LANTRONIX®

IntelliBox®-I/O 2100 Command Reference

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Revision History

Date	Rev.	Comments
May 2007	A	Initial Document.
March 2012	B	Updated for firmware v1.4.0.0.R2.

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1: About This Guide

This guide describes how to configure the IntelliBox-I/O 2100 using the Command Line Interface (CLI) and/or Extensible Markup Language (XML). It is written for software developers and system integrators.

Chapter Summaries

This table lists and summarizes each chapter and appendix.

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 IntelliBox.
Chapter 4: Configuration Using XML	Lists XCR groups and items and describes how to use XCRs to configure the IntelliBox.
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 web site at www.lantronix.com/support/documentation for the latest documentation and the following additional documentation.

Document	Description
IntelliBox-I/O 2100 User Guide	Information about the IntelliBox hardware, testing the IntelliBox, and integrating the IntelliBox device into your product.
DeviceInstaller Online Help	Instructions for using the Lantronix Windows-based utility to locate the IntelliBox and to view its current settings.
Secure Com Port Redirector User Guide	Instructions for using the Lantronix Windows-based utility to create secure virtual com ports.
Com Port Redirector Quick Start and Online Help	Instructions for using the Lantronix Windows-based utility to create virtual com ports.

2: Overview

Evolution OS™ is the Lantronix cutting-edge operating system that 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 *IntelliBox-I/O 2100 User Guide* at the Lantronix website.

XML Architecture and Device Control

XML is a fundamental building block for the future growth of Machine-to-Machine (M2M) networks. Evolution supports XML configuration records that make configuring the device server easy for users and administrators. XML configuration records are easy to edit with a 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, Evolution OS™ uses industry-standard tools for configuration, communication, and control. For example, the Evolution OS™ 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 device server.

3: Command Line Interface

This chapter describes accessing the IntelliBox by using Telnet, SSH, or serial ports to configure the IntelliBox, 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 Ports*
- *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 device server 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 DeviceInstaller. See the DeviceInstaller Online Help for more information, available on our website www.lantronix.com/support/downloads.

To access the IntelliBox 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). The IntelliBox 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 Ports

Serial Command 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.

Serial Recovery

In this mode, the normal boot process is interrupted, allowing recovery from unknown or incorrect configuration settings. While the back door is active, the CLI prompt is changed to “>>” (instead of “>”) and the Web Manager is inaccessible. These serve as an important indication that the device boot processes has been temporarily halted. To complete the boot process, terminate the serial CLI session (with the exit command).

To configure the Lantronix device server locally using a serial port, connect a terminal or a PC running a terminal emulation program to one of the device server's serial ports. Configure the terminal for 9600 baud, 8-bit, no parity, 1 stop bit, and no flow control.

1. Power off the device.
2. Press and hold down the exclamation point (!) key.
3. Power on the device. After about ten seconds, the exclamation point will display on the terminal or PC screen.
4. 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>#echo?` displays a list of all echo 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>#echo*` displays a list of all echo 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 Evolution OS™ 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. 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 device server using the CLI:

- **Ctrl + a**: place cursor at the beginning of a line
- **Ctrl + b**: backspace one character
- **Ctrl + d**: delete one character
- **Ctrl + e**: place cursor at the end of the line
- **Ctrl + f**: move cursor forward one character
- **Ctrl + k**: delete from the current position to the end of the line
- **Ctrl + l**: redraw the command line
- **Ctrl + n**: display the next line in the history
- **Ctrl + p**: display the previous line in the history
- **Ctrl + u**: delete entire line and place cursor at start of prompt
- **Ctrl + w**: delete one word back
- **Ctrl + z**: a shortcut for the exit command
- **Esc + b**: move cursor back one word
- **Esc + f**: move cursor forward one word

Understanding the CLI Level Hierarchy

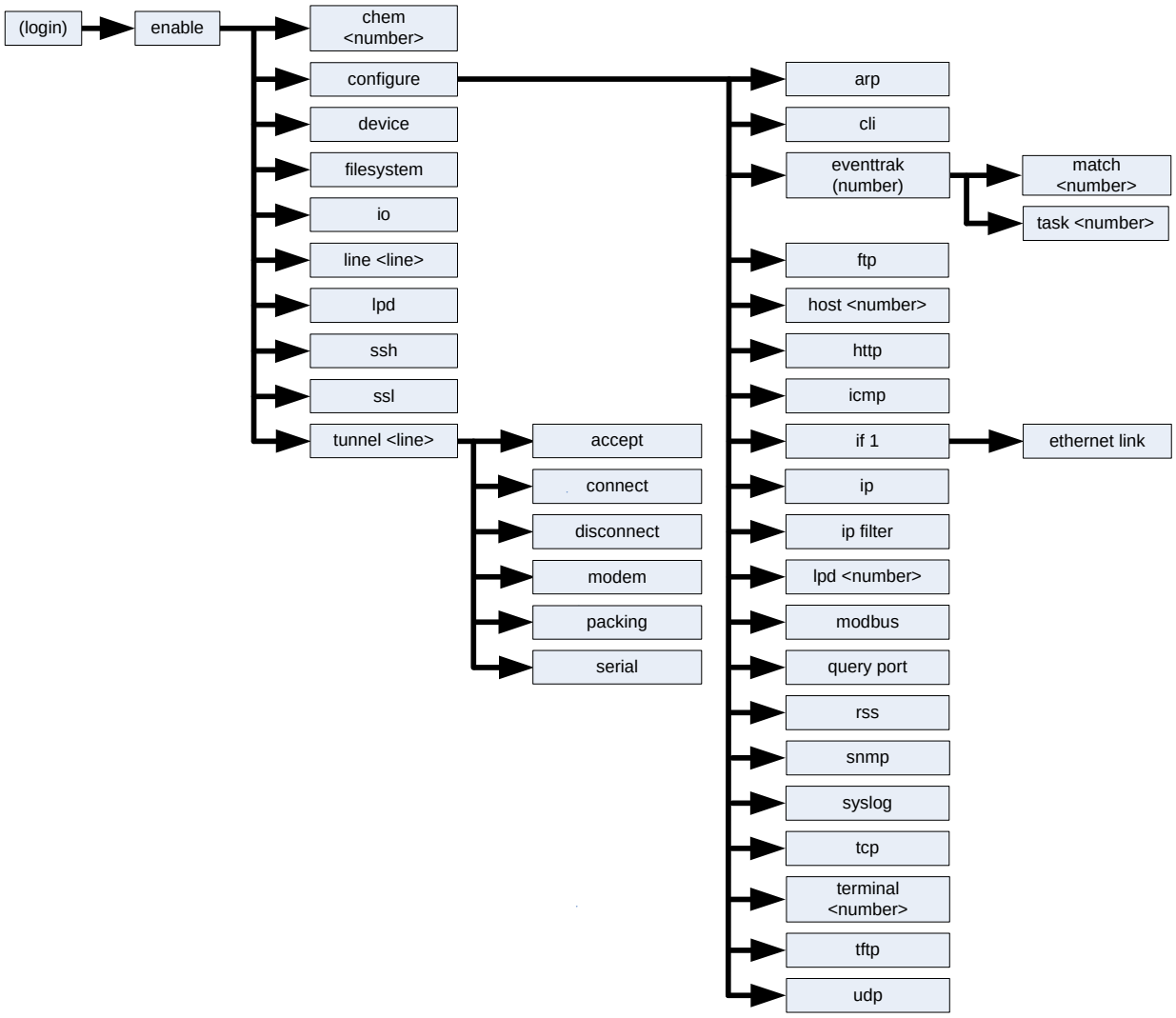
The CLI hierarchy is a series of levels. Arranging commands in a hierarchy of levels provides a way to organize and group similar commands, provide different levels of security, and reduce the complexity and number commands and options presented to a user at one time.

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 device server. 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 IntelliBox is presented in *Figure 3-1*.

Figure 3-1 CLI Level Hierarchy



Commands at the login level, shown in *Figure 3-2*, 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 3-2 Login Level Commands

```
>?
clrscrn                              enable
exit                                 ping <host>
ping <host> <count>                  ping <host> <count> <timeout>
show                                 show history
show ibio2100                        trace route <host>

>
```

To configure the , you must be in the enable level and any of its sub-levels. *Figure 3-3* shows the enable level commands.

Figure 3-3 Enable Level Commands

```
>enable
<enable>#?
auto show interfaces                    auto show processes
auto show xsr                           chem <number>
clear interfaces counters               clear query port counters
clear xsr counters                      clrscrn
configure                               connect
connect line <line>                     device
disable                                 exit
filesystem                              io
kill line <line>                        kill ssh <session>
kill telnet <session>                   line <line>
lpd                                     no clear interfaces counters
no clear query port counters            no clear xsr counters
nslookup                                nslookup <host>
ping <host>                             ping <host> <count>
ping <host> <count> <timeout>           reload
reload factory defaults                 secret xcr dump
secret xcr dump <group list>            secret xcr export <file>
secret xcr export <file> <group list>   show
show history                            show hosts
show ibio2100                           show interfaces
show ip sockets                         show processes
show sessions                           show xsr
ssh                                     ssh <optClientUsername> <host>
ssh <optClientUsername> <host> <port>   ssl
telnet <host>                           telnet <host> <port>
trace route <host>                      tunnel <line>
write                                   xcr dump
xcr dump <group list>                   xcr export <file>
xcr export <file> <group list>          xcr import <file>
xcr import <file> <group list>          xcr list
xsr dump                                xsr dump <group list>
xsr export <file>                       xsr export <file> <group list>
xsr list

<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 device server provides an Extensible Markup Language (XML) interface that you can use to configure device server devices. Every configuration setting that can be issued from the device server Web Manager and CLI can be specified using XML.

The device server 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 device server filesystem. An XCR can contain many configuration settings or just a few. For example, it might change all of the configurable parameters for a device server, 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 device server 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 shown in *Figure 4-1*.

Figure 4-1 DTD for XCRs

```
<!DOCTYPE configrecord [
<!ELEMENT configrecord (configgroup+)>
<!ELEMENT configgroup (configitem+)>
<!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 device server 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.

Notes:

- *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 IntelliBox-I/O 2100 User Guide for more information about the Web Manager 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

```
<?xml version="1.0" standalone="yes"?>
<configrecord>
 <configgroup name = "serial command mode" instance = "1">
      <configitem name = "mode serial string">
             <value>disable</value>
      </configitem>
 </configgroup>
</configrecord>
```

The Evolution OS™ 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 Group Example

```
<?xml version=”1.0” standalone=”yes”?>
<configrecord>
 <configgroup name = “serial command mode” instance = “1”>
      <configitem name = “mode”>
             <value>disable</value>
      </configitem>
 </configgroup>
</configrecord>
```

Figure 4-4 XML Example of Multiple Named Values

```
<?xml version=”1.0” standalone=”yes”?>
 <configgroup name = “ssh server”
      <configitem name = “host rsa keys”>
          <value name = “public key”></value>
          <value name = “private key”></value>
      </configitem>
 </configgroup>
```

Figure 4-5 XML Example of Multiple Items

```
<?xml version=”1.0” standalone=”yes”?>
 <configgroup name = “email” instance = “1”>
      <configitem name = “to”>
            <value>john.doe@somewhere.com></value>
      </configitem>
      <configitem name = “from”>
            <value>evolution@intellibox.com></value>
      </configitem>
 </configgroup>
```

Figure 4-6 XML Example with Multiple Groups

```
<?xml version=”1.0” standalone=”yes”?>
 <configgroup name = "ftp server">
       <configitem name = "state">
            <value>enable</value>
       </configitem>
       <configitem name = "admin username">
            <value>admin</value>
       </configitem>
       <configitem name = "admin password">
            <value><!-- configured and ignored --></value>
       </configitem>
  </configgroup>
  <configgroup name = "tftp server">
       <configitem name = "state">
            <value>enable</value>
       </configitem>
       <configitem name = "allow file creation">
            <value>disable</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 device server file system and imported or accessed as needed. See *Best Practices* or the Filesystem Browser section in the *IntelliBox-I/O 2100 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. Evolution OS 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 device server file system. It can also be used to import an XCR from an external source such as your local hard drive.
- FTP—The device server FTP server can export and import XCRs when an FTP get or put command on the filename intellibox_io.xcr is requested. On export (FTP get of intellibox_io.xcr), the FTP server obtains the current XCR from Evolution OS™ and sends it as a file. On import (FTP put of intellibox_io.xcr), the FTP server processes the file by sending it directly to the XML engine. In both cases the device server filesystem is not accessed. The file intellibox_io.xcr is not read from or written to the file system. See FTP in the *IntelliBox-I/O 2100 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 Evolution OS. 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.

Caution: ***The filename intellibox_io.xcr is not acceptable, because performing a FTP get on that name produces the current configuration and does not perform an FTP from the filesystem. Also, the filename intellibox_io.xsr is not acceptable, because performing an FTP get on that name produces the current status and does not get anything from the filesystem.***

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 device server's 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 device server 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 device server filesystem:

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

The following example imports only the settings for line 2 from a XCR named "factory_config.xcr" on the device server 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 device server filesystem named "foobar.xcr":

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

To import only disconnect mode tunneling settings for port 1 and serial line 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, line:2"
```

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 device server 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 device server filesystem:

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

Passwords in the XML File

If you log in to a device server to which you will be pasting an XCR, you do not need to include passwords in the file, because you are already logged into the device. However, if you send an XCR to one or more devices that are password protected, you can include the appropriate passwords in the XCR and skip the login steps.

The “xml paste passwords” <configgroup> name is used with the “passwords” <configitem> name and “cli login” and “cli enable level” values to specify the passwords to use when the device has been configured with password protection. The password value is clear text. To protect the password, establish an SSH connection to the device server. *Figure 4-7* shows an example.

Figure 4-7 XML Example of Supplying Passwords

```
<!—To supply passwords when importing via cli capture -->
<configgroup name = "xml paste passwords">
        <configitem name = "passwords">
            <value name = "cli login"></value>
            <value name = "cli enable level"></value>
        </configitem>
</configgroup>
```

XML Configuration Groups

Table 4-8 lists the Intellibox 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* ***<*** *(the html encoded form for less than) and any instance of* ***>*** *may be read as* ***>*** *(the html encoded form for greater than).*

Table 4-8 **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		
	timeout			Default: 60 seconds

Group Name	Group Item	Value Name	Value Options	Additional Information
cli	login password			Value is SECRET, hidden from user view.
	enable level password			Value is SECRET, hidden from user view.
	quit connect line			Accepts text containing control characters, for example, <control> A represents control-A Default: <control>L
device	cpu speed			
	short name			
	long name			
	serial number			Read only.
	firmware version			Read only.
email (Attribute of “instance” is a number.)	to			Multiple addresses may be separated with semicolons.
	cc			Multiple addresses may be separated with semicolons.
	from			
	reply to			
	subject			
	message file			
	overriding domain			
	server port			Default: 25
	local port		<Random>, ...	Default: <Random>
	priority		urgent, high, normal, low, very low	Default: normal
	trigger	input name	xio1, xio2	
		level	high, low	
ethernet (Attribute of “instance” is “eth0”.)	speed		auto, 10, 100	Default: auto
	duplex		auto, half, full	Default: auto

Group Name	Group Item	Value Name	Value Options	Additional Information
event trak (Attribute of “instance” is a number.)	match (Attribute of “instance” is a number.)	string		
		wildcard		
		timeout milliseconds		
		case sensitive	no, yes	
		rss trace matches	<None>, ...	
	task (Attribute of “instance” is a number.)	description		
		activity	none, ping, output	
		ping address		
		output control	exclusive, logical-or	
		rss trace steps	enable, disable	
		rss trace triggers	enable, disable	
		rss trace ping responses	enable, disable	

Group Name	Group Item	Value Name	Value Options	Additional Information
event trak (Attribute of “instance” is a number.) (continued)	step (Attribute of “instance” is a number.)	name	<None>, ...	
		activity		
		advance upon		
		advance timeout value		
		advance timeout units		
		fallback timeout value		
		fallback timeout units		
		fallback timeout enabled		
		fallback if input high to low		
		fallback if input low to high		
		fallback if matched string		
		fallback if trigger a		
		fallback if trigger b		
		fallback if output data present		
		fallback if accepted connection		
		fallback if accepted disconnection		
		fallback if ping response		
		upon fallback send trigger		
		upon advance send email		
		upon advance email subject		

Group Name	Group Item	Value Name	Value Options	Additional Information
event trak (Attribute of “instance” is a number.) (continued)	step (Attribute of “instance” is a number.) (continued)	upon advance clear receive buffer		
		upon advance send line		
		upon advance send data		
		upon advance send file name		
		upon advance send trigger		
		upon advance rss		
		upon advance rss title		
ftp server	state		enable, disable	Default: enable
	admin username			Default: admin
	admin password			Value is SECRET, hidden from user view.
host (Attribute of “instance” is a number.)	name			
	protocol		telnet, ssh	Default: telnet
	ssh username			
	remote address			
	remote port			Default: 0
http authentication uri (Attribute of “instance” is the URI.)	user delete	name		Deletes an HTTP Authentication URI user. The value element is used to specify the user for deletion.
	realm			
	type			
	user (Attribute of “instance” is the user name.)	password		

Group Name	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
	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"
icmp	state		enable, disable	Default: enable
input output (Attribute of “instance” is a number.)	input output	direction	output, input	
		control	force closed, force open, normal	
		rss trace transitions	enable, disable	

Group Name	Group Item	Value Name	Value Options	Additional Information
interface (Attribute of “instance” 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			Set the identity of the client device.
	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.
ip	multicast time to live			Default: 1 hops
ip filter	delete entries		enable, disable	If enabled, deletes any existing entries before adding “filter entry”.
	filter delete	ip address		Deletes a specific IP filter entry.
		net mask		Deletes a specific IP filter entry.
	filter entry	ip address		If configured, is a specific IP address.
		net mask		If configured, is a specific net mask.

Group Name	Group Item	Value Name	Value Options	Additional Information
line (Attribute of “instance” is a number.)	name			
	interface		rs232, rs485 half-duplex, rs485 full-duplex	Default:
	termination		enable, disable	Default: disable
	state		enable, disable	Default: depends on instance
	protocol		none, tunnel, ppp, lpd	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, <control> A represents control-A Default: <control>Q
	xoff char			Accepts a control character, for example, <control> A represents control-A Default: <control>S
lpd (Attribute of “instance” is a number.)	banner		enable, disable	Default: enable
	binary		enable, disable	Default: disable
	soj		enable, disable	Default: disable
	eoj		enable, disable	Default: disable
	formfeed		enable, disable	Default: disable
	convert newline		enable, disable	Default: disable
	soj text			
	eoj text			
	queue name			
modbus	tcp server state		enable, disable	Default: disable
	additional port		<None>, ...	Default: <None>
	response timeout			Default: 3000 milliseconds
query port	state			

Group Name	Group Item	Value Name	Value Options	Additional Information
rss	feed		enable, disable	Default: disable
	persist		enable, disable	Default: disable
	max entries			Default: 100
serial command mode (Attribute of “instance” is a number.)	mode			
	echo serial string			
	serial string			
	signon message			
	wait time			
snmp	state		enable, disable	Default: enable
	read community			Value is SECRET, hidden from user view. Default: public
	write community			Value is SECRET, hidden from user view. Default: private
	system contact			
	system name			Default: <Default>
	system description			Default: <Default>
	system location			
	traps	state	enable, disable	Default: enable
		primary destination		
		secondary destination		

Group Name	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 (Attribute of “instance” is required for the known host name)	public rsa key		
		public dsa key		
	delete client users		enable, disable	If enabled, deletes any existing client users before adding “client user”.
	client user (Attribute of “instance” is required for the user name)	password		
		remote command		
		public rsa key		
		private rsa key		
		public dsa key		
		private dsa key		
ssh command mode	state		enable, disable	
	port			
	max sessions			
ssh server	host rsa keys	public key		
		private key		
	host dsa keys	public key		
		private key		
	delete authorized users			
	authorized user delete	name		
	authorized user (Attribute of “instance” is required for the authorized user name)	password		
		public rsa key		
		public dsa key		

Group Name	Group Item	Value Name	Value Options	Additional Information
ssl	RSA certificate	certificate		Enter the text of the certificate.
		private key		Enter the text of the private key. If configured and not exporting secrets, exports only a placeholder.
	DSA certificate	certificate		Enter the text of the certificate.
		private key		Enter the text of the private key. If configured and not exporting secrets, exports only a placeholder.
	delete all cas		enable, disable	If enabled, deletes any existing trusted cas before adding “trusted ca”.
syslog	state		enable, disable	Default: disable
	host			
	local port			Default: 514
	remote port			Default: 514
	severity log level		none, emergency, alert, critical, error, warning, notice, information, debug	Default: none
tcp	resets		enable, disable	Default: enable
	ack limit			Number of packets received before an ACK is forced. Default: 3 packets
	send data		standard, expedited	Default: standard
telnet command mode	state		enable, disable	Default: enable
	port			Default: 23
	max sessions			Default: 3

Group Name	Group Item	Value Name	Value Options	Additional Information
terminal (Attribute of “instance” is either “network” or a number.)	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, <control> A represents control-A
	break duration			Default: 500 milliseconds
	echo		enable, disable	Default: enable
tftp server	state		enable, disable	Default: enable
	allow file creation		enable, disable	Default: disable
tunnel accept (Attribute of “instance” is a number.)	accept mode		disable, always, any character, start character, modem control asserted, modem emulation	Default: always
	local port		<None>, ...	Default: <None>
	protocol		tcp, ssh, telnet, tcp aes, ssl	Default: tcp
	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.
	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		<None>, ...	Default: <None>
	email disconnect		<None>, ...	Default: <None>

Group Name	Group Item	Value Name	Value Options	Additional Information
tunnel connect (Attribute of “instance” is a number.)	connect mode		disable, always, any character, start character, modem control asserted, modem emulation	Default: disable
	remote address			
	remote port			
	local port		<Random>, ...	Default: <Random>
	protocol		tcp, udp, ssh, telnet, tcp aes, udp aes, ssl	Default: tcp
	ssh username			Username must correspond to a configured ssh client user.
	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.
	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>
	output select	output		
		mode	logical or, exclusive control	
tunnel disconnect (Attribute of “instance” is a number.)	stop character			Accepts a control character, for example, <control> A represents control-A
	modem control		enable, disable	Default: disable
	timeout			Default: 0 milliseconds
	flush serial		enable, disable	Default: disable

Group Name	Group Item	Value Name	Value Options	Additional Information
tunnel modem (Attribute of “instance” 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 (Attribute of “instance” 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, <control> A represents control-A Default: <control>M
	trailing character			Accepts a control character, for example, <control> A represents control-A
tunnel serial (Attribute of “instance” is a number.)	dtr		asserted while connected, continuously asserted, unasserted, truport	Default: asserted while connected
	buffer size			
tunnel start (Attribute of “instance is a number.”	start character			import/export
	echo		enable	import/export
			disable	
tunnel stop (Attribute of “instance is a number.”	stop character			import/export
	echo		enable	import/export
			disable	

Group Name	Group Item	Value Name	Value Options	Additional Information
xml import control	restore factory configuration			
	delete cpm groups		enable, disable	
	cpm group delete	name		
	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 4-9 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.

Currently, the only XSR groups that contain any sub groups are buffer pools and tunnel. The buffer pools group has the following sub groups:

- Protocol stack
- Ethernet driver
- Line

The tunnel group has the following sub groups:

- Tunnel Modem

Table 4-9 **XSR Groups and Items**

Group Name	Item Name	Value Name	Valid Values
arp (Attribute of “instance” is “eth0”.)	arp entry	ip address	
		mac address	
		age	
		type	dynamic
			static
buffer pool	this group contains other groups: ethernet driver, line #, protocol stack.		

Group Name	Item Name	Value Name	Valid Values
device	product info	product type	
		serial number	
		firmware version	
		uptime	
		permanent config	saved
			unsaved
email (Attribute of “instance” is a number.)	success	sent	
		sent with retries	
	failed		
	queued		
email log (Attribute of “instance” is a number.)	entry	time	
		log	
ethernet driver (Within group “buffer pool”.)	buffer headers	total	
		free	
		used	
		max used	
	cluster pool	cluster size	
		total	
		free	
		used	
		max used	
eventtrak (Attribute of “instance” is a number.)	task description		
	current step		
	step name		
filesystem	filesystem	size	
		available clean	
		available dirty	
		used total	
		used data	
		busy	
	entries	file count	
		directory count	
		system count	
		open count	
		lock count	
		share count	

Group Name	Item Name	Value Name	Valid Values
filesystem (continued)	banks	current	A
			B
		firmware begin	
		firmware end	
		firmware erase cycles	
		bank a begin	
		bank a end	
		bank a erase cycles	
		bank b begin	
		bank b end	
		bank b erase cycles	
ftp	status		running
			inactive
	admin username	admin	
	connections	rejected	
		accepted	
	last client	ip address	
		port	
hardware	cpu	type	
		speed	
	hardware id	hardware id	
	memory	flash size	
		ram size	
http	state		enabled
			disabled
	ports		
	max timeout		
	max bytes		
	logging	entries	
		bytes	
http log	entry (Attribute of “instance” is a number.)		
	totals	entries	
		bytes	

Group Name	Item Name	Value Name	Valid Values
icmp	in	messages	
		messages discarded	
		errors	
		destination unreachable	
		time exceeded messages	
		parameter problems	
		source quench requests	
		redirects	
		ping requests	
		ping replies	
		timestamp requests	
		timestamp replies	
		address mask requests	
		address mask replies	
	out	messages	
		messages discarded	
		errors	
		destination unreachables	
		time exceeded messages	
		parameter problems	
		source quench requests	
		redirects	
		ping requests	
		ping replies	
		timestamp requests	
		timestamp replies	
		address mask requests	
		address mask replies	
inputs and outputs	xio1	configured as	
		state	
		control	
	xio2	configured as	
		state	
		control	
	Relay	configured as	
		state	
		control	

Group Name	Item Name	Value Name	Valid Values
interface (Attribute of “instance” is “eth0”.)	generic	status	no link
			link up
			disabled
			unknown
		errors	(error text)
			none
	ethernet (Present only for eth0.)	speed	10
			100
		duplex	full
			half
	arp	encapsulation	ARPA
		type	ARPA
		timeout	
	default gateway		
	network mask		
	domain		
	mac address		
	hostname		
	ip address		
	last change		
	mtu		
	primary dns		
	secondary dns		

Group Name	Item Name	Value Name	Valid Values
interface (Attribute of “instance” is “eth0”.) (Continued.)	transmit	octets	
		unicast	
		non unicast	
		discards	
		errors	
		broadcast packets	
		multicast packets	
		filtered packets	
		deferred	
		multiple retries	
		one retry	
		underflows	
		late collisions	
		retry errors	
		carrier lost errors	
	receive	octets	
		unicast	
		non unicast	
		discards	
		errors	
		broadcast packets	
		multicast packets	
		filtered packets	
		unknown protocol	
		framing errors	
		overflows	
		crc errors	
		missed frame errors	

Group Name	Item Name	Value Name	Valid Values
ip	state		enabled
			disabled
	default ttl		
	forwarded		
	route discards		
	in	receives	
		header errors	
		address errors	
		unknown protocols	
		discarded	
		delivered	
	out	requests	
		discards	
		discards no route	
	reassembly	timeout	
		needed	
		success	
		failures	
	fragments	needed	
		failures	
		success	
ip sockets	ip socket	protocol	UDP
			TCP
		rx queue	
		tx queue	
		local address	
		local port	
		remote address	
		remote port	
		state	

Group Name	Item Name	Value Name	Valid Values
line (Attribute of “instance” is a number.)	receiver	bytes	
		breaks	
		parity errors	
		framing errors	
		overrun errors	
		no receive buffer errors	
		queued bytes	
		flow control	n/a
			stop
			go
	transmitter	bytes	
		breaks	
		queued bytes	
		flow control	n/a
			stop
			go
	line levels	cts	asserted
			not asserted
		rts	asserted
			not asserted
		dsr	asserted
			not asserted
		dtr	asserted
			not asserted
line <number> (within group “buffer pool”.)	buffer headers	total	
		free	
		used	
		max used	
	cluster pool	cluster size	
		total	
		free	
		used	
		max used	

Group Name	Item Name	Value Name	Valid Values
line (With no instance.) (Within group “line” with instance.)	state		enable
			disable
	protocol		none
			ppp
			tunnel
	baud rate		Any value from 300 to 230400.
	parity		even
			none
			odd
	data bits		7
			8
	stop bits		1
			2
	flow control		hardware
			none
			software
	xon char		
	xoff char		
lpd (Attribute of “instance” is a number.)	jobs printed		
	bytes printed		
	current client ip address		
	current client port		
	last client ip address		
	last client port		
memory	main heap	condition	clean
			corrupt
		total memory	
		available memory	
		fragments	
		allocated blocks	
	internal buffer heap	condition	clean
			corrupt
		total memory	
		available memory	
		fragments	
		allocated blocks	

Group Name	Item Name	Value Name	Valid Values
modbus local slave	totals	pdus in	
		pdus out	
		exceptions	
modbus tcp server (Attribute of “instance” is “permanent” or “additional”.)	state		down
			up
			binding
			no port
	local port		
	totals	uptime	
		pdus in	
		pdus out	
		connections	
processes	process (Attribute of “instance” is a number.)	cpu %	
		stack used	
		stack size	
		thread name	
protocol stack (within group “buffer pool”)	buffer headers	total	
		free	
		used	
		max used	
	cluster pool	cluster size	
		total	
		free	
		used	
		max used	
query port	status		enabled
			disabled
	last connection	ip address	
		port	
	in	discoveries	
		unknown queries	
		erroneous packets	
	out	discovery replies	
		errors	
rss	url		
	data	entries	
		bytes	

Group Name	Item Name	Value Name	Valid Values
sessions	line (Attribute of “instance” is a number.)	baud	
		parity	none
			even
			odd
		data bits	7
			8
		stop bits	1
			2
		flow control	none
			hardware
			software
	ssh (Attribute of “instance” is the ssh session number.)	local port	
		remote ip address	
		remote port	
		duration	
	telnet (Attribute of “instance” is the telnet session number.)	local port	
		remote ip address	
		remote port	
		duration	
ssh	state		active
			waiting
			disabled
	local port		
	totals	uptime	
		bytes in	
		bytes out	
syslog	state	enable, disable	
	host		
	severity to log		
	messages failed		
	messages send		

Group Name	Item Name	Value Name	Valid Values
tcp	retransmission	algorithm	vanj
		timeout minimum	
		timeout maximum	
	connections	maximum	
		open active	
		open passive	
		failed	
		resets	
		established	
	errors in		
	resets	in	
		out	
	segments	in	
		out	
		retransmitted	
telnet	state		active
			waiting
			disabled
	local port		
	totals	uptime	
		bytes in	
		bytes out	
	last connection	local ip address	
		local port	
		remote ip address	
		remote port	
tftp	state	enabled, disabled	
	creation	enabled, disabled	
	downloaded		
	uploaded		
	not found		
	errors	read	
		write	
		unknown	
	last client	ip address	
		port	

Group Name	Item Name	Value Name	Valid Values
tunnel (Attribute of “instance” is a number.)	aggregate	completed connects	
		completed accepts	
		disconnects	
		dropped connects	
		dropped accepts	
		octets from serial	
		octets from network	
		connect connection time	
		accept connection time	
		connect dns address changes	
		connect dns address invalids	
	current connect connections (As many as present.)	local ip address	
		local port	
		remote ip address	
		remote port	
		uptime	
		octets from serial	
		octets from network	
		connect dns address changes	
		connect dns address invalids	
	current accept connections (As many as present.)	local ip address	
		local port	
		remote ip address	
		remote port	
		uptime	
		octets from serial	
		octets from network	

Group Name	Item Name	Value Name	Valid Values
tunnel modem (within group “tunnel”)	echo commands		enable
			disable
	verbose response		enable
			disable
	response type		text
			numeric
	error unknown commands		disable
			enable
	incoming connection		disabled
			automatic
			manual
udp	in unknown ports		
	in datagrams		
	in errors		
	out datagrams		
xsr	out	bytes	
		lines	
		elements	
	errors		

5: Commands and Levels

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

Table 5-1 Commands and Levels

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
accept mode disable	Disables accept mode tunneling.
accept mode modem control asserted	Enables the tunneling server to accept tunneling connections when the modem
accept mode modem emulation	Enables modem emulation for accept mode tunneling.
accept mode start character	Enables accept mode tunneling when the configured start character
aes decrypt key <*hexadecimal*>	Sets the accept tunnel AES decrypt key with up to 16 bytes.
aes decrypt key text <*text*>	Sets the accept tunnel AES decrypt key with up to 16 bytes.
aes encrypt key <*hexadecimal*>	Sets the accept tunnel AES encrypt key with up to 16 bytes.
aes encrypt key text <*text*>	Sets the accept tunnel AES encrypt key with up to 16 bytes.
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
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
clrscrn	Clears the screen.
default accept mode	Restores the default accept mode as "always".
default protocol	Restores the default protocol as "TCP".
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
email disconnect <*number*>	Sets an email profile to use to send an email alert upon closing
exit	Returns to the tunnel level.
flush serial disable	Characters already in the serial data buffer are retained upon establishing
flush serial enable	Flushes the serial data buffer upon establishing an accept mode tunneling
kill connection	Disconnects the active accept mode tunneling connection.
local port <*number*>	Sets the port to use for accept mode tunneling.
no aes decrypt key	Removes the accept tunnel AES decrypt key.
no aes encrypt key	Removes the accept tunnel AES encrypt key.
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 local port	Uses the default port number as the local port for accept mode tunneling.
no tcp keep alive	Disables the accept mode TCP keep alive timeout.
output select	Enters the next lower level.
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.
rss trace connections disable	Disables RSS Trace of accept mode connections.
rss trace connections enable	Enables RSS Trace of accept mode connections.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
show status	Displays tunnel accept status.
tcp keep alive <*milliseconds*>	Enables TCP keep alive for accept mode tunneling and sets the timer.
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
accept mode disable	Disables accept mode tunneling.
accept mode modem control asserted	Enables the tunneling server to accept tunneling connections when the modem
accept mode modem emulation	Enables modem emulation for accept mode tunneling.
accept mode start character	Enables accept mode tunneling when the configured start character
aes decrypt key <*hexadecimal*>	Sets the accept tunnel AES decrypt key with up to 16 bytes.
aes decrypt key text <*text*>	Sets the accept tunnel AES decrypt key with up to 16 bytes.
aes encrypt key <*hexadecimal*>	Sets the accept tunnel AES encrypt key with up to 16 bytes.
aes encrypt key text <*text*>	Sets the accept tunnel AES encrypt key with up to 16 bytes.
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
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
clrscrn	Clears the screen.
default accept mode	Restores the default accept mode as "always".
default protocol	Restores the default protocol as "TCP".
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
email disconnect <*number*>	Sets an email profile to use to send an email alert upon closing
exit	Returns to the tunnel level.
flush serial disable	Characters already in the serial data buffer are retained upon establishing
flush serial enable	Flushes the serial data buffer upon establishing an accept mode tunneling
kill connection	Disconnects the active accept mode tunneling connection.
local port <*number*>	Sets the port to use for accept mode tunneling.
no aes decrypt key	Removes the accept tunnel AES decrypt key.
no aes encrypt key	Removes the accept tunnel AES encrypt key.
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 local port	Uses the default port number as the local port for accept mode tunneling.
no tcp keep alive	Disables the accept mode TCP keep alive timeout.
output select	Enters the next lower level.

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.
rss trace connections disable	Disables RSS Trace of accept mode connections.
rss trace connections enable	Enables RSS Trace of accept mode connections.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
show status	Displays tunnel accept status.
tcp keep alive *<milliseconds>*	Enables TCP keep alive for accept mode tunneling and sets the timer.
write	Stores the current configuration in permanent memory.
arp (config-arp) level commands	
add *<IP address> <MAC address>*	Adds an entry to the ARP table, mapping an IP address to a MAC address.
clrscrn	Clears the screen.
default timeout	Restores the default ARP cache timeout.
exit	Exits to the configuration level.
remove *<IP address>*	Removes an entry from the ARP cache.
remove all	Removes all entries from the ARP cache.
show	Displays the current configuration.
show cache	Displays the ARP cache table.
show history	Displays the last 20 commands entered during the current CLI session.
timeout *<seconds>*	Sets the ARP cache timeout.
write	Stores the current configuration in permanent memory.
chem 1 (chem:1) level commands	
auto show statistics	Continuously displays email statistics.
cc *<email addresses>*	Sets Cc addresses for email alerts.
chem *<number>*	Enters the configure email level.
clear log	Clears all entries from the mail log.
clear mail counters	Sets the email counters to zero.
clrscrn	Clears the screen.
exit	Exits to the enable level.
file *<file>*	Specifies a text file, the contents of which will be the message body
from *<email address>*	Sets the From address for email alerts.
local port *<number>*	Sets local port used to send email alerts.
local port random	Sets local port (used to send email alerts) to random.
no cc	Removes the Cc addresses for email alerts.
no clear mail counters	Restores the email counters to the aggregate values.
no file	Removes the file name, so the message body will be empty.

no from	Removes From address for email alerts.
no overriding domain	Removes the overriding domain name option.
no replyto	Removes Reply-To address for email alerts.
no subject	Removes subject used for email alerts.
no to	Removes To address for email alerts.
no trigger	Disables the trigger to send an email.
overriding domain <*domain*>	Sets a domain name that will be used when connecting to an SMTP server to
priority high	Sets X-Priority for email alerts to 2.
priority low	Sets X-Priority for email alerts to 4.
priority normal	Sets X-Priority for email alerts to 3.
priority urgent	Sets X-Priority for email alerts to 1.
priority very low	Sets X-Priority for email alerts to 5.
replyto <*email address*>	Sets Reply-To address for email alerts.
send	Sends an email using the current settings.
server port <*number*>	Sets the port used by the SMTP server.
show	Displays email settings.
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 <*string*>	Sets the subject for email alerts.
to <*email addresses*>	Sets email address to which the email alerts will be sent.
trigger <*xio1/xio2*> <*high/low*>	Specifies input name and voltage level to trigger sending an email.
write	Stores the current configuration in permanent memory.
chem 2 (chem:2) level commands	
auto show statistics	Continuously displays email statistics.
cc <*email addresses*>	Sets Cc addresses for email alerts.
chem <*number*>	Enters the configure email level.
clear log	Clears all entries from the mail log.
clear mail counters	Sets the email counters to zero.
clrscrn	Clears the screen.
exit	Exits to the enable level.
file <*file*>	Specifies a text file, the contents of which will be the message body
from <*email address*>	Sets the From address for email alerts.
local port <*number*>	Sets local port used to send email alerts.
local port random	Sets local port (used to send email alerts) to random.
no cc	Removes the Cc addresses for email alerts.
no clear mail counters	Restores the email counters to the aggregate values.
no file	Removes the file name, so the message body will be empty.
no from	Removes From address for email alerts.
no overriding domain	Removes the overriding domain name option.
no replyto	Removes Reply-To address for email alerts.
no subject	Removes subject used for email alerts.

no to	Removes To address for email alerts.
no trigger	Disables the trigger to send an email.
overriding domain <*domain*>	Sets a domain name that will be used when connecting to an SMTP server to
priority high	Sets X-Priority for email alerts to 2.
priority low	Sets X-Priority for email alerts to 4.
priority normal	Sets X-Priority for email alerts to 3.
priority urgent	Sets X-Priority for email alerts to 1.
priority very low	Sets X-Priority for email alerts to 5.
replyto <*email address*>	Sets Reply-To address for email alerts.
send	Sends an email using the current settings.
server port <*number*>	Sets the port used by the SMTP server.
show	Displays email settings.
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 <*string*>	Sets the subject for email alerts.
to <*email addresses*>	Sets email address to which the email alerts will be sent.
trigger <*xio1/xio2*> <*high/low*>	Specifies input name and voltage level to trigger sending an email.
write	Stores the current configuration in permanent memory.
chem 3 (chem:3) level commands	
auto show statistics	Continuously displays email statistics.
cc <*email addresses*>	Sets Cc addresses for email alerts.
chem <*number*>	Enters the configure email level.
clear log	Clears all entries from the mail log.
clear mail counters	Sets the email counters to zero.
clrscrn	Clears the screen.
exit	Exits to the enable level.
file <*file*>	Specifies a text file, the contents of which will be the message body
from <*email address*>	Sets the From address for email alerts.
local port <*number*>	Sets local port used to send email alerts.
local port random	Sets local port (used to send email alerts) to random.
no cc	Removes the Cc addresses for email alerts.
no clear mail counters	Restores the email counters to the aggregate values.
no file	Removes the file name, so the message body will be empty.
no from	Removes From address for email alerts.
no overriding domain	Removes the overriding domain name option.
no replyto	Removes Reply-To address for email alerts.
no subject	Removes subject used for email alerts.
no to	Removes To address for email alerts.
no trigger	Disables the trigger to send an email.
overriding domain <*domain*>	Sets a domain name that will be used when connecting to an SMTP server to

priority high	Sets X-Priority for email alerts to 2.
priority low	Sets X-Priority for email alerts to 4.
priority normal	Sets X-Priority for email alerts to 3.
priority urgent	Sets X-Priority for email alerts to 1.
priority very low	Sets X-Priority for email alerts to 5.
replyto <*email address*>	Sets Reply-To address for email alerts.
send	Sends an email using the current settings.
server port <*number*>	Sets the port used by the SMTP server.
show	Displays email settings.
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 <*string*>	Sets the subject for email alerts.
to <*email addresses*>	Sets email address to which the email alerts will be sent.
trigger <*xio1/xio2*> <*high/low*>	Specifies input name and voltage level to trigger sending an email.
write	Stores the current configuration in permanent memory.
chem 4 (chem:4) level commands	
auto show statistics	Continuously displays email statistics.
cc <*email addresses*>	Sets Cc addresses for email alerts.
chem <*number*>	Enters the configure email level.
clear log	Clears all entries from the mail log.
clear mail counters	Sets the email counters to zero.
clrscrn	Clears the screen.
exit	Exits to the enable level.
file <*file*>	Specifies a text file, the contents of which will be the message body
from <*email address*>	Sets the From address for email alerts.
local port <*number*>	Sets local port used to send email alerts.
local port random	Sets local port (used to send email alerts) to random.
no cc	Removes the Cc addresses for email alerts.
no clear mail counters	Restores the email counters to the aggregate values.
no file	Removes the file name, so the message body will be empty.
no from	Removes From address for email alerts.
no overriding domain	Removes the overriding domain name option.
no replyto	Removes Reply-To address for email alerts.
no subject	Removes subject used for email alerts.
no to	Removes To address for email alerts.
no trigger	Disables the trigger to send an email.
overriding domain <*domain*>	Sets a domain name that will be used when connecting to an SMTP server to
priority high	Sets X-Priority for email alerts to 2.
priority low	Sets X-Priority for email alerts to 4.
priority normal	Sets X-Priority for email alerts to 3.
priority urgent	Sets X-Priority for email alerts to 1.

priority very low	Sets X-Priority for email alerts to 5.
replyto <*email address*>	Sets Reply-To address for email alerts.
send	Sends an email using the current settings.
server port <*number*>	Sets the port used by the SMTP server.
show	Displays email settings.
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 <*string*>	Sets the subject for email alerts.
to <*email addresses*>	Sets email address to which the email alerts will be sent.
trigger <*xio1/xio2*> <*high/low*>	Specifies input name and voltage level to trigger sending an email.
write	Stores the current configuration in permanent memory.
cli (config-cli) level commands	
clear ssh counters	Sets the SSH counters to zero.
clear telnet counters	Sets the Telnet counters to zero.
clrscrn	Clears the screen.
default quit connect line	Restores the default string used to quit the "connect line " command.
enable level password	Sets or removes the enable-level password by challenging and prompting.
exit	Exits to the configuration level.
login password	Sets or removes the CLI login password by challenging and prompting.
no clear ssh counters	Restores the IP SSH counters to the aggregate values.
no clear telnet counters	Restores the IP Telnet counters to the aggregate values.
quit connect line <*string*>	Sets the string used to quit the "connect line " command.
show history	Displays the last 20 commands entered during the current CLI session.
show ssh	Displays the SSH server settings.
show telnet	Displays the Telnet settings and statistics.
ssh disable	Disables the SSH Server.
ssh enable	Enables the SSH Server.
ssh max sessions <*number*>	Sets the maximum allowed concurrent incoming SSH sessions.
ssh port <*number*>	Sets the local port that the SSH server uses.
telnet disable	Disables the Telnet Server.
telnet enable	Enables the Telnet Server.
telnet max sessions <*number*>	Sets the maximum concurrent incoming Telnet sessions.
telnet port <*number*>	Sets the local port that the Telnet server uses.
write	Stores the current configuration in permanent memory.
configure (config) level commands	
arp	Changes to the command level for ARP configuration and status.
clear host <*host*>	Removes an entry from the DNS Cache
cli	Change to menu level for CLI configuration and status
clrscrn	Clears the screen.

eventtrak <*number*>	Changes to the command level for EventTrak configuration.
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.
ip filter	Enters the config-filter level.
kill ssh <*session*>	Kills SSH session with index from "show sessions"
kill telnet <*session*>	Kills Telnet session with index from "show sessions"
lpd <*line*>	Enters the configure lpd level.
modbus	Changes to the modbus configuration level.
query port	Enters the query port level.
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.
snmp	Enters the snmp level.
syslog	Enters the syslog level.
tcp	Changes to the command level for TCP configuration and status.
terminal <*line*>	Enters the configure-terminal level.
terminal network	Enters the configure-terminal level for the network.
tftp	Enters the tftp level.
udp	Changes to the command level for UDP configuration and status.
write	Stores the current configuration in permanent memory.
connect (tunnel-connect:2) level commands	
aes decrypt key <*hexadecimal*>	Sets the connect tunnel AES decrypt key with up to 16 bytes.
aes decrypt key text <*text*>	Sets the connect tunnel AES decrypt key with up to 16 bytes.
aes encrypt key <*hexadecimal*>	Sets the connect tunnel AES encrypt key with up to 16 bytes.
aes encrypt key text <*text*>	Sets the connect tunnel AES encrypt key with up to 16 bytes.
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
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
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
connect mode disable	Disables connect mode tunneling.
connect mode modem control asserted	Enables the tunneling server to make tunneling connections when the modem
connect mode modem emulation	Enables modem emulation for connect mode tunneling.
connect mode start character	Enables connect mode tunneling when the configured start character
default connect mode	Restores the default connect mode as "disable".
default local port	Uses a random port number as the local port for establishing tunneling
default protocol	Restores the default protocol as "TCP".
default reconnect time	Restores the default reconnect time value for connect mode tunneling.
default tcp keep alive	Restores the default 45 second connect mode TCP keep alive timeout.
email connect <*number*>	Sets an email profile to use to send an email alert upon establishing
email disconnect <*number*>	Sets an email profile to use to send an email alert upon closing
exit	Returns to the tunnel level.
flush serial disable	Characters already in the serial data buffer are retained upon establishing
flush serial enable	Flushes the serial data buffer upon establishing a connect mode tunneling
kill connection	Disconnects the active connect mode tunneling connection.
local port <*number*>	Sets a specific port for use as the local port.
no aes decrypt key	Removes the connect tunnel AES decrypt key.
no aes encrypt key	Removes the connect tunnel AES encrypt key.
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.
no remote address	Removes the remote host address used to establish tunneling connections.
no remote 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.
output select	Enters the next lower level.
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.
reconnect time <*milliseconds*>	Sets the reconnect time value for tunneling connections established by the
remote address <*text*>	Sets the remote host to establish tunneling connections with.
remote port <*number*>	Sets the remote port to use for connect mode tunneling.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
show status	Displays tunnel connect status.
ssh username <*text*>	Sets the SSH user name for use when establishing tunneling connections
tcp keep alive <*milliseconds*>	Enables TCP keep alive for connect mode tunneling and sets the timer.
write	Stores the current configuration in permanent memory.
connect (tunnel-connect:1) level commands	
aes decrypt key <*hexadecimal*>	Sets the connect tunnel AES decrypt key with up to 16 bytes.
aes decrypt key text <*text*>	Sets the connect tunnel AES decrypt key with up to 16 bytes.
aes encrypt key <*hexadecimal*>	Sets the connect tunnel AES encrypt key with up to 16 bytes.
aes encrypt key text <*text*>	Sets the connect tunnel AES encrypt key with up to 16 bytes.
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
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
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
connect mode disable	Disables connect mode tunneling.
connect mode modem control asserted	Enables the tunneling server to make tunneling connections when the modem
connect mode modem emulation	Enables modem emulation for connect mode tunneling.
connect mode start character	Enables connect mode tunneling when the configured start character
default connect mode	Restores the default connect mode as "disable".
default local port	Uses a random port number as the local port for establishing tunneling
default protocol	Restores the default protocol as "TCP".
default reconnect time	Restores the default reconnect time value for connect mode tunneling.
default tcp keep alive	Restores the default 45 second connect mode TCP keep alive timeout.

email connect <*number*>	Sets an email profile to use to send an email alert upon establishing
email disconnect <*number*>	Sets an email profile to use to send an email alert upon closing
exit	Returns to the tunnel level.
flush serial disable	Characters already in the serial data buffer are retained upon establishing
flush serial enable	Flushes the serial data buffer upon establishing a connect mode tunneling
kill connection	Disconnects the active connect mode tunneling connection.
local port <*number*>	Sets a specific port for use as the local port.
no aes decrypt key	Removes the connect tunnel AES decrypt key.
no aes encrypt key	Removes the connect tunnel AES encrypt key.
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.
no remote address	Removes the remote host address used to establish tunneling connections.
no remote 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.
output select	Enters the next lower level.
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.
reconnect time <*milliseconds*>	Sets the reconnect time value for tunneling connections established by the
remote address <*text*>	Sets the remote host to establish tunneling connections with.
remote port <*number*>	Sets the remote port to use for connect mode tunneling.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
show status	Displays tunnel connect status.
ssh username <*text*>	Sets the SSH user name for use when establishing tunneling connections
tcp keep alive <*milliseconds*>	Enables TCP keep alive for connect mode tunneling and sets the timer.
write	Stores the current configuration in permanent memory.
device (device) level commands	

auto show tlog	Continuously displays the internal trouble log.
auto show upload	Continuously displays the status of firmware upload.
clrscrn	Clears the screen.
cpu speed <*mhz*>	Sets the CPU speed.
default cpu speed	Restores the default CPU clock rate.
default long name	Restores the default product long name.
default short name	Restores the default product short name.
exit	Exit to the enable level.
long name <*name*>	Sets the product long name, displayed in command mode and the Web interface.
short name <*name*>	Sets the product short name, displayed in command mode and the Web interface.
show	Show system information
show buffer pool	Displays information about the various buffer pools.
show codefile memory	Displays memory utilization by code files.
show delta memory	Displays differences in memory utilization by code files or line reference.
show hardware information	Displays information about the hardware.
show history	Displays the last 20 commands entered during the current CLI session.
show ibio2100	Show system information
show linereference memory <*code filename*>	Displays memory utilization by line reference for one code file.
show memory	Displays current memory usage information.
show task memory	Displays task memory utilization.
show task state	Displays current task states.
show tlog	Displays the internal trouble log.
show upload	Displays the status of firmware upload.
write	Stores the current configuration in permanent memory.
disconnect (tunnel-disconnect:2) level commands	
character stop disable	Does not watch for a stop character to disconnect.
character stop enable	Watches for a stop character to disconnect.
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.
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 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.
timeout <*milliseconds*>	Disconnects when no data has been received on the line (serial port) for the
write	Stores the current configuration in permanent memory.

disconnect (tunnel-disconnect:1) level commands	
character stop disable	Does not watch for a stop character to disconnect.
character stop enable	Watches for a stop character to disconnect.
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.
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 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.
timeout <*milliseconds*>	Disconnects when no data has been received on the line (serial port) for the
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
auto show xsr	Show XML Status Record counters
chem <*number*>	Enters the configure email level.
clear interfaces counters	Zeros interface session counters
clear query port counters	Zeros Query Port counters
clear xsr counters	Zeros XML Status Record counters
clrscrn	Clears the screen.
configure	Enters the configuration level.
connect	Show name and number for lines.
connect line <*line*>	Begin session on serial port.
device	Enters the device level.
disable	Exits the enable level.
exit	Exit from the system
filesystem	Enters the filesystem level.
io	Enters the I/O Manager level.
kill line <*line*>	Kills command mode session on the Line
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.
lpd	Enters the lpd level.
no clear interfaces counters	Unzeros interface session counters
no clear query port counters	Unzeros Query Port counters
no clear xsr counters	Unzeros XML Status Record counters
nslookup	Lookup host information for the given host name
nslookup <*host*>	Return host information for the given host name

ping <*host*>	Ping destination 5 times 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
reload factory defaults	Reload factory defaults to permanent storage
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	Show system information
show history	Displays the last 20 commands entered during the current CLI session.
show hosts	Show domain settings
show ibio2100	Show system information
show interfaces	Show interface statistics
show ip sockets	Show UDP/TCP state information
show processes	Show thread runtime information
show sessions	Show active Telnet and SSH Sessions
show xsr	Show XML Status Record counters
ssh	Enters the SSH configuration level.
ssh <*optClientUsername*> <*host*>	Begin SSH session on network .
ssh <*optClientUsername*> <*host*> <*port*>	Begin SSH session on network :.
ssl	Enters the SSL configuration level.
telnet <*host*>	Begin telnet session on network .
telnet <*host*> <*port*>	Begin telnet session on network :.
trace route <*host*>	Trace route to destination
tunnel <*line*>	Enters the tunnel level.
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
eventtrak 1 (config-eventtrak:1) level commands	
clrscrn	Clears the screen.
eventtrak <*number*>	Changes to the command level for EventTrak configuration.
exit	Exits to the configuration level.

match <*number*>	Changes to the command level for EventTrak Match configuration.
show history	Displays the last 20 commands entered during the current CLI session.
task <*number*>	Changes to the command level for EventTrak Task configuration.
write	Stores the current configuration in permanent memory.
eventtrak 2 (config-eventtrak:2) level commands	
clrscrn	Clears the screen.
eventtrak <*number*>	Changes to the command level for EventTrak configuration.
exit	Exits to the configuration level.
match <*number*>	Changes to the command level for EventTrak Match configuration.
show history	Displays the last 20 commands entered during the current CLI session.
task <*number*>	Changes to the command level for EventTrak Task configuration.
write	Stores the current configuration in permanent memory.
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.
compact	Compact the file system, freeing all dirty space
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
tftp get ascii <*source file*> <*destination file*> <*host*>	Get an ascii file using TFTP
tftp get ascii <*source file*> <*destination file*> <*host*> <*port*>	Get an ascii file using TFTP
tftp get binary <*source file*> <*destination file*> <*host*>	Get a binary file using TFTP
tftp get binary <*source file*> <*destination file*> <*host*> <*port*>	Get a binary file using TFTP
tftp put ascii <*source file*> <*destination file*> <*host*>	Put an ascii file using TFTP
tftp put ascii <*source file*> <*destination file*> <*host*> <*port*>	Put an ascii file using TFTP
tftp put binary <*source file*> <*destination file*> <*host*>	Put a binary file using TFTP
tftp put binary <*source file*> <*destination*	Put a binary file using TFTP

file> <*host*> <*port*>	
touch <*file*>	Create a file
ftp (config-ftp) level commands	
admin password <*string*>	Sets the administrative password for the FTP server.
admin username <*string*>	Sets the administrative username for the FTP server.
clear counters	Zeros FTP counters.
clrscrn	Clears the screen.
default admin password	Resets the FTP password to the default (PASS).
default admin username	Resets the FTP username to the default (admin).
exit	Returns to the config level.
no clear counters	Unzeros FTP counters.
show	Displays the FTP settings and statistics.
show history	Displays the last 20 commands entered during the current CLI session.
state disable	Disables the FTP server.
state enable	Enables the FTP server.
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,
exit	Exits to the configuration level.
host <*number*>	Change to config host level
name <*text*>	Sets the 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
remote port <*number*>	Sets the remote port used to connect to the host.
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.
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,
exit	Exits to the configuration level.
host <*number*>	Change to config host level
name <*text*>	Sets the 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
remote port <*number*>	Sets the remote port used to connect to the host.
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.
write	Stores the current configuration in permanent memory.
http (config-http) level commands	
auth <*uri*> <*realm*>	Creates a new HTTP server authentication directive.
auth type <*uri*> basic	Sets an HTTP server authentication directive to the Basic Access
auth type <*uri*> digest	Sets an HTTP server authentication directive to the Digest Access
auth type <*uri*> none	Sets the authentication type for an HTTP server authentication directive to
auth type <*uri*> ssl	Sets the authentication type for an HTTP server authentication directive to SSL.
auth type <*uri*> ssl-basic	Sets the authentication type for an HTTP server authentication directive
auth type <*uri*> ssl-digest	Sets the authentication type for an HTTP server authentication directive
auth user <*uri*> <*user*> <*password*>	Creates or modifies a user for an HTTP server authentication directive.
clear counters	Sets the HTTP counters to zero.
clear log	Clears the HTTP server log.
clrscrn	Clears the screen.
default log format	Restores the HTTP Server log format string to its default value.
default log max entries	Restores the default maximum number of HTTP Server log entries.
default max bytes	Resets the default maximum bytes the HTTP Server will accept when receiving
default max timeout	Resets the default maximum time the HTTP Server will wait when receiving
default port	Resets the HTTP Server port to its default value.
default ssl port	Resets the HTTP Server SSL port to its default value.
delete auth <*uri*>	Deletes an existing HTTP Server authentication directive.
delete auth user <*uri*> <*user*>	Deletes an existing user for an HTTP Server authentication directive.
exit	Returns to the config level.
log disable	Disables HTTP server logging.
log enable	Enables HTTP server logging.
log format <*string*>	Sets the log format string for the HTTP server, using the following
max bytes <*bytes*>	Sets the maximum number of bytes the HTTP server ac-

	cepts when receiving
max timeout <*seconds*>	Sets the maximum timeout the HTTP server waits when receiving a request.
no clear counters	Restores the HTTP counters to the aggregate values.
port <*number*>	Sets the port number the HTTP server will use.
server disable	Disables the HTTP server.
server enable	Enables the HTTP server.
show	Displays the HTTP server settings.
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.
ssl port <*number*>	Sets the port number the HTTP server will use over SSL.
ssl3 disable	Disables SSLv3 handling.
ssl3 enable	Enables SSLv3 handling.
tls1.0 disable	Disables TLSv1.0 handling.
tls1.0 enable	Enables TLSv1.0 handling.
tls1.1 disable	Disables TLSv1.1 handling.
tls1.1 enable	Enables TLSv1.1 handling.
write	Stores the current configuration in permanent memory.
icmp (config-icmp) level commands	
auto show stats	Continuously shows ICMP statistics
clear counters	Zeros counters
clrscrn	Clears the screen.
exit	Exits to the configuration level.
no clear counters	Unzeros IP counters
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
show stats	Shows ICMP statistics
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.
clear host <*string*>	Removes an entry from the DNS Cache
clrscrn	Clears the screen.
default gateway <*IP address*>	Sets the configurable gateway IP address to the default value.
dhcp client id binary <*binary*>	Sets the client id allowing binary characters.
dhcp client id set <*text*>	Sets the client id in text format.
dhcp disable	Disables DHCP.
dhcp enable	Enables DHCP.
dhcp renew	Force DHCP to renew
domain <*text*>	Sets the domain name.

exit	Exits to the config level.
hostname <*text*>	Sets the host name.
ip address <*ip address/cidr*>	Sets the IP address and network mask.
link	Enter link configuration level
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.
io (io) level commands	
clrscrn	Clears the screen.
exit	Exits to the enable level.
get <*io*>	Displays the value of the specified Input or Output.
no rss trace <*input*>	Disables RSS trace of input transitions.
rss trace <*input*>	Enables RSS trace of input transitions.
set <*io*> as input	Configures the specified I/O as an input.
set <*io*> as output	Configures the specified I/O as an output.
set <*output*> force closed	Forces the specified Output to be Closed.
set <*output*> force open	Forces the specified Output to be Open.
set <*output*> normal	Sets the specified Output for normal operation.
show	Displays information for all I/Os.
show history	Displays the last 20 commands entered during the current CLI session.
ip (config-ip) level commands	
auto show stats	Continuously shows IP statistics
clear counters	Zeros counters
clrscrn	Clears the screen.
default multicast time to live	Restores the default IP multicast time to live, which is one hop.
exit	Exits to the configuration level.
multicast time to live <*hops*>	Sets the IP multicast time to live.
no clear counters	Unzeros IP counters
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
show stats	Shows IP statistics
write	Stores the current configuration in permanent memory.
ip filter (config-filter) level commands	

add <*ip address*> <*subnet mask*>	Adds an entry to the IP filter table.
clrscrn	Clears the screen.
exit	Returns to the config level.
remove <*ip address*> <*subnet mask*>	Removes an entry from the IP filter table.
show	Displays the IP filter table.
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.
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.
command mode serial string binary <*string*>	Sets a binary string that can be entered at boot time to enter command mode.
command mode signon message <*string*>	Sets an ASCII sign-on message that is sent from the serial port when the
command mode signon message binary <*string*>	Sets a binary sign-on message that is sent from the serial port when the
command mode wait time <*milliseconds*>	Sets boot-up wait time for command mode serial string.
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 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.
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.

line <*line*>	Enters the line level.
lpd <*line*>	Enters the configure lpd level.
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 serial string	Prevents the user-defined serial boot string from being used to enter
no command mode signon message	Clears the signon message displayed at boot time and when entering
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 lpd	Applies Line Printer Daemon (LPD) protocol on the line.
protocol lpd or tunnel	Applies LPD or tunnel protocol on the line.
protocol modbus ascii	Applies Modbus ASCII protocol on the line.
protocol modbus rtu	Applies Modbus RTU protocol on the line.
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.
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.
tunnel <*line*>	Enters the tunnel level.
write	Stores the current configuration in permanent memory.
xoff char <*control*>	Sets the xoff character for use with software flow control on this line.
xon char <*control*>	Sets the xon character for use with software flow control on this line.
line 2 (line:2) level commands	
auto show statistics	Continuously displays line statistics.
baud rate <*bits per second*>	Sets the line speed.
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.
command mode serial string binary <*string*>	Sets a binary string that can be entered at boot time to enter command mode.
command mode signon message <*string*>	Sets an ASCII sign-on message that is sent from the serial port when the
command mode signon message binary <*string*>	Sets a binary sign-on message that is sent from the serial port when the
command mode wait time <*milliseconds*>	Sets boot-up wait time for command mode serial string.
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 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.
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.
line <*line*>	Enters the line level.
lpd <*line*>	Enters the configure lpd level.
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 serial string	Prevents the user-defined serial boot string from being used to enter
no command mode signon message	Clears the signon message displayed at boot time and when entering
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 lpd	Applies Line Printer Daemon (LPD) protocol on the line.

protocol lpd or tunnel	Applies LPD or tunnel protocol on the line.
protocol modbus ascii	Applies Modbus ASCII protocol on the line.
protocol modbus rtu	Applies Modbus RTU protocol on the line.
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.
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.
tunnel <*line*>	Enters the tunnel level.
write	Stores the current configuration in permanent memory.
xoff char <*control*>	Sets the xoff character for use with software flow control on this line.
xon char <*control*>	Sets the xon character for use with software flow control on this line.
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
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.
lpd (lpd) level commands	
auto show <*line*>	Continuously displays lpd status for the specified line.
clrscrn	Clears the screen.
exit	Exits to the enable level.

kill <*line*>	Kills the current print job on the specified line.
show <*line*>	Displays lpd status for the specified line.
show history	Displays the last 20 commands entered during the current CLI session.
lpd 1 (config-lpd:1) level commands	
banner disable	Disables printing banner for all print jobs. Only print the banner when a
banner enable	Enables printing banner for all print jobs.
binary disable	Treats print job as ascii text. Filters out all non-ascii cha-racters and
binary enable	Treats print job as binary. Sends data byte-for-byte to the printer.
capture disable	Redirects serial output back to the line.
capture enable	Redirects serial output from the line to this CLI session.
clrscrn	Clears the screen.
convert newline disable	Disables converting single new line and carriage return characters to
convert newline enable	Enables converting single new line and carriage return characters to
eoj disable	Disables sending the end-of-job string after each print job.
eoj enable	Enables sending the end-of-job string after each print job.
eoj text binary <*binary*>	Sets the end-of-job text allowing for binary characters.
eoj text set <*text*>	Sets the end-of-job text.
exit	Exits to the configuration level.
formfeed disable	Disables the printer from advancing to the next page at the end of each
formfeed enable	Forces the printer to advance to the next page at the end of each print job.
kill	Ends the current print job on this lpd line.
line <*line*>	Enters the line level.
lpd <*line*>	Enters the configure lpd level.
no eoj text	Removes the end-of-job string.
no queue name	Removes the queue name.
no soj text	Removes the start-of-job string.
queue name <*text*>	Sets the name of the queue that this lpd line belongs to.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
show statistics	Displays statistics and status information for this lpd line.
soj disable	Disables sending the start-of-job string after each print job.
soj enable	Enables sending the start-of-job string after each print job.
soj text binary <*binary*>	Sets the start-of-job text allowing for binary characters.
soj text set <*text*>	Sets the start-of-job text.
terminal <*line*>	Enters the configure-terminal level.
terminal network	Enters the configure-terminal level for the network.
test print <*number of lines*>	Prints lines of text directly to the lpd line.
tunnel <*line*>	Enters the tunnel level.

write	Stores the current configuration in permanent memory.
lpd 2 (config-lpd:2) level commands	
banner disable	Disables printing banner for all print jobs. Only print the banner when a
banner enable	Enables printing banner for all print jobs.
binary disable	Treats print job as ascii text. Filters out all non-ascii characters and
binary enable	Treats print job as binary. Sends data byte-for-byte to the printer.
capture disable	Redirects serial output back to the line.
capture enable	Redirects serial output from the line to this CLI session.
clrscrn	Clears the screen.
convert newline disable	Disables converting single new line and carriage return characters to
convert newline enable	Enables converting single new line and carriage return characters to
eoj disable	Disables sending the end-of-job string after each print job.
eoj enable	Enables sending the end-of-job string after each print job.
eoj text binary <*binary*>	Sets the end-of-job text allowing for binary characters.
eoj text set <*text*>	Sets the end-of-job text.
exit	Exits to the configuration level.
formfeed disable	Disables the printer from advancing to the next page at the end of each
formfeed enable	Forces the printer to advance to the next page at the end of each print job.
kill	Ends the current print job on this lpd line.
line <*line*>	Enters the line level.
lpd <*line*>	Enters the configure lpd level.
no eoj text	Removes the end-of-job string.
no queue name	Removes the queue name.
no soj text	Removes the start-of-job string.
queue name <*text*>	Sets the name of the queue that this lpd line belongs to.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
show statistics	Displays statistics and status information for this lpd line.
soj disable	Disables sending the start-of-job string after each print job.
soj enable	Enables sending the start-of-job string after each print job.
soj text binary <*binary*>	Sets the start-of-job text allowing for binary characters.
soj text set <*text*>	Sets the start-of-job text.
terminal <*line*>	Enters the configure-terminal level.
terminal network	Enters the configure-terminal level for the network.
test print <*number of lines*>	Prints lines of text directly to the lpd line.
tunnel <*line*>	Enters the tunnel level.
write	Stores the current configuration in permanent memory.
match 1 (config-eventtrak-match:2.1) level commands	
case sensitive no	Sets EventTrak monitoring to be insensitive to case, so

	either a or A will
case sensitive yes	Sets EventTrak monitoring to be case sensitive, requiring an exact match.
clrscrn	Clears the screen.
default case sensitive	Sets the default EventTrak monitoring case sensitivity, which is not case
default timeout milliseconds	Restores the default EventTrak monitoring timeout.
exit	Exits to the EventTrak level.
match <*number*>	Changes to the command level for EventTrak Match configuration.
no string	Removes the EventTrak monitoring match string.
no wildcard	Removes the EventTrak wildcard character.
rss trace matches disable	Turns off RSS tracing of EventTrak string matches.
rss trace matches enable	Turns on RSS tracing to post each time EventTrak matches the string.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
string binary <*binary*>	Sets the EventTrak monitoring match string allowing for binary characters.
string set <*text*>	Sets the EventTrak monitoring match string.
task <*number*>	Changes to the command level for EventTrak Task configuration.
timeout milliseconds <*number*>	Sets the EventTrak monitoring timeout milliseconds. Old data that might
wildcard <*text*>	Sets the EventTrak monitoring wildcard character. Where it is placed in the
write	Stores the current configuration in permanent memory.
match 1 (config-eventtrak-match:1.1) level commands	
case sensitive no	Sets EventTrak monitoring to be insensitive to case, so either a or A will
case sensitive yes	Sets EventTrak monitoring to be case sensitive, requiring an exact match.
clrscrn	Clears the screen.
default case sensitive	Sets the default EventTrak monitoring case sensitivity, which is not case
default timeout milliseconds	Restores the default EventTrak monitoring timeout.
exit	Exits to the EventTrak level.
match <*number*>	Changes to the command level for EventTrak Match configuration.
no string	Removes the EventTrak monitoring match string.
no wildcard	Removes the EventTrak wildcard character.
rss trace matches disable	Turns off RSS tracing of EventTrak string matches.
rss trace matches enable	Turns on RSS tracing to post each time EventTrak matches the string.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
string binary <*binary*>	Sets the EventTrak monitoring match string allowing for binary characters.

string set <*text*>	Sets the EventTrak monitoring match string.
task <*number*>	Changes to the command level for EventTrak Task configuration.
timeout milliseconds <*number*>	Sets the EventTrak monitoring timeout milliseconds. Old data that might
wildcard <*text*>	Sets the EventTrak monitoring wildcard character. Where it is placed in the
write	Stores the current configuration in permanent memory.
match 2 (config-eventtrak-match:2.2) level commands	
case sensitive no	Sets EventTrak monitoring to be insensitive to case, so either a or A will
case sensitive yes	Sets EventTrak monitoring to be case sensitive, requiring an exact match.
clrscrn	Clears the screen.
default case sensitive	Sets the default EventTrak monitoring case sensitivity, which is not case
default timeout milliseconds	Restores the default EventTrak monitoring timeout.
exit	Exits to the EventTrak level.
match <*number*>	Changes to the command level for EventTrak Match configuration.
no string	Removes the EventTrak monitoring match string.
no wildcard	Removes the EventTrak wildcard character.
rss trace matches disable	Turns off RSS tracing of EventTrak string matches.
rss trace matches enable	Turns on RSS tracing to post each time EventTrak matches the string.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
string binary <*binary*>	Sets the EventTrak monitoring match string allowing for binary characters.
string set <*text*>	Sets the EventTrak monitoring match string.
task <*number*>	Changes to the command level for EventTrak Task configuration.
timeout milliseconds <*number*>	Sets the EventTrak monitoring timeout milliseconds. Old data that might
wildcard <*text*>	Sets the EventTrak monitoring wildcard character. Where it is placed in the
write	Stores the current configuration in permanent memory.
match 2 (config-eventtrak-match:1.2) level commands	
case sensitive no	Sets EventTrak monitoring to be insensitive to case, so either a or A will
case sensitive yes	Sets EventTrak monitoring to be case sensitive, requiring an exact match.
clrscrn	Clears the screen.
default case sensitive	Sets the default EventTrak monitoring case sensitivity, which is not case
default timeout milliseconds	Restores the default EventTrak monitoring timeout.
exit	Exits to the EventTrak level.
match <*number*>	Changes to the command level for EventTrak Match configuration.

no string	Removes the EventTrak monitoring match string.
no wildcard	Removes the EventTrak wildcard character.
rss trace matches disable	Turns off RSS tracing of EventTrak string matches.
rss trace matches enable	Turns on RSS tracing to post each time EventTrak matches the string.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
string binary <*binary*>	Sets the EventTrak monitoring match string allowing for binary characters.
string set <*text*>	Sets the EventTrak monitoring match string.
task <*number*>	Changes to the command level for EventTrak Task configuration.
timeout milliseconds <*number*>	Sets the EventTrak monitoring timeout milliseconds. Old data that might
wildcard <*text*>	Sets the EventTrak monitoring wildcard character. Where it is placed in the
write	Stores the current configuration in permanent memory.
match 3 (config-eventtrak-match:2.3) level commands	
case sensitive no	Sets EventTrak monitoring to be insensitive to case, so either a or A will
case sensitive yes	Sets EventTrak monitoring to be case sensitive, requiring an exact match.
clrscrn	Clears the screen.
default case sensitive	Sets the default EventTrak monitoring case sensitivity, which is not case
default timeout milliseconds	Restores the default EventTrak monitoring timeout.
exit	Exits to the EventTrak level.
match <*number*>	Changes to the command level for EventTrak Match configuration.
no string	Removes the EventTrak monitoring match string.
no wildcard	Removes the EventTrak wildcard character.
rss trace matches disable	Turns off RSS tracing of EventTrak string matches.
rss trace matches enable	Turns on RSS tracing to post each time EventTrak matches the string.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
string binary <*binary*>	Sets the EventTrak monitoring match string allowing for binary characters.
string set <*text*>	Sets the EventTrak monitoring match string.
task <*number*>	Changes to the command level for EventTrak Task configuration.
timeout milliseconds <*number*>	Sets the EventTrak monitoring timeout milliseconds. Old data that might
wildcard <*text*>	Sets the EventTrak monitoring wildcard character. Where it is placed in the
write	Stores the current configuration in permanent memory.
match 3 (config-eventtrak-match:1.3) level commands	
case sensitive no	Sets EventTrak monitoring to be insensitive to case, so

	either a or A will
case sensitive yes	Sets EventTrak monitoring to be case sensitive, requiring an exact match.
clrscrn	Clears the screen.
default case sensitive	Sets the default EventTrak monitoring case sensitivity, which is not case
default timeout milliseconds	Restores the default EventTrak monitoring timeout.
exit	Exits to the EventTrak level.
match <*number*>	Changes to the command level for EventTrak Match configuration.
no string	Removes the EventTrak monitoring match string.
no wildcard	Removes the EventTrak wildcard character.
rss trace matches disable	Turns off RSS tracing of EventTrak string matches.
rss trace matches enable	Turns on RSS tracing to post each time EventTrak matches the string.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
string binary <*binary*>	Sets the EventTrak monitoring match string allowing for binary characters.
string set <*text*>	Sets the EventTrak monitoring match string.
task <*number*>	Changes to the command level for EventTrak Task configuration.
timeout milliseconds <*number*>	Sets the EventTrak monitoring timeout milliseconds. Old data that might
wildcard <*text*>	Sets the EventTrak monitoring wildcard character. Where it is placed in the
write	Stores the current configuration in permanent memory.
modbus (modbus) level commands	
additional port <*number*>	Sets an additional TCP server port.
clrscrn	Clears the screen.
default response timeout	Restores the default Modbus Response Timeout.
exit	Exits to the config level.
kill connection <*index*>	Kills modbus connection selected by index from show connections.
no additional port	Removes the additional TCP server port.
response timeout <*milliseconds*>	Sets the Modbus Response Timeout in milliseconds.
show	Displays the current configuration.
show connections	Displays connections.
show history	Displays the last 20 commands entered during the current CLI session.
show statistics	Displays statistics.
tcp server state disable	Disables the Modbus TCP Server.
tcp server state enable	Enables the Modbus TCP Server.
modem (tunnel-modem:2) level commands	
clrscrn	Clears the screen.
connect string <*text*>	Sets the CONNECT string used in modem emulation.
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.
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.
connect string *<text>*	Sets the CONNECT string used in modem emulation.
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.
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.
output select (tunnel-connect-output_select:2) level commands	
clrscrn	Clears the screen.
default mode	Requires exclusive control of the output for connect mode connection.
exit	Exits to the next higher level.
mode exclusive control	Requires exclusive control of the output for connect mode connection.
mode logical-or	Does not require exclusive control of the output for connect mode connection.
no output	Discontinues enabling any output while the connect mode connection is up.
output <*text*>	Selects an output to enable while the connect mode connection is up.
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.
output select (tunnel-accept-output_select:2) level commands	
clrscrn	Clears the screen.
default mode	Requires exclusive control of the output for accept mode connection.
exit	Exits to the next higher level.
mode exclusive control	Requires exclusive control of the output for accept mode connection.
mode logical-or	Does not require exclusive control of the output for accept mode connection.
no output	Discontinues enabling any output while the accept mode connection is up.
output <*text*>	Selects an output to enable while the accept mode connection is up.
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.
output select (tunnel-connect-output_select:1) level commands	

clrscrn	Clears the screen.
default mode	Requires exclusive control of the output for connect mode connection.
exit	Exits to the next higher level.
mode exclusive control	Requires exclusive control of the output for connect mode connection.
mode logical-or	Does not require exclusive control of the output for connect mode connection.
no output	Discontinues enabling any output while the connect mode connection is up.
output <*text*>	Selects an output to enable while the connect mode connection is up.
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.
output select (tunnel-accept-output_select:1) level commands	
clrscrn	Clears the screen.
default mode	Requires exclusive control of the output for accept mode connection.
exit	Exits to the next higher level.
mode exclusive control	Requires exclusive control of the output for accept mode connection.
mode logical-or	Does not require exclusive control of the output for accept mode connection.
no output	Discontinues enabling any output while the accept mode connection is up.
output <*text*>	Selects an output to enable while the accept mode connection is up.
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:2) level commands	
clrscrn	Clears the screen.
default packing mode	Sets to default packing mode, which is "Disable"
default threshold	Restores the default threshold.
default timeout	Restores the default packing mode timeout.
exit	Returns to the tunnel level.
no send character	Removes the send character for packing mode.
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
packing mode timeout	Sets packing mode to accumulate data and transmit it after a specified
send character <*control*>	Sets the send character for packing mode.
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
timeout <*milliseconds*>	Sets the timeout value for packing mode in milliseconds.
trailing character <*control*>	Sets the trailing character for packing mode.
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 threshold	Restores the default threshold.
default timeout	Restores the default packing mode timeout.
exit	Returns to the tunnel level.
no send character	Removes the send character for packing mode.
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
packing mode timeout	Sets packing mode to accumulate data and transmit it after a specified
send character <*control*>	Sets the send character for packing mode.
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
timeout <*milliseconds*>	Sets the timeout value for packing mode in milliseconds.
trailing character <*control*>	Sets the trailing character for packing mode.
write	Stores the current configuration in permanent memory.
query port (config-query_port) level commands	
clrscrn	Clears the screen.
exit	Returns to the config level.
show	Displays statistics and information about the query port.
show history	Displays the last 20 commands entered during the current CLI session.
state disable	Disables response to 77FE requests.
state enable	Permits response to 77FE requests.
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
ping <*host*>	Ping destination 5 times 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 ibio2100	Show system information
trace route <*host*>	Trace route to destination
rss (config-rss) level commands	
clear rss	Clear the RSS Feed data
clrscrn	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:2) level commands	
buffer size <*bytes*>	Sets the size of the buffer for data read from the serial port.
clrscrn	Clears the screen.
default buffer size	Restores the default buffer size.
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 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	
buffer size <*bytes*>	Sets the size of the buffer for data read from the serial port.
clrscrn	Clears the screen.
default buffer size	Restores the default buffer size.
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 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.
snmp (config-snmp) level commands	

clrscrn	Clears the screen.
community ro <*string*>	Sets the SNMP read-only community string.
community rw <*string*>	Sets the SNMP read-write community string.
contact <*string*>	Sets the SNMP system contact information.
default description	Restores the SNMP system description to its default.
description <*string*>	Sets the SNMP system description.
exit	Returns to the config level.
host <*ip address*>	Sets the primary SNMP trap host.
host <*ip address*> <*ip address*>	Sets the primary and secondary SNMP trap hosts.
location <*string*>	Sets the SNMP system location.
name <*string*>	Sets the SNMP system name.
no community ro	Clears the SNMP read-only community.
no community rw	Clears the SNMP read/write community.
no contact	Clears the SNMP server contact.
no host <*ip address*>	Deletes the designated SNMP server trap host.
no host <*ip address*> <*ip address*>	Deletes the designated SNMP server trap hosts.
no location	Clears the SNMP server location.
no name	Clears the SNMP server name.
server disable	Disables the SNMP server.
server enable	Enables the SNMP server.
show	Displays the SNMP server settings.
show history	Displays the last 20 commands entered during the current CLI session.
traps disable	Disables the sending of SNMP trap messages.
traps enable	Enables the sending of SNMP trap messages.
write	Stores the current configuration in permanent memory.
ssh (ssh) level commands	
client server <*server*>	Set Client Server RSA or DSA key
client server <*server*> <*key*>	Set Client Server RSA or DSA key
client user <*user*> <*command*>	Set Client User, command and RSA or DSA keys
client user <*user*> <*password*> <*command*>	Set Client User with password, command and optional RSA or DSA keys
client user er <*user*> <*password*> <*command*> <*public*> <*private*>	Set Client User with password, command and RSA or DSA keys
client user <*user*> generate dsa 1024	Generate DSA public and private keys
client user <*user*> generate dsa 512	Generate DSA public and private keys
client user <*user*> generate dsa 768	Generate DSA public and private keys
client user <*user*> generate rsa 1024	Generate RSA public and private keys
client user <*user*> generate rsa 512	Generate RSA public and private keys
client user <*user*> generate rsa 768	Generate RSA public and private keys
clrscrn	Clears the screen.
exit	Exits to the enable level.
host	Sets RSA or DSA public and/or private keys
host <*key*>	Sets RSA or DSA public or private key
host <*public*> <*private*>	Sets RSA or DSA public and private keys
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 user <*user*> <*password*>	Sets Host username and password
host user <*user*> <*password*> <*public*>	Sets Host username, password and either a RSA or DSA public key.
host user <*user*> <*password*> <*public*> <*public*>	Sets Host username, password and both RSA and DSA public keys.
no client server <*server*>	Remove Client Server
no client server <*server*> dsa	Remove Client Server DSA key
no client server <*server*> rsa	Remove Client Server RSA key
no client user <*user*>	Remove Client User
no client user <*user*> command	Remove command from Client User
no client user <*user*> dsa	Remove Client User DSA key
no client user <*user*> rsa	Remove Client User RSA key
no host dsa	Removes DSA public and private keys
no host rsa	Removes RSA public and private keys
no host user <*user*>	Remove a host user
show	Show SSH settings
show client server <*server*>	Show Client Server RSA and DSA keys
show client user <*user*>	Show information for a client 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
show host user <*user*>	Show information for a host user
write	Stores the current configuration in permanent memory.
ssl (ssl) level commands	
authority	Adds an Authority Certificate.
clrscrn	Clears the screen.
dsa	Adds DSA Certificate and Private Key.
exit	Exits to the enable level.
generate dsa	Generates a new Self-Signed DSA Certificate.
generate rsa	Generates a new Self-Signed RSA Certificate.
no dsa	Removes DSA Certificate and Private Key
no intermediate authority <*cert*>	Removes an Intermediate Authority Certificate.
no rsa	Removes RSA Certificate and Private Key
no trusted authority <*cert*>	Removes a Trusted Authority Certificate.
rsa	Adds RSA Certificate and Private Key.
show	Displays Certificate Information.
show authority	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.
syslog (config-syslog) level commands	
clrscrn	Clears the screen.

default local port	Restores the default syslog local port.
default remote port	Restores the default syslog remote port.
exit	Returns to the config level.
host <*IP address*>	Sets the address of the syslog recipient.
level <*severity*>	Sets the minimum severity of events that will be logged.
local port <*number*>	Sets the syslog local port.
no host	Removes the address of the syslog recipient.
no level	Disables logging of all events.
remote port <*number*>	Sets the syslog remote port.
show	Displays the syslog settings and statistics.
show history	Displays the last 20 commands entered during the current CLI session.
state disable	Disables syslog logging.
state enable	Enables syslog logging.
write	Stores the current configuration in permanent memory.
task 1 (config-eventtrak-task:2.1) level commands	
activity none	Sets the EventTrak task activity to None.
activity output <*number*>	Sets the EventTrak task activity to control the designated output pin.
activity ping	Sets the EventTrak task activity to send a ping once per second.
clrscrn	Clears the screen.
default activity	Sets the default EventTrak task activity, which is None.
default description	Removes the description of an EventTrak control task.
default output control	Sets the default EventTrak output control, which is Exclusive.
description <*text*>	Sets the description of an EventTrak control task. It will appear in
exit	Exits to the EventTrak level.
match <*number*>	Changes to the command level for EventTrak Match configuration.
no ping address	Removes the EventTrak ping address.
output control exclusive	Sets the EventTrak output control to exclusive, so if the activity is to
output control logical-or	Sets the EventTrak output control to be Logical-Or, so it may be combined
ping address <*text*>	Sets the EventTrak ping address to be used when the activity is to send
rss trace ping responses disable	Turns off RSS tracing of EventTrak ping responses.
rss trace ping responses enable	Turns on RSS tracing of ping responses received by this EventTrak task.
rss trace steps disable	Turns off RSS tracing of EventTrak task steps.
rss trace steps enable	Turns on RSS tracing of each step taken by an EventTrak task.
rss trace triggers disable	Turns off RSS tracing of EventTrak task triggers.
rss trace triggers enable	Turns on RSS tracing of triggers emitted by this EventTrak task.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current

	CLI session.
step <*letter*>	Changes to the command level for EventTrak Task Step configuration.
task <*number*>	Changes to the command level for EventTrak Task configuration.
write	Stores the current configuration in permanent memory.
task 1 (config-eventtrak-task:1.1) level commands	
activity none	Sets the EventTrak task activity to None.
activity output <*number*>	Sets the EventTrak task activity to control the designated output pin.
activity ping	Sets the EventTrak task activity to send a ping once per second.
clrscrn	Clears the screen.
default activity	Sets the default EventTrak task activity, which is None.
default description	Removes the description of an EventTrak control task.
default output control	Sets the default EventTrak output control, which is Exclusive.
description <*text*>	Sets the description of an EventTrak control task. It will appear in
exit	Exits to the EventTrak level.
match <*number*>	Changes to the command level for EventTrak Match configuration.
no ping address	Removes the EventTrak ping address.
output control exclusive	Sets the EventTrak output control to exclusive, so if the activity is to
output control logical-or	Sets the EventTrak output control to be Logical-Or, so it may be combined
ping address <*text*>	Sets the EventTrak ping address to be used when the activity is to send
rss trace ping responses disable	Turns off RSS tracing of EventTrak ping responses.
rss trace ping responses enable	Turns on RSS tracing of ping responses received by this EventTrak task.
rss trace steps disable	Turns off RSS tracing of EventTrak task steps.
rss trace steps enable	Turns on RSS tracing of each step taken by an EventTrak task.
rss trace triggers disable	Turns off RSS tracing of EventTrak task triggers.
rss trace triggers enable	Turns on RSS tracing of triggers emitted by this EventTrak task.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
step <*letter*>	Changes to the command level for EventTrak Task Step configuration.
task <*number*>	Changes to the command level for EventTrak Task configuration.
write	Stores the current configuration in permanent memory.
task 2 (config-eventtrak-task:2.2) level commands	
activity none	Sets the EventTrak task activity to None.
activity output <*number*>	Sets the EventTrak task activity to control the designated output pin.

activity ping	Sets the EventTrak task activity to send a ping once per second.
clrscrn	Clears the screen.
default activity	Sets the default EventTrak task activity, which is None.
default description	Removes the description of an EventTrak control task.
default output control	Sets the default EventTrak output control, which is Exclusive.
description <*text*>	Sets the description of an EventTrak control task. It will appear in
exit	Exits to the EventTrak level.
match <*number*>	Changes to the command level for EventTrak Match configuration.
no ping address	Removes the EventTrak ping address.
output control exclusive	Sets the EventTrak output control to exclusive, so if the activity is to
output control logical-or	Sets the EventTrak output control to be Logical-Or, so it may be combined
ping address <*text*>	Sets the EventTrak ping address to be used when the activity is to send
rss trace ping responses disable	Turns off RSS tracing of EventTrak ping responses.
rss trace ping responses enable	Turns on RSS tracing of ping responses received by this EventTrak task.
rss trace steps disable	Turns off RSS tracing of EventTrak task steps.
rss trace steps enable	Turns on RSS tracing of each step taken by an EventTrak task.
rss trace triggers disable	Turns off RSS tracing of EventTrak task triggers.
rss trace triggers enable	Turns on RSS tracing of triggers emitted by this EventTrak task.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
step <*letter*>	Changes to the command level for EventTrak Task Step configuration.
task <*number*>	Changes to the command level for EventTrak Task configuration.
write	Stores the current configuration in permanent memory.
task 2 (config-eventtrak-task:1.2) level commands	
activity none	Sets the EventTrak task activity to None.
activity output <*number*>	Sets the EventTrak task activity to control the designated output pin.
activity ping	Sets the EventTrak task activity to send a ping once per second.
clrscrn	Clears the screen.
default activity	Sets the default EventTrak task activity, which is None.
default description	Removes the description of an EventTrak control task.
default output control	Sets the default EventTrak output control, which is Exclusive.
description <*text*>	Sets the description of an EventTrak control task. It will appear in
exit	Exits to the EventTrak level.

match <*number*>	Changes to the command level for EventTrak Match configuration.
no ping address	Removes the EventTrak ping address.
output control exclusive	Sets the EventTrak output control to exclusive, so if the activity is to
output control logical-or	Sets the EventTrak output control to be Logical-Or, so it may be combined
ping address <*text*>	Sets the EventTrak ping address to be used when the activity is to send
rss trace ping responses disable	Turns off RSS tracing of EventTrak ping responses.
rss trace ping responses enable	Turns on RSS tracing of ping responses received by this EventTrak task.
rss trace steps disable	Turns off RSS tracing of EventTrak task steps.
rss trace steps enable	Turns on RSS tracing of each step taken by an EventTrak task.
rss trace triggers disable	Turns off RSS tracing of EventTrak task triggers.
rss trace triggers enable	Turns on RSS tracing of triggers emitted by this EventTrak task.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
step <*letter*>	Changes to the command level for EventTrak Task Step configuration.
task <*number*>	Changes to the command level for EventTrak Task configuration.
write	Stores the current configuration in permanent memory.
task 3 (config-eventtrak-task:2.3) level commands	
activity none	Sets the EventTrak task activity to None.
activity output <*number*>	Sets the EventTrak task activity to control the designated output pin.
activity ping	Sets the EventTrak task activity to send a ping once per second.
clrscrn	Clears the screen.
default activity	Sets the default EventTrak task activity, which is None.
default description	Removes the description of an EventTrak control task.
default output control	Sets the default EventTrak output control, which is Exclusive.
description <*text*>	Sets the description of an EventTrak control task. It will appear in
exit	Exits to the EventTrak level.
match <*number*>	Changes to the command level for EventTrak Match configuration.
no ping address	Removes the EventTrak ping address.
output control exclusive	Sets the EventTrak output control to exclusive, so if the activity is to
output control logical-or	Sets the EventTrak output control to be Logical-Or, so it may be combined
ping address <*text*>	Sets the EventTrak ping address to be used when the activity is to send
rss trace ping responses disable	Turns off RSS tracing of EventTrak ping responses.
rss trace ping responses enable	Turns on RSS tracing of ping responses received by this

	EventTrak task.
rss trace steps disable	Turns off RSS tracing of EventTrak task steps.
rss trace steps enable	Turns on RSS tracing of each step taken by an EventTrak task.
rss trace triggers disable	Turns off RSS tracing of EventTrak task triggers.
rss trace triggers enable	Turns on RSS tracing of triggers emitted by this EventTrak task.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
step <*letter*>	Changes to the command level for EventTrak Task Step configuration.
task <*number*>	Changes to the command level for EventTrak Task configuration.
write	Stores the current configuration in permanent memory.
task 3 (config-eventtrak-task:1.3) level commands	
activity none	Sets the EventTrak task activity to None.
activity output <*number*>	Sets the EventTrak task activity to control the designated output pin.
activity ping	Sets the EventTrak task activity to send a ping once per second.
clrscrn	Clears the screen.
default activity	Sets the default EventTrak task activity, which is None.
default description	Removes the description of an EventTrak control task.
default output control	Sets the default EventTrak output control, which is Exclusive.
description <*text*>	Sets the description of an EventTrak control task. It will appear in
exit	Exits to the EventTrak level.
match <*number*>	Changes to the command level for EventTrak Match configuration.
no ping address	Removes the EventTrak ping address.
output control exclusive	Sets the EventTrak output control to exclusive, so if the activity is to
output control logical-or	Sets the EventTrak output control to be Logical-Or, so it may be combined
ping address <*text*>	Sets the EventTrak ping address to be used when the activity is to send
rss trace ping responses disable	Turns off RSS tracing of EventTrak ping responses.
rss trace ping responses enable	Turns on RSS tracing of ping responses received by this EventTrak task.
rss trace steps disable	Turns off RSS tracing of EventTrak task steps.
rss trace steps enable	Turns on RSS tracing of each step taken by an EventTrak task.
rss trace triggers disable	Turns off RSS tracing of EventTrak task triggers.
rss trace triggers enable	Turns on RSS tracing of triggers emitted by this EventTrak task.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.

step <*letter*>	Changes to the command level for EventTrak Task Step configuration.
task <*number*>	Changes to the command level for EventTrak Task configuration.
write	Stores the current configuration in permanent memory.
tcp (config-tcp) level commands	
ack limit <*packets*>	Sets the number of packets that must be received before an ACK is forced.
auto show stats	Continuously shows TCP statistics
clear counters	Zeros TCP counters
clrscrn	Clears the screen.
default ack limit	Restores the default ack limit of 3 packets.
default send data	Sets TCP to send data in accordance with standards.
exit	Exits to the configuration level.
no clear counters	Unzeros TCP counters
resets disable	Does not send TCP RSTs upon connection to unused ports.
resets enable	Sends TCP RSTs upon connection to unused ports.
send data expedited	Sets TCP to send data whenever the window is sufficiently open, for improved
send data standard	Sets TCP to send data in accordance with standards.
show	Displays the current configuration.
show history	Displays the last 20 commands entered during the current CLI session.
show stats	Shows TCP statistics
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.
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
exit connect menu enable	On the login connect menu, inserts the menu item allowing the user to exit
line <*line*>	Enters the line level.
login connect menu disable	Disables the login connect menu, so a user will get the CLI immediately
login connect menu enable	Enables the login connect menu, so a user will get the menu rather than the
lpd <*line*>	Enters the configure lpd level.
no send break	Removes the configured send break character.
preview connect menu	Shows the layout of the connect menu with current set-

	tings.
send break <*control*>	Sets the optional send break character.
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.
terminal network	Enters the configure-terminal level for the network.
terminal type <*text*>	Sets the terminal type.
tunnel <*line*>	Enters the tunnel level.
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.
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
exit connect menu enable	On the login connect menu, inserts the menu item allowing the user to exit
line <*line*>	Enters the line level.
login connect menu disable	Disables the login connect menu, so a user will get the CLI immediately
login connect menu enable	Enables the login connect menu, so a user will get the menu rather than the
lpd <*line*>	Enters the configure lpd level.
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.
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.
terminal network	Enters the configure-terminal level for the network.
terminal type <*text*>	Sets the terminal type.
tunnel <*line*>	Enters the tunnel level.
write	Stores the current configuration in permanent memory.
terminal network (config-terminal:network) level commands	
break duration <*milliseconds*>	Sets how long a break should last when it is being sent to the line.
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
exit connect menu enable	On the login connect menu, inserts the menu item allowing the user to exit
line <*line*>	Enters the line level.
login connect menu disable	Disables the login connect menu, so a user will get the CLI immediately
login connect menu enable	Enables the login connect menu, so a user will get the menu rather than the
lpd <*line*>	Enters the configure lpd level.
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.
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.
terminal network	Enters the configure-terminal level for the network.
terminal type <*text*>	Sets the terminal type.
tunnel <*line*>	Enters the tunnel level.
write	Stores the current configuration in permanent memory.
tftp (config-tftp) level commands	
allow file creation disable	Prohibits the TFTP server from creating files on the file system.
allow file creation enable	Enables the TFTP server to create files on the file system.
clear counters	Sets the TFTP counters to zero.
clrscrn	Clears the screen.
exit	Returns to the config level.
no clear counters	Restores the TFTP counters to the aggregate values.
show	Displays the TFTP settings and statistics.
show history	Displays the last 20 commands entered during the current CLI session.
state disable	Disables the TFTP server.
state enable	Enables the TFTP server.
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 accept counters	Zeros accept counters
clear aggregate counters	Zeros aggregate counters
clear all counters	Zeros all tunnel counters
clear connect counters	Zeros connect counters

clrscrn	Clears the screen.
connect	Enters the connect level for this tunnel.
disconnect	Enters the disconnect level for this tunnel.
echo start character disable	Disables forwarding (tunneling) of the start character.
echo start character enable	Enables forwarding (tunneling) of the start character.
echo stop character disable	Disables forwarding (tunneling) of the stop character.
echo stop character enable	Enables forwarding (tunneling) of the stop character.
exit	Exits to the enable level.
line <*line*>	Enters the line level.
lpd <*line*>	Enters the configure lpd level.
modem	Enters the modem level for this tunnel.
no clear accept counters	Unzeros accept counters
no clear aggregate counters	Unzeros aggregate counters
no clear all counters	Unzeros all tunnel counters
no clear connect counters	Unzeros connect counters
no start character	Removes the start character.
no stop character	Removes the stop character.
packing	Enters the packing level for this tunnel.
serial	Enters the serial level for this tunnel.
show	Displays tunneling configuration.
show history	Displays the last 20 commands entered during the current CLI session.
show statistics	show connection statistics
start character <*string*>	Sets the start character.
stop character <*string*>	Sets the stop character.
terminal <*line*>	Enters the configure-terminal level.
terminal network	Enters the configure-terminal level for the network.
tunnel <*line*>	Enters the tunnel level.
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 accept counters	Zeros accept counters
clear aggregate counters	Zeros aggregate counters
clear all counters	Zeros all tunnel counters
clear connect counters	Zeros connect counters
clrscrn	Clears the screen.
connect	Enters the connect level for this tunnel.
disconnect	Enters the disconnect level for this tunnel.
echo start character disable	Disables forwarding (tunneling) of the start character.
echo start character enable	Enables forwarding (tunneling) of the start character.
echo stop character disable	Disables forwarding (tunneling) of the stop character.
echo stop character enable	Enables forwarding (tunneling) of the stop character.
exit	Exits to the enable level.
line <*line*>	Enters the line level.
lpd <*line*>	Enters the configure lpd level.

modem	Enters the modem level for this tunnel.
no clear accept counters	Unzeros accept counters
no clear aggregate counters	Unzeros aggregate counters
no clear all counters	Unzeros all tunnel counters
no clear connect counters	Unzeros connect counters
no start character	Removes the start character.
no stop character	Removes the stop character.
packing	Enters the packing level for this tunnel.
serial	Enters the serial level for this tunnel.
show	Displays tunneling configuration.
show history	Displays the last 20 commands entered during the current CLI session.
show statistics	show connection statistics
start character <*string*>	Sets the start character.
stop character <*string*>	Sets the stop character.
terminal <*line*>	Enters the configure-terminal level.
terminal network	Enters the configure-terminal level for the network.
tunnel <*line*>	Enters the tunnel level.
write	Stores the current configuration in permanent memory.
udp (config-udp) level commands	
auto show stats	Continuously shows UDP statistics
clear counters	Zeros counters
clrscrn	Clears the screen.
exit	Exits to the configuration level.
no clear counters	Unzeros IP counters
show history	Displays the last 20 commands entered during the current CLI session.
show stats	Shows UDP statistics
write	Stores the current configuration in permanent memory.