



Using the Command Line Interface (CLI)

This appendix summarizes the Wireless LAN Solution Engine's command line interface (CLI) commands.



Note

When you use CLI commands to make a configuration change, the system configuration is updated immediately.

This appendix contains the following sections:

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Using the CLI

You can use the CLI by:

- Attaching a console to the WLSE, or
- Accessing the WLSE using Telnet or SSH.

**Note**

Telnet is disabled by default. Use the **telnetenable** command to enable Telnet. See [telnetenable](#), page B-76.

CLI Conventions

The command-line interface (CLI) uses the following conventions:

- The key combination **^c** or **Ctrl-c** means hold down the **Ctrl** key while you press the **c** key.
- A string is defined as a non-quoted set of characters.
- Use single-quotes (') to surround a series of parameters; do not use double-quotes

**Note**

Although the WLSE CLI is similar to the IOS CLI, they are not identical.

Command Privileges

Access to CLI commands is controlled by your user account privilege level. Users with privilege level 15 can use all commands. Users with privilege level 0 can use only a subset of the commands. The command descriptions in this appendix are organized by privilege level.

Checking Command Syntax

The user interface provides several types of responses to incorrect command entries:

- `Command not found`—You entered a command line that does not contain a valid command.
- `Incomplete command`—You entered a valid command but omitted required arguments.
- `Invalid input`—You entered a valid command but provided invalid arguments or parameters.

In addition, some commands have command-specific error messages that notify you that a command is valid but cannot run correctly.

Command History Feature

The CLI provides a command history feature. To display previously entered commands, press the up arrow key. After pressing the up arrow key, you can press the down arrow key to display the commands in reverse order. To run a command, press the Enter key while the command is displayed on the command line. You can also edit commands before pressing the Enter key.

Help for CLI Commands

You can obtain help using the following methods:

- For a list of all commands and their syntax, type **help** and press **Enter**.
- For help on a specific command, use either of the following methods:
 - Type the command name, a space, **help**; then press **Enter**. For example, **ntp help**.
 - Type **help**, a space, and the command name; then press **Enter**. For example, **help ntp**.

The help contains command usage information and syntax.

Command Description Conventions

Command descriptions in this document and in the CLI help system use the following conventions:

- Vertical bars (|) separate alternative, mutually exclusive elements.
- Square brackets ([]) indicate optional elements.
- Braces ({ }) indicate a required choice. Braces within square brackets ([{ }]) indicate a required choice within an optional element.
- Boldface indicates commands and keywords that are entered literally as shown.
- Italics indicate arguments for which you supply values.

Command Summary

Table B-1 summarizes all commands available on the WLSE. For full descriptions of commands, see the following sections:

- [Privilege Level 0 Commands, page B-10](#)
- [Privilege Level 15 Commands, page B-17](#)
- [Maintenance Image Commands, page B-79](#)

Table B-1 Command Summary

Command	Privilege Level	Description	For a detailed description, see ...
auth	15	Enables secure remote authentication.	auth, page B-17
backup	15	Backs up WLSE configuration.	backup, page B-18
backupconfig	15	Sets the backup file location for all backup and restore operations.	backupconfig, page B-19
cdp	15	Enables or disables the Cisco Discovery Protocol (CDP).	cdp, page B-20
clock	15	Sets the system date and time.	show clock, page B-11

Table B-1 Command Summary (continued)

Command	Privilege Level	Description	For a detailed description, see ...
df	15	Displays the current storage usage on the WLSE.	df , page B-22
dumptcp	15	Displays TCP/IP packet content.	dumptcp , page B-23
erase config	15 ¹	Erases the configuration in flash memory and reloads the device.	erase config , page B-24
exit	0	Logs user out of the WLSE.	exit , page B-10
gethostbyname	15	Displays IP address of a known domain name.	gethostbyname , page B-26
fsck	N/A ²	Checks and repairs the file system.	fsck , page B-79
firewall	15	Implements port filtering on the WLSE.	firewall , page B-25
hostname	15	Changes the system host name.	hostname , page B-27
import	15	Imports host files or maps IP addresses to host names.	import , page B-27
install configure	15	Configures the repository for installing software updates on the WLSE.	install configure , page B-28
install list	15	Lists software updates and images currently available on the repository.	install list , page B-29
install update	15	Installs software updates and images from the repository.	install update , page B-30
interface	15	Configures Ethernet interfaces.	interface , page B-31
ip domain-name	15	Defines the default domain name.	ip domain-name , page B-33
ip name-server	15	Specifies the address of name servers for name and address resolution.	ip name-server , page B-33
listbackup	15	Lists all current backups at the configured site.	listbackup , page B-35
mail	15	Debugs and tests email settings.	mail , page B-35

Table B-1 Command Summary (continued)

Command	Privilege Level	Description	For a detailed description, see ...
mailentrl clear	15	Deletes the mail log, send queue, or user queue.	mailentrl clear , page B-36
mailentrl list	15	Lists the size of the mail log, user queue, or send queue.	mailentrl list , page B-37
mailroute	15	Forwards email to a specified server.	mailroute , page B-37
mkcert	15	Generates a Certificate Signed Request (CSR) for HTTPS.	mkcert , page B-38
nslookup	15	Translates a device name to its IP address or an IP address to its device name.	nslookup , page B-40
ntp server	15	Allows the system clock to be synchronized by a time server.	ntp server , page B-40
ping	0	Sends ICMP echo_request packets for diagnosing basic network connectivity.	ping , page B-10
reload	15 ¹	Reboots the system.	reload , page B-42
reinitdb	15	Reinitializes the database.	reinitdb , page B-43
repository	15	Configures the WLSE to be a repository server.	repository , page B-44
repository add	15	Transfers software updates and images from a remote server to the WLSE's local repository.	repository add , page B-45
repository delete	15	Deletes software updates and images on the local repository.	repository delete , page B-46
repository list	15	Lists software updates and images on the local or remote repository.	repository list , page B-46
repository server	15	Starts, stops, or displays the status of the WLSE's local repository.	repository server , page B-47

Table B-1 Command Summary (continued)

Command	Privilege Level	Description	For a detailed description, see ...
restore	15	Restores backed up configuration from the configured location.	restore , page B-48
route	15	Adds a route.	route , page B-49
services	15	Lists, starts, or stops management services.	services , page B-50
show anilog	15	Displays the WLSE's ANI log.	show anilog , page B-51
show auth-cli	15	Displays the type of authentication used for secure CLI access.	show auth-cli , page B-52
show auth-http	15	Displays the type of authentication used for secure HTTP access.	show auth-http , page B-52
show backupconfig	15	Displays the current backup and restore configuration.	show backupconfig , page B-53
show bootlog	0	Displays the messages logged during the last system boot.	show bootlog , page B-54
show cdp neighbor	15	Displays the WLSE's nearest neighbor on the network.	show cdp neighbor , page B-55
show cdp run	15	Displays the Cisco Discovery Protocol (CDP) configuration.	show cdp run , page B-55
show clock	0	Displays system time in Coordinated Universal Time (UTC).	show clock , page B-11
show collectorlog	15	Displays the WLSE's collector log.	show collectorlog , page B-56
show config	15	Displays WLSE configuration.	show config , page B-57
show daemonslog	15	Displays WLSE's daemons log.	show daemonslog , page B-58
show dmgtldlog	15	Displays WLSE's daemon manager log.	show dmgtldlog , page B-59
show domain-name	0	Displays WLSE's domain name	show domain-name , page B-12

Table B-1 Command Summary (continued)

Command	Privilege Level	Description	For a detailed description, see ...
show webaccesslog	15	Displays WLSE's Web access log.	show webaccesslog , page B-60
show weberrorlog	15	Displays WLSE's Web error log.	show weberrorlog , page B-61
show websslaccesslog	15	Displays WLSE's Web SSL log.	show websslaccesslog , page B-62
show import	15	Displays imported host files.	show import , page B-62
show install logs	15	Displays software updates and images available on the configured repository.	show install logs , page B-63
show interfaces	0	Displays information about the WLSE's network interface.	show interfaces , page B-13
show ipchains	15	Displays IP chains for the selected interface.	show ipchains , page B-63
show hosts	15	Displays WLSE's host file.	show hosts , page B-64
show maillog	15	Displays WLSE's mail log.	show maillog , page B-64
show process	0	Displays information about processes running on the system.	show process , page B-13
show repository	15	Displays the status or the access log of a configured repository.	show repository , page B-66
show route	15	Displays the routes currently configured.	show route , page B-67
show securitylog	15	Displays WLSE's secure log information.	show securitylog , page B-67
show snmp-server	15	Displays WLSE's SNMP configuration.	show snmp-server , page B-68
show ssh-version	15	Displays type of SSH enabled.	show ssh-version , page B-69
show syslog	15	Displays syslog information.	show syslog , page B-69

Table B-1 Command Summary (continued)

Command	Privilege Level	Description	For a detailed description, see ...
show tech	15	Displays information necessary for Cisco's Technical Assistance Center to assist you.	show tech , page B-70
show telnetenable	15	Displays WLSE's Telnet status.	show telnetenable , page B-71
show tomcatlog	15	Displays WLSE's Tomcat log.	show tomcatlog , page B-72
show version	0	Displays information about current software installed on WLSE.	show version , page B-14
shutdown	15	Shuts down system in preparation for powering it off.	shutdown , page B-73
snmp-server	15	Configures an SNMP agent.	snmp-server , page B-74
ssh	15	Connects to an external host by using SSH.	ssh , page B-74
ssh-version	15	Enables Secure Shell (SSH) 1, SSH 2, or both SSH 1 and SSH 2.	ssh-version , page B-75
telnet	15	Telnets to an external host.	telnet , page B-75
telnetenable	15	Configures Telnet access.	telnetenable , page B-76
traceroute	0	Displays route to a specified host and identifies faulty gateways.	traceroute , page B-15
username	15	Creates new user account or changes account properties.	username , page B-77
webtimeout	15	Changes the session timeout for the Web interface.	webtimeout , page B-78

1. This command is also available in the maintenance image.
2. This command is available only in the maintenance image.

Privilege Level 0 Commands

This section describes the privilege level 0 commands.

exit

To log out of the system, use the following command:

```
exit
```

Syntax Description

This command has no arguments or keywords.

Example

The following command logs you out of the system:

```
exit
```

ping

To send ICMP echo_request packets for diagnosing basic network connectivity, use the following command.

```
ping [ -c count ] [ -i wait ] [ -s packetsize ] [ -n ] { hostname | ip-address }
```

Syntax Description

c	Sets the number of echo packets to send.
<i>count</i>	Number of echo packets to send.
i	Sets the amount of time to wait between sending each packet.
<i>wait</i>	Amount of time to wait between sending each packet, in seconds. The default is 1.
s	Sets the size of each echo packet.
<i>packetsize</i>	The size of each echo packet, in bytes. The default is 56.

<i>hostname</i>	Host name of system to ping.
<i>ip-address</i>	IP address of system to ping.
n	Disables reverse DNS lookup.

Usage Guidelines

To use this command with the *hostname* argument, DNS must be configured on the system.

To force the time-out of a nonresponsive host or to eliminate a loop cycle, press **Ctrl-c**.

Example

This command sends 4 echo packets to the host otherhost with a wait time of 5 seconds between each packet:

```
ping -c 4 -i 5 209.165.200.224
```

```
PING 209.165.200.224 (209.165.200.224) from 209.165.201.0 : 56(84)
bytes of data.
64 bytes from dns-sj1.cisco.com (209.165.200.224): icmp_seq=0 ttl=246
time=16.3 ms
64 bytes from dns-sj1.cisco.com (209.165.200.224): icmp_seq=1 ttl=246
time=2.0 ms
64 bytes from dns-sj1.cisco.com (209.165.200.224): icmp_seq=2 ttl=246
time=2.1 ms
64 bytes from dns-sj1.cisco.com (209.165.200.224): icmp_seq=3 ttl=246
time=2.1 ms
```

show clock

To display the system date and time in Coordinated Universal Time (UTC), use the following command.

```
show clock
```

Syntax Description

This command has no arguments or keywords.

Usage Guidelines

or more information about the system time, see the *Configuration and Installation Guide for the Wireless LAN Solution Engine*.

Example

This command displays the system date and time:

```
show clock
12:43:47 Jun 20 2001
```

Related Commands

```
clock
ntp server
```

show domain-name

To display the system domain name, use the following command.

```
show domain-name
```

Syntax Description

This command has no arguments or keywords.

Example

This command displays the system domain name:

```
show domain-name
cisco.com
```

show interfaces

To display information about the system network interfaces, use the following command.

show interfaces

Syntax Description

This command has no arguments or keywords.

Example

This command displays information about system network interfaces:

```
show interfaces
eth0      Link encap:Ethernet  HWaddr 00:02:B3:35:FD:CC
          inet addr:209.165.200.224 Bcast:209.165.201.0
          Mask:255.255.255.224
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:80309 errors:0 dropped:0 overruns:0 frame:0
          TX packets:22451 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:100
          Interrupt:5 Base address:0xef00 Memory:d0c7e000-d0c7ec40
```

Related Commands

interface

show process

To display information about processes running on the system (including the status of the database), use the following command.

show process [page]



Note

If the db2sync process is listed, the database is running.

Syntax Description

page Displays command output one screen at a time. Press the Return key to display the next output screen. Press **Ctrl-c** to exit paged output and return to the command prompt.

Example

This command displays information about processes running on the system:

```
show process page
PID  PPID    ELAPSED    SZ           STARTED TTY  COMMAND
  1    0  4-20:04:35  277 Fri Jun 15 16:54:03 2001 ?   init
  2    1  4-20:04:35    0 Fri Jun 15 16:54:03 2001 ?   kflushd
  3    1  4-20:04:35    0 Fri Jun 15 16:54:03 2001 ?   kupdate
  4    1  4-20:04:35    0 Fri Jun 15 16:54:03 2001 ?   kpiod
  5    1  4-20:04:35    0 Fri Jun 15 16:54:03 2001 ?   kswapd
  6    1  4-20:04:28    0 Fri Jun 15 16:54:10 2001 ?   kreiserfsd
 81    1  4-20:04:25    0 Fri Jun 15 16:54:13 2001 ?   kreiserfsd
 82    1  4-20:04:25    0 Fri Jun 15 16:54:13 2001 ?   kreiserfsd
 83    1  4-20:04:25    0 Fri Jun 15 16:54:13 2001 ?   kreiserfsd
 84    1  4-20:04:25    0 Fri Jun 15 16:54:13 2001 ?   kreiserfsd
 85    1  4-20:04:24    0 Fri Jun 15 16:54:14 2001 ?   kreiserfsd
199    1  4-20:04:23   290 Fri Jun 15 16:54:15 2001 ?   watchdog
213    1  4-20:04:23   342 Fri Jun 15 16:54:15 2001 ?   idled
402    1  4-20:04:17   290 Fri Jun 15 16:54:21 2001 ?   syslogd
411    1  4-20:04:17   360 Fri Jun 15 16:54:21 2001 ?   klogd
517    1  4-20:04:15   327 Fri Jun 15 16:54:23 2001 ?   crond
531    1  4-20:04:15   286 Fri Jun 15 16:54:23 2001 ?   inetd
540    1  4-20:04:14   585 Fri Jun 15 16:54:24 2001 ?   sshd
585    1  4-20:04:09   842 Fri Jun 15 16:54:29 2001 ?   dmgttd.lnx
-----more-----
```

show version

To display information about the current software on the system, use the following command.

```
show version
```

Syntax Description

This command has no arguments or keywords.

Example

This command displays the current software on the system:

```
show version
Copyright (c) 1999-2000 by Cisco Systems, Inc.
Build Version (166) Mon Jun 11 16:56:23 PDT 2001
Uptime: 4 days 20 hours 6 mins
Linux/UID32 version 2.2.16-13bipsec.uid32 (gcc version egcs1
```

traceroute

To display the network route to a specified host and identify faulty gateways, use the following command.

```
traceroute [ -f first_ttl ] [ -m max_ttl ] [ -w waittime ] host [ packetlength ]
```

Syntax Description

-f	(Optional) Sets the time-to-live used in the first outgoing probe packet.
<i>first_ttl</i>	Time-to-live value of the first outgoing probe packet. The default is 1 hop.
-m	(Optional) Sets the maximum time-to-live (maximum number of hops) used in outgoing probe packets.
<i>max_ttl</i>	Maximum time-to-live for outgoing probe packets. The default is 30 hops.
-w	(Optional) Sets the time to wait for a response to a probe, in seconds.
<i>waittime</i>	Time to wait for a response to a probe, in seconds. The default is 5.
<i>host</i>	Name or IP address of host to which to connect.
<i>packetlength</i>	(Optional) The length of the packet to send, in bytes. The default and minimum value is 40.

Usage Guidelines

The **traceroute** command displays a list of the hosts that receive probe packets as they travel to the destination host, in the order that the receiving hosts receive the packets. Asterisks (*) appear as the list entry for hosts that do not respond to probing correctly.

Example

This command displays the network route to the host otherhost with a packet time-to-live value of 2, a wait time of 5 seconds, and 50-byte packets:

```
traceroute -m 20 -w 10 cisco.com 50
traceroute to example.com (209.165.200.224), 20 hops max, 50 byte
packets
 1 ex1.com (209.165.200.225)  0.981 ms  0.919 ms  0.926 ms
 2 ex2.com (209.165.200.254)  1.528 ms  0.747 ms  0.661 ms
 3 ex3.com (209.165.200.255)  0.887 ms  0.770 ms  0.744 ms
 4 ex4.com (209.165.201.0)   0.932 ms  0.789 ms  0.679 ms
 5 ex5.com (209.165.201.1)   1.066 ms  1.052 ms  0.983 ms
 6 ex6.com (209.165.201.30)  1.472 ms  1.247 ms  1.847 ms
 7 ex7.com(209.165.201.31)  1.738 ms  1.424 ms  1.658 ms
 8 ex8.com (209.165.202.128) 3.728 ms  2.429 ms  2.804 ms
 9 ex9.com (209.165.202.129) 6.283 ms  5.499 ms  3.285 ms
10 ex10.com (209.165.202.158) 9.926 ms  73.463 ms  3.895 ms
11 ex11.com (209.165.202.159) 70.967 ms * 47.106 ms
```

Related Commands

ping

Privilege Level 15 Commands

This section describes the privilege level 15 commands. Only users with privilege level 15 can run these commands.

auth

Use the following command to enable secure remote authentication.

```
auth { cli | http } { local | tacacs secret server1 [server2] | radius secret server1 [server2] | nt domain pdc [bdc] }
```

Syntax Description

cli	Enables authentication using the Command Line Interface (CLI).
http	Enables authentication using Hypertext Transfer Protocol (HTTP).
local	Enables local authentication.
tacacs	Enables authentication using the Terminal Access Controller Access Control System (TACACS).
radius	Enables authentication using Remote Dial-In User Service (RADIUS).
nt	Enables authentication from an NT domain controller.
<i>secret</i>	Shared secret code of server.
<i>server1</i>	IP address or device name of server from which authentication will occur.
<i>server2</i>	IP address or device name of optional secondary server from which authentication could occur
<i>domain</i>	NT domain name.
<i>pdc</i>	Name of the Primary Domain Controller (PDC).
<i>bdc</i>	Name of the Backup Domain Controller (BDC).

Example

This command enables secure remote authentication from a remote server, using TACACS.

```
auth http tacacs tr5e43 209.165.200.224
```

This command uses RADIUS for CLI access via SSH or Telnet:

```
auth cli radius my_secret 209.165.200.224
```

backup

Use the following command to back up the WLSE.

```
backup [test]
```

Syntax Description

test	Tests the configured backup hostname, username, password, and directory.
-------------	--

Usage Guidelines

The **backup** command backs up the WLSE configuration to the location specified by the **backupconfig** command.

Related Commands

backupconfig

listbackup

restore

show backupconfig

backupconfig

Use the **backupconfig** command to specify the location for all backup and restore operations. To clear the backup and restore configuration information, use the **no backupconfig** command.

```
backupconfig { hostname } { username } { password } [ directory ]
```

```
no backupconfig
```

Syntax Description

<i>hostname</i>	Host name or IP address of the host system.
<i>username</i>	Username of host system.
<i>password</i>	Password of the host system.
<i>directory</i>	Path to specific backup directory, if different from user's default directory.

Example

The following command causes all backup and restore operations to use the host with IP address 209.165.200.224, username user1, and password pass:

```
backupconfig 209.165.200.224 user1 pass
```

The following command clears all backup and restore configuration information:

```
no backupconfig
```

Related Commands

```
backup  
listbackup  
restore  
show backupconfig
```

cdp

Use the **cdp** command to configure the Cisco Discovery Protocol (CDP). CDP allows a Cisco device to recognize, and be recognized by, other Cisco devices.

```
cdp { run [ port ] | timer seconds | holdtime seconds }
```

```
no cdp { run [ port ] | timer | holdtime }
```

Syntax Description

run	Start CDP; starts the WLSE sending out signals to other devices.
timer	Set CDP packets retransmission time; sets the amount of time, in seconds, that CDP signals are sent.
holdtime	Set CDP packet information hold time; sets the amount of time a device will recognize another device without receiving a signal. For example, if your system's holdtime is set to 30 seconds, and another device that has already been recognized by yours does not send a signal within that 30 seconds, your system will cease to recognize it.
<i>port</i>	Ethernet port on which CDP will be enabled. Acceptable values are eth0-5. On the WLSE 1130, eth0 corresponds to the port labeled A on the back panel, and eth1 corresponds to the port labeled B.
<i>seconds</i>	Amount of time, in seconds, that the system takes to either transmit the CDP packet information or to hold another system's CDP packet information.

Usage Guidelines

If you are using the **no cdp** command, the **timer** and **holdtime** values are set to their default values.

Example

This command sets the CDP packet's retransmission time at 10 seconds:

```
cdp timer 10
```

This command sets the CDP packet's retransmission to its default time.

```
no cdp timer
```

clock

To set the system date and time, use the following command. See the following usage guidelines before using this command.

```
clock {set hh:mm:ss month day year}
```

Syntax Description

set	Sets the system clock.
<i>hh:mm:ss</i>	Current time (for example, 13:32:00).
<i>month</i>	Current month. You can enter full month names or abbreviations that include at least the first 3 characters of the month name (for example, jan, feb, mar).
<i>day</i>	Day of the month (for example, 1 to 31).
<i>year</i>	Current year (for example, 2000).

Usage Guidelines

When resetting the time, you must stop and restart WLSE services. Otherwise, scheduled configuration and firmware jobs will not run properly. To reset the time:

-
- Step 1** Stop services:
- ```
services stop
```
- Step 2** Change the time.
- Step 3** Start services:
- ```
services start
```
-

To set the date and time, use the **set** option.

If you configure the system to use Network Time Protocol (NTP), you do not need to set the system clock manually using the **clock** command. When setting the clock, enter the current time in Coordinated Universal Time (UTC).

For more information about the system time, see the *Installation and Configuration Guide for the Wireless LAN Solution Engine*.

Example

This command sets the date and time:

```
clock set 16:00:00 dec 11 2001
```

```
Tue Dec 11 16:00:00 UTC 2001
```

Related Commands

ntp server

show clock

df

To display the current storage usage on the WLSE, use the following command.

```
df
```

Usage Guidelines

This command is primarily intended as a debugging tool for problems with full partitions.

Example

The following command displays the current storage usage on the WLSE:

```
df
Filesystem                Size  Used Avail Use% Mounted on
/dev/sda12                 151M   59M   92M  39% /
/dev/sda1                   49M   2.8M   44M   6% /boot
/dev/sda7                   985M   24M   911M   3% /extra
/dev/sda8                   601M   32M   569M   5% /home
```

```

/dev/sda6          1001M  136M  865M  14% /opt
/dev/sda13         9.7G   32M   9.7G   0% /tftpboot
/dev/sda9          601M   32M  569M   5% /tmp
/dev/sda10         591M  212M  350M  38% /usr
/dev/sda5          2.9G  450M   2.5G  15% /var

```

dump tcp

The following command displays TCP/IP network protocol packet content.

```

dump tcp proto { snmp snmp-trap ip icmp tcp udp | port port }
  [ interface eth[ernet] 0 ... 5] [ host host [ host2 host2 ]]

```

Syntax Description

proto	Name of protocol. Enter snmp , snmp-trap , ip , icmp , tcp , or udp to specify the protocol for which you want to view the packet content. You must specify either a protocol or a port.
port	Use the port number to specify the protocol to observe, instead of specifying the protocol name. You must specify either a protocol or a port.
<i>port</i>	The port number.
interface eth[0-5]	The interface to observe. On the WLSE 1130, eth0 corresponds to the port labeled A on the back panel, and eth1 corresponds to the port labeled B.
host, host2	The host(s) to observe.
<i>host</i>	The host name(s).

Usage Guidelines

You can either specify a protocol by name or specify a port; you must specify one or the other. Optionally, you can specify the interface and specify one or two hosts to observe.

The command allows you to continuously observe the packets. Enter **Ctrl C** to terminate the command.

Examples

The following command listens displays the SNMP packets in the interface:

```
dump tcp proto snmp interface eth0
```

The following command listens to packets from port 161 only with abc.com as either the source or destination host:

```
dump tcp port 161 host abc.com
```

erase config

To erase the configuration in flash memory and reload the device, use the following command.

```
erase config
```

Syntax Description

This command has no arguments or keywords.

Usage Guidelines

When you enter the command, you are prompted for confirmation. Enter **yes** to confirm, or press **Enter** to accept the default response **no**.



Caution

When you confirm this command, the system configuration is erased and the system reboots automatically. The system will not operate until you reconfigure it.

When the system reboots, you must reconfigure it with the setup program. For information about using the setup program, see the *Installation and Configuration Guide for the Wireless LAN Solution Engine*.

Example

This command erases the system configuration:

```
erase config
```

```
This will erase your configuration, return device t
```

```
o factory defaults, and reload the device
Do you want to continue?[no]:yes
```

firewall

The following command implements port filtering on the WLSE.

```
firewall eth [0-5] [public | private | none ] | [icmp telnet ssh snmp
https 1741 repository tftp traceroute ]]
```

Syntax Description

eth [0-5]	Port to be configured. Acceptable values are eth0-eth5. On the WLSE 1130, eth0 corresponds to the port labeled A on the back panel, and eth1 corresponds to the port labeled B.
public	Denies access via Internet Control Message Protocol (ICMP), Telnet, SNMP, and the HTTP 1741 port.
none	Disables the firewall on an interface.
private	Denies no access.
icmp	Denies ICMP ping messages.
telnet	Denies incoming Telnet connections.
ssh	Denies incoming SSH connections.
snmp	Denies incoming SNMP requests.
https	Denies all connections to the SSL HTTP port.
1741	Denies all connections to the HTTP 1741 port.
repository	Disables the local software repository from access from the network.
traceroute	Prevents the WLSE from responding to traceroute commands.
tftp	Disables TFTP access.

Usage Guidelines

To configure an Ethernet port for secured public access, use the **public** option.

To configure an Ethernet port for local access, via a LAN or VLAN, use the **private** option.

To *disable* ICMP, Telnet, SSH, SNMP, HTTPS, or to deny connections to the SSL HTTP port or the HTTP 1741 port, use the corresponding option.

Example

The following is an example of a secure Ethernet port configuration:

- Ethernet port 0 is connected to the Internet, and is configured to be accessible only via HTTPS by entering the following command:

```
firewall eth0 public ssh 1741
```

- Ethernet port 0 is connected to an internal LAN or VLAN, and is configured to be accessible via any of the supported protocols by entering the following command:

```
firewall eth0 private
```

An on-site user has full access to the WLSE, but an external user can only access it using a secure connection.

gethostbyname

Use the following command to display the IP address of a known domain name.

```
gethostbyname host
```

Syntax Description

host Domain name of host.

Example

This command displays the IP address of example.com

```
gethostbyname example.com  
209.165.200.224
```

hostname

To change the system host name, use the following command.

```
hostname name
```

Syntax Description

<i>name</i>	New hostname for the WLSE. The name is case-sensitive and may be from 1 to 24 alphanumeric characters (A-Z, a-z, 0-9) and the minus sign (-).
-------------	---

Example

The following example changes the hostname to sandbox:

```
hostname sandbox
```

import

To import host files, or to map IP addresses to hostnames, use the following command:

```
import {host hostname ipaddress} | {hosts ftp-host username password path}  
no import {host hostname ipaddress} | {hosts}
```

Syntax Description

host	Maps one IP address to a hostname.
<i>hostname</i>	Hostname to map IP address to.
hosts	Imports host files from an FTP-accessible host.
<i>ipaddress</i>	IP address to map Hostname to.
<i>password</i>	Password used to access an FTP-accessible host.
<i>path</i>	Path to an FTP-accessible host.
<i>ftp-host</i>	IP address of an FTP-accessible host.

username username use to access an FTP-accessible host.

Usage Guidelines

To map a single hostname to an IP address:

import host *hostname ipaddress*

To import host files from an external, FTP- accessible server:

import hosts *ftp-host username password path*

To remove an individual IP address from a host file:

no import host *hostname ipaddress*

To remove an imported host file:

no import hosts

Example

The following command imports host files from the FTP- accessible server ftpserver_1. Ftpserver_1 has the username admin, the password pass, and the path /ftpserver_1/hosts.

```
import hosts ftpserver_1 admin pass /ftpserver_1/hosts
```

The following command deletes the hosts imported in the example above:

```
no import hosts
```

install configure

To define the repository that the WLSE uses to install software updates and images, use the following command. A repository is a remote or local server from where a system can download software updates and images. Only HTTP is supported.

```
install configure {URL URL Value | default | save}
```

Syntax Description

URL Sets the URL of the repository.

<i>URL Value</i>	The URL of the repository. The URL should take the form of <code>http://host:port/path</code> (the path is not a requirement).
default	Configures the Wireless LAN Solution Engine to be its own repository. The URL is <code>http://localhost:9851</code> .
save	Saves the current configuration in the <code>install.ini</code> file.

Example

The following command configures the WLSE to use `http://209.165.200.22`, with port 9851, as a repository:

```
install configure URL http://209.165.200.224:9851
```

Related Commands

install update

install list

install list

To list software updates and images currently available on the configured repository, use the following command. A repository is a remote or local server from where a system can receive software.

```
install list [all | full | page | updates]
```

Syntax Description

all	Displays all software updates and images on a configured repository. This command displays the name, the version, the requirements, the type, and a summary of the software.
full	Displays only the complete images on a configured repository. This command displays the name, the version, the requirements, the type, and a summary of the image.
page	Displays only the names of all software updates and images on a configured repository. All other information is omitted.

updates Displays only the updates on a configured repository. This command displays the name, the version, the requirements, the type, and a summary of the update.

Example

The following command lists all software updates in the repository:

```
install list all
Name           Version Requires      Type      Summary
EX-1.02        1.02   HSE-1.0   UPDATE    Hosting Solution...
EX-1.1aR       1.1aR  HSE-1.1   UPDATE    Hosting Solution...
EX-1.1a        1.1a   HSE-1.1   UPDATE    Hosting Solution...
EX-1.0a        1.0a   HSE-1.0   UPDATE    Hosting Solution...
EX-1.0aR       1.0aR  HSE-1.0   UPDATE    Hosting Solution...
EX-1.0-ROB     1.0    HSE-1.0   COMPLETE  Hosting Solution...
EX-1.0         1.0    HSE-1.0   COMPLETE  Hosting Solution...
```

Related Commands

install configure

install update

install update

To install a software update or image, use the following command.

```
install update package name
```

Syntax Description

Package Name Name of the software update or image to be installed. To see the names of software updates and images available for installation, use the **install list** command. For more information, see [install list](#), page B-29.

Example

The following command installs the update EX-2.0:

```
install update EX-2.0
```

Related Commands

install configure

install list

interface

To configure an Ethernet interface, use the **interface** command.

```
interface eth[ernet][0-5] { [ up | down ] | ipaddress netmask
  [ default-gateway address ] [ up | down ] }
  [ auto | speed [10 | 100 | 1000]] duplex [half | full]
```

Syntax Description

eth[0-5]	Name of the interface port to be configured. Acceptable values are eth0-eth5. On the WLSE 1130, eth0 corresponds to the port labeled A on the back panel, and eth1 corresponds to the port labeled B.
up	Enables the interface (the default). If you include the <i>ipaddress</i> parameter and want to enable the interface in the same command, either enter the up parameter after <i>ipaddress</i> and its required parameters, or do not specify the up or down parameters (up is the default).
down	Disables the interface. If you include the <i>ipaddress</i> parameter and want to disable the interface in the same command, enter the down parameter after <i>ipaddress</i> and its required parameters.
<i>ipaddress</i>	The IP address of the interface.
<i>netmask</i>	The netmask of the interface IP address.
default-gateway	The IP address of the default gateway that connects the WLSE to the network.
<i>address</i>	The default gateway IP address.

up	See the preceding description of up .
down	See the preceding description of down .
auto	Allow the interface speed to be set automatically.
speed	Set the interface speed to 10, 100, or 1000 megabits.
duplex half full	Set interface to half- or full-duplex mode.

Default

When you enter the **interface** command, the interface that you specify is enabled by default. If you want to disable an enabled interface or leave a disabled interface disabled, you must specify the **down** option.

Usage Guidelines

If you change the IP address or hostname, follow these steps to make sure that applications can connect to the WLSE:

-
- Step 1** Stop and restart management services by entering:
- ```
services stop
services start
```
- Step 2** Verify that management applications can still connect to the WLSE.
- Step 3** Reconnect any applications that cannot connect to it using the system's new IP address or hostname.
- 

## Example

The following command disables the Ethernet 1 interface:

```
interface eth1 down
```

The following command sets the Ethernet 0 IP address, netmask, and gateway IP address:

```
interface eth0 209.165.200.224 255.255.255.224 default-gateway
209.165.201.31 up
```

## ip domain-name

To define a default domain name, use the following command. To remove the default domain name, use the **no** form of the command.

A default domain name allows the system to resolve any unqualified host names. Any IP hostname that does not contain a domain name will have the configured domain name appended to it. If you are using a DNS server, this appended name is resolved by the DNS server, and then added to the host table.

```
ip domain-name name
```

```
no ip domain-name name
```

### Syntax Description

*name* Domain name (for example, cisco.com).

### Example

This command defines the default domain name cisco.com:

```
ip domain-name cisco.com
```

This command removes the default domain name:

```
no ip domain-name
```

### Related Commands

```
ip name-server
```

## ip name-server

To specify the addresses of up to three name servers for name and address resolution, use the following command. To remove a name server, use the **no** form of the command.

```
ip name-server ip-address
```

```
no ip name-server ip-address
```

## Syntax Description

*ip-address*                      Name server IP address (maximum of 3).

## Usage Guidelines

Use the **ip name-server** command to point the WLSE to a specific DNS server. You may configure up to three servers. If you attempt to configure a fourth name server, the following error message appears:

```
Name-server table is full.
```

The WLSE must be able to contact a functional DNS server to operate correctly. If it does not, in most cases it will not correctly process requests from management applications that use it. If the system cannot obtain DNS services from the network, Telnet connections to the system will fail or Telnet interaction with the system will become extremely slow.

## Example

This command assigns a name server for the system to use for name-to-address resolution:

```
ip name-server 209.165.200.224
```

This command disables the name server; the system will not use it for name-to-address resolution:

```
no ip name-server 209.165.200.224
```

## Related Commands

**ip domain-name**

# listbackup

Use the following command to list all current backups at the configured site.

**listbackup**

## Syntax Description

This command has no arguments or keywords.

## Example

The following command lists all current backups at the configured site:

```
listbackup
ex1_06042001_170640: Hostname: ex1 Date: 06042001 time: 1700
ex1_06052001_124543: Hostname: ex1 Date: 06052001 time: 1243
ex1_06052001_155148: Hostname: ex1 Date: 06052001 time: 1558
ex1_06202001_145704: Hostname: ex1 Date: 06202001 time: 1454
```

## Related Commands

**backup**

**backupconfig**

**restore**

**show backupconfig**

# mail

To debug and test email settings, use the **mail** command.

**mail** [ *to user@host* [ **debug** ] ]

## Syntax Description

To read email, enter the command with no arguments. To send email, enter the command with the following arguments:

**to** Sends email to the expressed recipient.

*user@host* Recipient of the email.  
To debug email problems, use the **debug** argument.

## Example

The following command sends an email message:

```
mail to operator@sj_wlse
Subject: test
This is a test mail
.
Cc:
```



### Note

---

You must end the mail message with a period (.) on a line by itself.

---

## mailcntrl clear

To delete the mail log, send queue, or user queue, use the following command.

```
mailcntrl clear {log | sendqueue | userqueue}
```

## Syntax Description

|                  |                               |
|------------------|-------------------------------|
| <b>log</b>       | Clears the WLSE's email log.  |
| <b>sendqueue</b> | Clears the WLSE's send queue. |
| <b>userqueue</b> | Clears the WLSE's user queue. |

## Example

The following command clears the WLSE's email log.

```
mailcntrl clear log
```

## Related Commands

```
mailcntrl list
```

## mailcntrl list

To list the size of the mail log, user queue, or the send queue, use the **mailcntrl list** command.

```
mailcntrl list {logsize | sendqueuesize | userqueuesize}
```

### Syntax Description

|                      |                        |
|----------------------|------------------------|
| <b>logsize</b>       | Size of the mail log.  |
| <b>sendqueuesize</b> | Size of the sendqueue. |
| <b>userqueuesize</b> | Size of the userqueue. |

### Example

The following command displays the size of the WLSE's email log.

```
mailcntrl list logsize
Mail log files total size: 4.0k
```

### Related Commands

```
mailcntrl clear
```

## mailroute

To forward email to a specified SMTP server, use the **mailroute** command to specify the server. If no server is specified, the WLSE will use DNS to resolve the correct email server in your local domain. To stop forwarding mail to the SMTP server, use the **no mailroute** command to remove the mail server information.

```
mailroute {hostname | ip-address}
```

```
no mailroute
```

### Syntax Description

|                   |                                |
|-------------------|--------------------------------|
| <i>hostname</i>   | Host name of an email server.  |
| <i>ip-address</i> | IP address of an email server. |

## Example

The following command forwards email to a server with the hostname mailserver:

```
mailroute mailserver
```

## mkcert

Use this command to generate a Certificate Signed Request (CSR) for enabling secure socket layer protocol (SSL), which provides a secure HTTPS connection between Web clients and the WLSE.

When you initially set up the WLSE, a private key, a self-signed certificate, and a certificate signing request (CSR) are generated. This set up procedure enables SSL.

The unsigned certificate expires in one year; use the **mkcert** command or the Web interface to obtain a permanent, signed certificate.

**Note**


---

When you wish to establish an SSL connection to the WLSE, use the https prefix instead of http when entering the URL into the browser. Do not append a port number to the URL.

---

## Syntax Description

**mkcert**                      Creates a CSR.

## Usage Guidelines

When you run **mkcert**, the following prompts are displayed. For some fields, there is a default name. If you enter a period (.), the field will be left blank.

| Prompt                    | Response                                                                                                                                                      |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Country Name           | Country, state or province, and city in which the WLSE is located. Use the 2-character code for the country and the full names of state or province and city. |
| 2. State or Province Name |                                                                                                                                                               |
| 3. Locality Name          |                                                                                                                                                               |

| Prompt                      | Response                                                            |
|-----------------------------|---------------------------------------------------------------------|
| 4. Organization Name        | Full name of the organization that owns the WLSE.                   |
| 5. Organizational Unit Name | (Optional) Section of the organization that is using the WLSE.      |
| 6. Common Name              | Fully qualified domain name of the organization that owns the WLSE. |
| 7. Email Address            | Email address of the organization that owns the WLSE.               |

After generating the certificate, view it in the Web interface (**Administration > Security > SSL (HTTPS)**). Copy everything between the BEGIN CERTIFICATE REQUEST and END CERTIFICATE REQUEST lines and send it to a certificate authority (such as Verisign). Use the authority's procedure for sending the certificate.

When you receive the signed certificate:

- 
- Step 1** Copy the certificate into an ASCII file on a client system.
  - Step 2** Using the WLSE Web interface on the same client, select **Administration > Security > SSL (HTTPS)**.
  - Step 3** Enter the path to the certificate or click **Browse** to locate it. Then click **Submit Certificate**.
  - Step 4** To use the new certificate, restart the WLSE by running the following commands:
 

```
services stop
services start
```
-

## nslookup

To translate a device name to its IP address or an IP address to its device name, use the **nslookup** command.

```
nslookup {dns-name | ip-address}
```

### Syntax Description

|                   |                                       |
|-------------------|---------------------------------------|
| <i>dns-name</i>   | Device name of a host on the network. |
| <i>ip-address</i> | IP address of a host on the network.  |

### Example

The following command translates the device name `hostname` to its IP address:

```
nslookup hostname
Server: dns.ex1.com
Address: 209.165.200.224

Name: ex1.com
Address: 209.165.201.0
```

## ntp server

To configure the Network Time Protocol (NTP) and allow the system clock to be synchronized by a time server, use the **ntp server** command. To disable this function, use the **no** form of this command.

```
ntp server ip-address
```

```
no ntp server ip-address
```

### Syntax Description

|                   |                                                                    |
|-------------------|--------------------------------------------------------------------|
| <i>ip-address</i> | IP address of the NTP time server providing clock synchronization. |
|-------------------|--------------------------------------------------------------------|

## Usage Guidelines

Use the **ntp server** command to synchronize the system clock with the specified NTP server. If you configure multiple NTP servers, the system will synchronize with the first working NTP server it finds. There is no limit to the number of NTP servers that you can configure.

The **ntp server** command validates the NTP server that you specify. The possible results are:

- If the server is a valid NTP server, a message similar to the following appears:

```
19 Jan 00:43:48 ntpdate[1437]: step time server 209.165.200.224
offset 999.257304
```

- If no NTP server with the name or IP address you specified exists, a message similar to the following appears:

```
19 Jan 00:43:40 ntpdate[1431]: no server suitable for
synchronization found
```

In this case, remove the NTP server by using the **no** form of the command, then configure a valid NTP server.

- If the system time is set to a time later than the time on the NTP server, a message similar to the following appears:

```
19 Jan 00:43:58 ntpdate[1265]: Can't adjust the time of day:
Invalid argument.
```

In this case, the **ntp server** command is entered into the system configuration, but NTP will not function. Follow these steps to remove the command and configure NTP correctly:

- 
- Step 1** Remove the **ntp server** command from the configuration by entering the **no** form of the command. For example:

```
no ntp server ip-address
```

where *ip-address* is the IP address of the NTP server.

- Step 2** Set the system clock to a time that is behind the time on the NTP server using the **clock set** command. For more information about the clock command, see [show clock, page B-11](#).

- Step 3** Enter the **ntp server** command again to configure the NTP server on the system. For example:

```
ntp server ip-address
```

---

## Example

This command configures the system to use an NTP server:

```
ntp server 209.165.201.0
```

This command configures the system to stop using the NTP server:

```
no ntp server 209.165.201.0
```

## Related Commands

**clock**

# reload

To reboot the system, use the **reload** command.

**reload**

## Syntax Description

This command has no arguments or keywords.

## Usage Guidelines

You will be prompted to verify the reload. Enter **yes** to confirm or **no** to cancel the reload.



### Caution

All processes running on the system stop when you run the **reload** command. The WLSE will not respond while it is reloading.

---

## Example

This command reboots the system:

```
reload
```

## Related Commands

**shutdown**

# reinitdb

To reinitialize the database, use the **reinitdb** command. This command erases all information contained within the database and stops and restarts system services.

**reinitdb**



---

**Note**

This command stops and restarts system services.

---

## Syntax Description

This command has no arguments or keywords.

## Example

This command reinitializes the database:

```
reinitdb
```

## Related Command

**services**

# repository

To configure the WLSE to be a repository for software updates, use the following command.

```
repository source URL
```

## Syntax Description

|               |                                                                                          |
|---------------|------------------------------------------------------------------------------------------|
| <b>source</b> | Sets the location from where the local repository downloads software updates and images. |
| <i>URL</i>    | The IP address of an external server containing software updates and images.             |

## Usage Guidelines

The **repository** command allows the WLSE to be a repository both for itself and for external systems. A repository is a remote or local server from where a system can receive software updates and images.

The **repository** command only configures the WLSE to be a repository. To configure the WLSE to install software updates and images from this repository, see [install configure, page B-28](#).

## Example

To configure the WLSE to be a repository, and to download software updates and images from `http://209.165.200.224`, enter the following command:

```
repository source ftp://209.165.200.224
```

## Related Commands

```
repository add
repository delete
repository list
repository server
```

## repository add

To transfer software updates and images from a remote server to the WLSE's local repository, use the following command.

```
repository add package
```

### Syntax Description

*package*                      Name of the software update or image to be transferred.

### Usage Guidelines

You will be prompted to enter a username and password if they are needed to access the remote server.

### Example

To transfer the update EX\_2.0 from an update server to the local repository, enter the following command:

```
repository add ex_2.0
```

### Related Commands

```
repository
repository delete
repository list
repository server
```

## repository delete

To delete software updates and images on the WLSE's local repository, use the **repository delete** command. A repository is a remote or local server from where a system can receive software updates and images.

```
repository delete [package | all]
```

### Syntax Description

|                |                                                                  |
|----------------|------------------------------------------------------------------|
| <b>all</b>     | Deletes all software updates and images in the local repository. |
| <i>package</i> | Name of the software update or image to be deleted.              |

### Example

The following command deletes the update EX\_2.0 from the local repository:

```
repository delete EX_2.0
```

### Related Commands

- repository**
- repository add**
- repository list**
- repository server**

## repository list

To list software updates and images on the configured local or remote repository, use the **repository list** command.

```
repository list { local | remote } [detail] [page]
```

### Syntax Description

|               |                                                              |
|---------------|--------------------------------------------------------------|
| <b>local</b>  | Lists software updates and packages on the local repository. |
| <b>remote</b> | Lists software updates and packages on a remote repository.  |

|               |                                                                |
|---------------|----------------------------------------------------------------|
| <b>detail</b> | Includes details of the software updates and images displayed. |
| <b>page</b>   | Displays the software updates and packages on page at a time.  |

### Example

To list the software updates and images available on the configured local repository, with details and one page at a time, enter the following command:

```
repository list local detail page
```

### Related Commands

- repository**
- repository add**
- repository delete**
- repository server**

## repository server

To start, stop, or view the status of the WLSE's local repository, use the **repository server** command. A repository is a remote or local server from where a system can receive software updates and images.

```
repository server [stop | start | status]
```

### Syntax Description

|               |                                              |
|---------------|----------------------------------------------|
| <b>stop</b>   | Stops the local repository.                  |
| <b>start</b>  | Starts the local repository.                 |
| <b>Status</b> | Displays the status of the local repository. |

### Example

The following command stops the local repository:

```
repository server stop
```

## Related Commands

**repository**  
**repository add**  
**repository delete**  
**repository list**

## restore

Use the **restore** command to restore a backed up configuration of the WLSE.

```
restore restore_name
```

## Syntax Description

*restore\_name*            Name of backup to be used to restore the WLSE.

## Usage Guidelines

After you restore a backup, all current domains, roles, users, and discovery configuration information will be erased.

Backups are restored from the location you specify by using the **backupconfig** command.

You can restore configuration data from one WLSE to another; for example, if you want to replace one WLSE with another. For more information see the backup procedures in [Backing Up and Restoring Data, page 6-91](#).

## Example

The following command restores the backup called **backup1** from the configured backup location:

```
restore backup1
```

## Related Commands

**backup**  
**backupconfig**

```
listbackup
show backupconfig
```

## route

To add a route through a gateway device, use the **route** command. To delete a route, use the no version of the command.

```
route { network address } netmask { network netmask }
 gateway { gateway address }

no route { network address } netmask { network netmask }
```

### Syntax Description

|                        |                                               |
|------------------------|-----------------------------------------------|
| <b>netmask</b>         | Sets value of the network netmask.            |
| <b>gateway</b>         | Sets the IP address of the router or gateway. |
| <i>network address</i> | IP address of the network.                    |
| <i>network netmask</i> | Value of the network netmask.                 |
| <i>gateway address</i> | IP address of router or gateway.              |

### Example

The following command adds a route:

```
route 209.165.201.0 netmask 255.255.255.224 gateway 209.165.200.224
```

The following command deletes the above route:

```
no route 209.165.201.0 netmask 255.255.255.224
```

## services

To list, start, or stop the management services running on the system, use the **services** command.

**services [ status | start | stop ]**

### Syntax Description

|               |                                          |
|---------------|------------------------------------------|
| <b>status</b> | Displays the management services status. |
| <b>start</b>  | Starts the management services.          |
| <b>stop</b>   | Stops the management services.           |

### Usage Guidelines

Management services are the software installed on the system by network management applications. Use this command to stop and restart the management services if the system is not responding correctly to a management application. This should cause the services to reset and function properly again.

### Example

This command stops management services:

```
services stop
```

This command starts management services:

```
services start
```

This command shows services status:

```
services status
Process= HSECollector
 State = Running but busy flag set
 Pid = 588
 RC = 0
 Signo = 0
 Start = 06/15/01 16:54:32
 Stop = Not applicable
 Core = Not applicable
 Info = HSECollector started.

Process= HSEANIServer
```

```

State = Running but busy flag set
Pid = 589
RC = 0
Signo = 0
Start = 06/15/01 16:54:32
-----more-----

```

## Related Commands

**show process**

## show anilog

To display the WLSE's ANI log, use the **show anilog** command.

```
show anilog [page] | include MatchString1 [MatchString2]
```

## Syntax Description

|                     |                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>page</b>         | Displays command output one screen at a time. Press the Return key to display the next output screen. Press <b>Ctrl-c</b> to exit paged output and return to the command prompt. |
| <b>include</b>      | Filters the command output to display only the records that contain the specified string of characters.                                                                          |
| <i>matchstring1</i> | String of characters to search for in the command output.                                                                                                                        |
| <i>matchstring2</i> | (Optional) Another string of characters to search for in the command output.                                                                                                     |

## Example

The following command displays the WLSE's ANI log, one page at a time:

```

show anilog page
/var/adm/CSCOets/log/ani.log
SNMPThrPool: Instantiated ex.lib.snmp.lib.timer.DynamicThreadPool, min=15, max=48, maxIdleSecs=240
2001/12/20 13:43:12 main ani MESSAGE DBConnection: Created new Database connection [hashCode = 45981573]
2001/12/20 13:43:38 main ani MESSAGE ServletServiceModule: Moxie Servlet Engine

```

```
is ready to receive requests
2001/12/20 15:43:39 HSEstatusPoll ani MESSAGE DBConnection: Created
new Database
 connection [hashCode = 85057415]
2001/12/20 17:43:39 HSEstatusPoll ani MESSAGE DBConnection: Created
new Database
 connection [hashCode = 396959623]
2001/12/20 19:43:39 HSEstatusPoll ani MESSAGE DBConnection: Created
new Database
--More--
```

## show auth-cli

To display the type of authentication used for secure CLI access, use the **show auth-cli** command.

**show auth-cli**

### Syntax Description

This command has no arguments or keywords.

### Example

This command and response shows that the WLSE's local authentication is being used for the CLI:

```
show auth-cli
local
```

## show auth-http

To display the type of authentication used for secure HTTP access, use the **show auth-http** command.

**show auth-http**

### Syntax Description

This command has no arguments or keywords.

## Example

This command and response shows that the WLSE's local authentication is being used for the CLI:

```
show auth-http
local
```

## show backupconfig

The following command displays the current backup and restore configuration.

```
show backupconfig
```

## Syntax Description

This command has no arguments or keywords.

## Usage Guidelines

If the backup configuration has not been set, the host and username fields display NONE.

## Example

The following command displays the current backup and restore configuration:

```
show backupconfig
Hostname: 209.165.201.0
Username: user1
```

## Related Commands

```
backup
backupconfig
listbackup
restore
```

## show bootlog

To display the messages logged during the last system boot, use the following command.

```
show bootlog [page]
```

### Syntax Description

**page** Displays command output one screen at a time. Press the **return** key to display the next output screen. Press **Ctrl-c** to exit paged output and return to the command prompt.

### Example

This command displays the messages logged during the last system boot:

```
show bootlog page
Linux/UID32 version 2.2.16-13bipsec.uid32 (gcc version egcs1
Console: colour VGA+ 80x25
Calibrating delay loop... 1133.77 BogoMIPS
start low memory: 0xc0001000 i386_endbase: 0xc009f000
addresses range:: 0xc0f00000 0xc1000000
start memory: c04f8000 end_memory: d0000000
Memory: 257688k/262144k available (988k kernel code, 416k reserved,
2992k data,)
Dentry hash table entries: 262144 (order 9, 2048k)
Buffer cache hash table entries: 262144 (order 8, 1024k)
Page cache hash table entries: 65536 (order 6, 256k)
vmdump: setting dump_execute() as dump_function_ptr ...
VFS: Diskquotas version dquot_6.4.0 initialized
CPU: Intel Pentium III (Coppermine) stepping 06
Checking 386/387 coupling... OK, FPU using exception 16 error
reporting.
Checking 'hlt' instruction... OK.
POSIX conformance testing by UNIFIX
mtrr: v1.35a (19990819) Richard Gooch (rgooch@atnf.csiro.au)
PCI: PCI BIOS revision 2.10 entry at 0xfda95
PCI: Using configuration type 1
-----more-----
```

### Related Commands

**reload**

clock

## show cdp neighbor

To display the WLSE's nearest neighbor on the network, use the **show cdp neighbor** command.

```
show cdp neighbor
```

### Syntax Description

This command has no arguments or keywords.

### Usage Guidelines

CDP neighbor information is usually broadcasted at 3- to 5-minute intervals, so there may be a delay in displaying neighbor information.

### Example

This command shows the nearest neighbor on the network.

```
show cdp neighbor
cdp neighbor device: Switch
 device type: cisco WS-C2924-XL
 port: FastEthernet0/12
 address: 209.165.201.0
```

## show cdp run

To display the Cisco Discovery Protocol (CDP) configuration, use the **show cdp-run** command.

```
show cdp run
```

### Syntax Description

This command has no arguments or keywords.

## Example

This command displays the CDP configuration:

```
show cdp run
CDP protocol is enabled ...
 broadcasting interval is every 60 seconds.
 time-to-live of cdp packets is 180 seconds.

CDP is enabled on port eth0.
```

## show collectorlog

To display the WLSE's collector log, use the show collectorlog command.

```
show collectorlog [page] | include matchstring1 [matchstring2]
```

### Syntax Description

|                     |                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>page</b>         | Displays command output one screen at a time. Press the Return key to display the next output screen. Press <b>Ctrl-c</b> to exit paged output and return to the command prompt. |
| <b>include</b>      | Filters the command output to display only the records that contain the specified string of characters.                                                                          |
| <i>matchstring1</i> | String of characters to search for in the command output.                                                                                                                        |
| <i>matchstring2</i> | (Optional) Another string of characters to search for in the command output.                                                                                                     |

## Example

The following command displays the WLSE's collector log, one page at a time:

```
show collectorlog page
/var/adm/CSCOets/log/collector.log
2001/12/20 13:43:18 main HSECollector MESSAGE CollectorMain: Waiting
for databas
e to be ready
2001/12/20 13:43:21 main HSECollector MESSAGE CollectorMain: Database
is ready
SNMPThrPool: Instantiated ex.lib.snmp.lib.timer.DynamicThreadPool, mi
n=15, max=48, maxIdleSecs=0
```

```
2001/12/20 13:43:29 main HSECollector MESSAGE ServletServiceModule:
Moxie Servlet
t Engine is ready to receive requests
2001/12/20 13:43:30 PeriodicSchedulerRun:FaultCleanup HSECollector
MESSAGE Colle
ctorDBUtils: DB.TableCleanupCommand=[VACUUM]
2001/12/20 13:43:30 PeriodicSchedulerRun:FaultCleanup HSECollector
MESSAGE Colle
ctorDBUtils: DB.TableUpdateStatsCommand=[VACUUM ANALYZE]
2001/12/21 10:39:52 Moxie Servlet Engine:Pooled Thread:1 HSECollector
MESSAGE Se
rvletContextAdaptor: Collector: init
```

## show config

To display the system configuration, use the **show config** command.

### show config

### Syntax Description

This command has no arguments or keywords.

### Example

This command displays the system configuration:

```
show config
hostname ex1
interface ethernet0 209.165.201.0 255.255.255.224 default-gateway
209.165.202.128
interface ethernet1 down
interface ethernet2 down
interface ethernet3 down
interface ethernet4 down
interface ethernet5 down
ip domain-name embu-doc
ip name-server 209.165.202.158
username admin epassword ***** privilege 15
```

## show daemonslog

To display the WLSE's daemons log, use the following command.

```
show daemonslog [page] | include matchstring1 [matchstring2]
```

### Syntax Description

|                     |                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>page</b>         | Displays command output one screen at a time. Press the Return key to display the next output screen. Press <b>Ctrl-c</b> to exit paged output and return to the command prompt. |
| <b>include</b>      | Filters the command output to display only the records that contain the specified string of characters.                                                                          |
| <i>matchstring1</i> | String of characters to search for in the command output.                                                                                                                        |
| <i>matchstring2</i> | (Optional) Another string of characters to search for in the command output.                                                                                                     |

### Example

The following command displays the WLSE's daemons log, one page at a time:

```
show daemonslog page
/var/adm/CSCOets/log/daemons.log
[dmgrDbg] getenv(PX_DBG)=NULL
[dmgrDbg] getenv(PX_MY_DEBUG)=NULL
[dmgrDbg] getenv(PX_MY_TRACE)=NULL
[dmgrDbg] getenv(PX_DBG_LEVEL)=NULL
[dmgrDbg][Thu Dec 20 13:42:53 2001]##### INFO ##### re-evaluate
DbgLevel=0x0
 ++>>it(1) = 8077978 <HSECollector>
 ++>>it(1) = 8077898 <HSEANIServer>
 ++>>it(1) = 8077428 <PostgreSQL>
 ++>>it(1) = 8077228 <WebServer>
 ++>>it(1) = 8077328 <Tomcat>
 ++>>it(1) = 80770d8 <ExcepReporter>
 ++>>it(1) = 8076fc8 <CDPbrdcast>
 ++>>it(1) = 8076e58 <PerfMon>

#!/bin/sh -v
#!/bin/sh -v

if ["$NMSROOT" = ""]; then
 NMSROOT=/opt/CSCOets
 export NMSROOT
```

```
fi

cd $NMSROOT
--More--
```

## show dmgtlog

To display the WLSE's daemon manager log, use the following command.

```
show dmgtlog [page] | include matchstring1 [matchstring2]
```

### Syntax Description

|                     |                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>page</b>         | Displays command output one screen at a time. Press the Return key to display the next output screen. Press <b>Ctrl-c</b> to exit paged output and return to the command prompt. |
| <b>include</b>      | Filters the command output to display only the records that contain the specified string of characters.                                                                          |
| <i>matchstring1</i> | String of characters to search for in the command output.                                                                                                                        |
| <i>matchstring2</i> | (Optional) Another string of characters to search for in the command output.                                                                                                     |

### Example

The following command displays the daemon manager log, one page at a time:

```
show dmgtlog page
/var/adm/CSCOets/log/dmgt.d.log
Dec 20 13:42:56 ex dmgt[712]: #3001:TYPE=INFO:Using port: tcp/42340.
Dec 20 13:42:56 ex dmgt[714]: #3007:TYPE=INFO:Started application(HSECO
ollector) "/bin/nice -n 19 /opt/CSCOets/bin/collector" pid=715.
Dec 20 13:42:56 ex dmgt[714]: #3007:TYPE=INFO:Started application(HSEA
--More--
```

## show webaccesslog

To display the WLSE's Web access log, use the following command.

```
show webaccesslog [page] | include matchstring1 [matchstring2]
```

### Syntax Description

|                     |                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>page</b>         | Displays command output one screen at a time. Press the Return key to display the next output screen. Press <b>Ctrl-c</b> to exit paged output and return to the command prompt. |
| <b>include</b>      | Filters the command output to display only the records that contain the specified string of characters.                                                                          |
| <i>matchstring1</i> | String of characters to search for in the command output.                                                                                                                        |
| <i>matchstring2</i> | (Optional) Another string of characters to search for in the command output.                                                                                                     |

### Example

The following command displays the Web access log, one page at a time:

```
show webaccesslog page
/var/adm/CSCOets/log/access_log
209.165.200.224 - - [21/Dec/2001:10:38:54 +0000] "GET / HTTP/1.0" 302
276 "-" "Moz
illa/4.76 [en]C-CCK-MCD (Windows NT 5.0; U)"
209.165.200.224 - - [21/Dec/2001:10:38:54 +0000] "GET
/per1/login-form.cgi HTTP/1.
0" 200 2268 "-" "Mozilla/4.76 [en]C-CCK-MCD (Windows NT 5.0; U)"
209.165.200.224 - - [21/Dec/2001:10:38:55 +0000] "GET /icons/hse.gif
HTTP/1.0" 200
5554 "http://209.165.201.0:1741/per1/login-form.cgi" "Mozilla/4.76
[en]C-CCK-MC
D (Windows NT 5.0; U)"
209.165.200.224 - - [21/Dec/2001:10:38:55 +0000] "GET
/icons/left_top.gif HTTP/1.0
" 200 324 "http://209.165.201.0:1741/per1/login-form.cgi"
"Mozilla/4.76 [en]C-CC
K-MCD (Windows NT 5.0; U)"
--More--
```

## show weberrorlog

To display the WLSE's Web error log, use the following command.

```
show weberrorlog [page] | include matchstring1 [matchstring2]
```

### Syntax Description

|                     |                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>page</b>         | Displays command output one screen at a time. Press the Return key to display the next output screen. Press <b>Ctrl-c</b> to exit paged output and return to the command prompt. |
| <b>include</b>      | Filters the command output to display only the records that contain the specified string of characters.                                                                          |
| <i>matchstring1</i> | String of characters to search for in the command output.                                                                                                                        |
| <i>matchstring2</i> | (Optional) Another string of characters to search for in the command output.                                                                                                     |

### Example

The following command displays the Web error log, one page at a time:

```
show weberrorlog page
/var/adm/CSCOets/log/error_log
[Thu Dec 20 13:43:00 2001] [error] (22)Invalid argument: <Perl>:
Invalid command
'secret', perhaps mis-spelled or defined by a module not included in
the server
configuration
[Thu Dec 20 13:43:00 2001] [error] (22)Invalid argument: <Perl>:
Invalid command
'line', perhaps mis-spelled or defined by a module not included in
the server c
onfiguration
[Thu Dec 20 13:43:00 2001] [error] (22)Invalid argument: <Perl>:
```

## show websslaccesslog

To display the WLSE's Web SSL log, use the following command.

```
show websslaccesslog [page] | include matchstring1 [matchstring2]
```

### Syntax Description

|                     |                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>page</b>         | Displays command output one screen at a time. Press the Return key to display the next output screen. Press <b>Ctrl-c</b> to exit paged output and return to the command prompt. |
| <b>include</b>      | Filters the command output to display only the records that contain the specified string of characters.                                                                          |
| <i>matchstring1</i> | String of characters to search for in the command output.                                                                                                                        |
| <i>matchstring2</i> | (Optional) Another string of characters to search for in the command output.                                                                                                     |

### Example

The following command displays the Web SSL log, one page at a time:

```
show websslaccesslog page
```

## show import

To display an imported host file, use the **show import** command.

```
show import hosts
```

### Syntax Description

|              |                                                    |
|--------------|----------------------------------------------------|
| <i>hosts</i> | Name of server that host files were imported from. |
|--------------|----------------------------------------------------|

### Example

This command displays the imported host file.

```
show import ftpserver_1
```

## show install logs

Displays the software updates and images available on the configured repository.

```
show install logs [short | long] [page]
```

### Syntax Description

|              |                                                                                                  |
|--------------|--------------------------------------------------------------------------------------------------|
| <b>short</b> | Displays only the names of software updates and images on the configured repository              |
| <b>long</b>  | Displays the names and descriptions of software updates and images on the configured repository. |
| <b>page</b>  | Displays command output one screen at a time.                                                    |

### Example

The following command displays the software updates and images available on the configured browser, one screen at a time:

```
show install updates page
2
NAME=EX-2.0a
```

## show ipchains

Displays the IP chains for the selected interface.

```
show ipchains eth[0-5]
```

### Syntax Description

|                   |                                                                                                                                                                                                       |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>eth[ 0-5 ]</b> | Name of the interface port to be configured. Acceptable values are eth0-eth5. On the WLSE 1130, eth0 corresponds to the port labeled A on the back panel, and eth1 corresponds to the port labeled B. |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Example

The following command displays the IP chains for the ethernet 0 interface:

```
show ipchains eth0
Chain ineth0 (1 references):
target prot opt source destination
ports
ACCEPT tcp -y--l- anywhere ex.help any -> telt
ACCEPT tcp ------ anywhere ex.help any -> telt
ACCEPT tcp ------ anywhere ex.help any -> 3345
ACCEPT tcp -y--l- anywhere ex.help any -> ssh
```

## show hosts

Displays the WLSE's host file.

```
show hosts [page]
```

### Syntax Description

**page** Displays command output one screen at a time.

## Example

The following command displays the host file one page at a time:

```
show hosts page
```

## show maillog

To display the WLSE's mail log, use the **show maillog** command.

```
show maillog [page] | include matchstring1 [matchstring2]
```

### Syntax Description

**page** Displays command output one screen at a time. Press the Return key to display the next output screen. Press **Ctrl-c** to exit paged output and return to the command prompt.

|                     |                                                                                                         |
|---------------------|---------------------------------------------------------------------------------------------------------|
| <b>include</b>      | Filters the command output to display only the records that contain the specified string of characters. |
| <i>matchstring1</i> | String of characters to search for in the command output.                                               |
| <i>matchstring2</i> | (Optional) Another string of characters to search for in the command output.                            |

## Example

The following command displays the collector log, one page at a time:

```
show maillog page
/var/log/maillog
Dec 21 04:02:06 ex sendmail[11643]: EAA11643: from=root, size=307, class=0, pri=30307, nrcpts=1, msgid=<200112210402.EAA11643@ex.help>, relay=root@localhost
Dec 21 04:02:06 ex sendmail[11660]: EAA11643: SYSERR(root): Cannot execute /usr/bin/procmail: No such file or directory
Dec 21 04:02:06 ex sendmail[11643]: EAA11643: to=root, ctladdr=root (0/0), delay=00:00:06, xdelay=00:00:00, mailer=local, stat=Operating system error
```

## show proc

To display the WLSE's active process statistics, use the **show proc** command.

```
show proc [page]
```

## Syntax Description

**page** Displays command output one screen at a time.

## Example

The following command displays the active process statistics one page at a time:

```
show proc page
PID ELAPSED SZ STARTED TTY COMMAND
 1 22:29:10 277 Thu Dec 20 13:42:29 2001 ? init
 2 22:29:10 0 Thu Dec 20 13:42:29 2001 ? kflushd
 3 22:29:10 0 Thu Dec 20 13:42:29 2001 ? kupdate
 4 22:29:10 0 Thu Dec 20 13:42:29 2001 ? kpiod
 5 22:29:10 0 Thu Dec 20 13:42:29 2001 ? kswapd
 6 22:29:03 0 Thu Dec 20 13:42:36 2001 ? kreiserfsd
```

```

 85 22:29:00 0 Thu Dec 20 13:42:39 2001 ? kreiserfsd
 86 22:29:00 0 Thu Dec 20 13:42:39 2001 ? kreiserfsd
 87 22:28:59 0 Thu Dec 20 13:42:40 2001 ? kreiserfsd
 88 22:28:59 0 Thu Dec 20 13:42:40 2001 ? kreiserfsd
 89 22:28:59 0 Thu Dec 20 13:42:40 2001 ? kreiserfsd
 208 22:28:57 290 Thu Dec 20 13:42:42 2001 ? watchdog
 322 22:28:51 342 Thu Dec 20 13:42:48 2001 ? idled
 510 22:28:51 290 Thu Dec 20 13:42:48 2001 ? syslogd
 519 22:28:50 361 Thu Dec 20 13:42:49 2001 ? klogd
 637 22:28:48 327 Thu Dec 20 13:42:51 2001 ? crond
 651 22:28:48 286 Thu Dec 20 13:42:51 2001 ? inetd
 17076 18:23 364 Fri Dec 21 11:53:16 2001 ? _ in.telnetd
 17077 18:23 575 Fri Dec 21 11:53:16 2001 0 | _ login
-----more-----

```

## show repository

To display the status or the access log of a configured repository, use the **show repository** command.

```
show repository {[status | access-log]} [page]
```

### Syntax Description

|                   |                                                 |
|-------------------|-------------------------------------------------|
| <b>status</b>     | Displays the status of the local repository     |
| <b>access-log</b> | Displays the access-log of the local repository |
| <b>page</b>       | Displays command output one screen at a time.   |

### Example

This command displays the status of the configured repository:

```

show repository status
Repository Source: 171.69.212.146:9851
repository is running.

```

## show route

To display the routes currently configured, use the following command.

```
show route
```

### Syntax Description

This command has no arguments or keywords.

### Example

This command displays the currently configured routes

```
show route
Destination Gateway Genmask Flags Metric Ref Use Iface
209.165.200.224 0.0.0.0 255.255.255.224 UH 0 0 0 eth0
209.165.200.225 0.0.0.0 255.255.255.224 U 0 0 0 eth0
209.165.200.254 0.0.0.0 255.255.255.224 U 0 0 0 lo
209.165.202.128 0.0.0.0 255.255.255.224 UG 0 0 0 eth0
```

## show securitylog

To display the WLSE's security log information, use the following command.

```
show securitylog [page] | include matchstring1 [matchstring2]
```

### Syntax Description

|                     |                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>page</b>         | Displays command output one screen at a time. Press the Return key to display the next output screen. Press <b>Ctrl-c</b> to exit paged output and return to the command prompt. |
| <b>include</b>      | Filters the command output to display only the records that contain the specified string of characters.                                                                          |
| <i>matchstring1</i> | String of characters to search for in the command output.                                                                                                                        |
| <i>matchstring2</i> | (Optional) Another string of characters to search for in the command output.                                                                                                     |

## Example

The following command displays the security log, one page at a time:

```
show securitylog page
/var/log/secure
Dec 20 13:45:23 ex in.tftpd[1381]: connect from 209.165.200.224
Dec 20 13:45:27 ex in.tftpd[1383]: connect from 209.165.200.224
Dec 20 13:45:31 ex in.tftpd[1385]: connect from 209.165.200.224
Dec 20 13:45:35 ex in.tftpd[1387]: connect from 209.165.200.224
Dec 20 13:45:39 ex in.tftpd[1389]: connect from 209.165.200.224
Dec 20 13:45:44 ex in.tftpd[1391]: connect from 209.165.200.224
Dec 20 13:45:48 ex in.tftpd[1393]: connect from 209.165.200.224
Dec 20 13:45:52 ex in.tftpd[1395]: connect from 209.165.200.224
Dec 20 13:45:56 ex in.tftpd[1397]: connect from 209.165.200.224
Dec 20 13:46:00 ex in.tftpd[1399]: connect from 209.165.200.224
Dec 20 13:46:04 ex in.tftpd[1412]: connect from 209.165.200.224
Dec 20 13:46:27 ex in.tftpd[1424]: connect from 209.165.200.224
Dec 20 13:46:31 ex in.tftpd[1426]: connect from 209.165.200.224
Dec 20 13:46:35 ex in.tftpd[1428]: connect from 209.165.200.224
Dec 20 13:46:39 ex in.tftpd[1430]: connect from 209.165.200.224
Dec 20 13:46:43 ex in.tftpd[1432]: connect from 209.165.200.224
Dec 20 13:46:47 ex in.tftpd[1434]: connect from 209.165.200.224
--More--
```

## show snmp-server

The following command displays the WLSE's SNMP configuration:

```
show snmp-server
```

### Syntax Description

This command has no arguments or keywords.

## Example

The following command displays the WLSE's SNMP configuration:

```
show snmp-server
RW community string: private
 RO community string: public
 sysLocation: your site information
 sysContact: your contact information
 trap-forwarding is disabled
```

## show ssh-version

The following command displays the type of SSH that is enabled:

```
show ssh-version
```

### Syntax Description

This command has no arguments or keywords.

### Example

This command displays the type of SSH that is enabled:

```
show ssh-version
SSH1, SSH2
```

## show syslog

To display syslog information, use the **show syslog** command.

```
show syslog [page] [include matchstring1 [matchstring2]]
```

### Syntax Description

|                     |                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>page</b>         | Displays command output one screen at a time. Press the Return key to display the next output screen. Press <b>Ctrl-c</b> to exit paged output and return to the command prompt. |
| <b>include</b>      | Filters the command output to display only the records that contain the specified string of characters.                                                                          |
| <i>matchstring1</i> | String of characters to search for in the command output.                                                                                                                        |
| <i>matchstring2</i> | (Optional) Another string of characters to search for in the command output.                                                                                                     |

## Usage Guidelines

To filter command output to include only the records that contain a specified string(s) of characters, use the **include** option with one or two character strings to search for.

If you include two strings, the command outputs only those records that contain both character strings.

## Example

This command displays syslog information:

```
show syslog
Jun 20 16:04:23 ex syslogd 1.3-3: restart.
Jun 20 16:04:23 ex syslog: syslogd startup succeeded
Jun 20 16:04:23 ex kernel: klogd 1.3-3, log source = /proc/kmsg start.
Jun 20 16:04:23 ex kernel: Inspecting /boot/System.map-2.2.16-13bipse2
Jun 20 16:04:23 ex syslog: klogd startup succeeded
-----more-----
```

## Related Command

**interface**

## show tech

Use the following command to display information necessary for Cisco's Technical Assistance Center to assist you:

```
show tech [page]
```

## Syntax Description

|             |                                                                                                                                                                                  |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>page</b> | Displays command output one screen at a time. Press the Return key to display the next output screen. Press <b>Ctrl-c</b> to exit paged output and return to the command prompt. |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Example

```
show tech page
/bin/cat: /var/log/secure: Permission denied
Copyright (c) 1999-2000 by Cisco Systems, Inc.
Build Version (166) Mon Jun 11 16:56:23 PDT 2001
Linux/UID32 version 2.2.16-13bipsec.uid32 (gcc version egcs1
Uptime: 0 days 18 hours 35 mins

2 Ethernet interfaces
hostname ex
interface ethernet0 209.165.200.224 255.255.255.224 default-gateway
209.165.202.128
ip name-server 209.165.201.0
username admin epassword ***** privilege 15
eth0 Link encap:Ethernet HWaddr 00:02:B3:35:FD:CC
 inet addr:209.165.200.224 Bcast:209.165.201.31
 Mask:255.255.255.224
 -----more-----
```

## show telnetenable

To display the WLSE's Telnet status, use the following ommand.

```
show telnetenable
```

### Syntax Description

This command has no arguments or keywords.

### Example

The following command shows whether Telnet is enabled or disabled:

```
show telnetenable
telnet enable for: ALL
```

## show tomcatlog

To display the WLSE's Tomcat log, use the **show tomcatlog** command.

```
show tomcatlog [page] | include matchstring1 [matchstring2]
```

### Syntax Description

|                     |                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>page</b>         | Displays command output one screen at a time. Press the Return key to display the next output screen. Press <b>Ctrl-c</b> to exit paged output and return to the command prompt. |
| <b>include</b>      | Filters the command output to display only the records that contain the specified string of characters.                                                                          |
| <i>matchstring1</i> | String of characters to search for in the command output.                                                                                                                        |
| <i>matchstring2</i> | (Optional) Another string of characters to search for in the command output.                                                                                                     |

### Example

The following command displays the tomcat log, one page at a time:

```
show tomcatlog page
/var/adm/CSCOets/log/tomcat.log
2001-12-20 01:43:06 - ContextManager: Adding context Ctx(/examples)
2001-12-20 01:43:06 - ContextManager: Adding context Ctx(/admin)
Starting tomcat. Check logs/tomcat.log for error messages
2001-12-20 01:43:06 - ContextManager: Adding context Ctx()
getUIProperties(): unhandled error could be a bad ui.properties
java.lang.NullPointerException
 at java.io.Reader.<init>(Reader.java:68)
 at java.io.InputStreamReader.<init>(InputStreamReader.java:96)
--More--
```

# shutdown

To shut down the system in preparation for powering it off, use the **shutdown** command.

## **shutdown**

### Syntax Description

This command has no arguments or keywords.

### Usage Guidelines

All processes running on the WLSE will stop, and the WLSE will not respond until you power it off and back on.

You are prompted to verify the shutdown. Enter **yes** to continue, or **no** to cancel the shutdown.



---

**Caution**

Never power the system off without running the **shutdown** command first. Doing so can destroy data and prevent the system from booting.

---

### Example

This command shuts down the system:

```
shutdown
```

### Related Commands

**reload**

## snmp-server

To configure an simple network management protocol (SNMP) agent, use the following command.

```
snmp-server { community community-name [RO | RW] | location
 sysLocation-info | contact sysContact-info }

no snmp-server { community community-name | location | contact }
```

### Syntax Description

|                         |                                                            |
|-------------------------|------------------------------------------------------------|
| <b>community</b>        | sets the community strings that permit access to the SNMP. |
| <i>community-name</i>   | the community name string.                                 |
| <b>RO</b>               | read only.                                                 |
| <b>RW</b>               | read / write.                                              |
| <b>location</b>         | sets the system location string.                           |
| <i>sysLocation-info</i> | the location string.                                       |
| <b>contact</b>          | sets the contact string.                                   |
| <i>sysContact-info</i>  | the contact string.                                        |

### Example

This command sets an SNMP contact string:

```
snmp-server contact Dial System Operator at Beeper # 27345
```

## ssh

To use SSH to connect to an external host, use the ssh command.

```
ssh [options] host [command]
```

### Syntax Description

|                |                                                                                                        |
|----------------|--------------------------------------------------------------------------------------------------------|
| <i>options</i> | Standard SSH options. For a list of these options, enter the <b>ssh</b> command without any arguments. |
|----------------|--------------------------------------------------------------------------------------------------------|

*host* Name or IP address of host to which to connect.  
*command* Command for the external host to execute.

### Example

Enter the following command to connect to an external host using SSH:

```
ssh 209.165.200.224
```

## ssh-version

Use the ssh-version command to enable Secure Shell (SSH) 1, SSH 2, or both SSH 1 and SSH 2.

```
ssh-version { ssh1 | ssh2 | both }
```

### Syntax Description

|             |                             |
|-------------|-----------------------------|
| <b>ssh1</b> | Enables SSH 1               |
| <b>ssh2</b> | Enables SSH 2               |
| <b>both</b> | Enables both SSH 1 and SSH2 |

### Example

This command enables ssh1:

```
ssh-version ssh1
```

## telnet

To Telnet to an external host, use the telnet command.

```
telnet { hostname | ip-address } [portnumber]
```

### Syntax Description

|                   |                                    |
|-------------------|------------------------------------|
| <i>hostname</i>   | Hostname of the external device.   |
| <i>ip-address</i> | IP address of the external device. |

*portnumber* portnumber of the external device.

## Example

Enter the following command to telnet to port 9851 of a system with the IP address 209.165.200.224:

```
telnet 209.165.200.224 9851
```

## telnetenable

To configure Telnet access, use the following command.

```
telnetenable { enable [ip-addresses | domains] | disable | status }
```

## Syntax Description

|                     |                                                                                                                                                                                       |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>enable</b>       | Enables Telnet access to the system.                                                                                                                                                  |
| <b>disable</b>      | Disables Telnet access to the system.                                                                                                                                                 |
| <b>status</b>       | Displays current access status.                                                                                                                                                       |
| <i>ip-addresses</i> | IP addresses of systems allowed Telnet access. If this argument is used, no other machines will be allowed access. Multiple IP address are allowed.                                   |
| <i>domains</i>      | Domains of systems allowed Telnet access. If this argument is used, machines with domains other than the specified domain will be denied Telnet access. Multiple domains are allowed. |

## Default

The default is **disable**.

## Usage Guidelines

To enable Telnet access to the system for *all* IP source addresses, use the **telnetenable enable** command alone. To enable *specific* IP addresses, use the **telnetenable enable** command followed by the IP addresses.

## Example

This command enables Telnet for all IP source addresses:

```
telnetenable enable
```

## username

To create a new user account or change an account's properties, use the **username** command. Use the **no** form of the command to remove a user account.

```
username name password password [privilege { 0 | 15 }]
```

```
no username name
```

## Syntax Description

|                  |                                                                                           |
|------------------|-------------------------------------------------------------------------------------------|
| <i>name</i>      | Name of the user account to create or remove. User names can be up to 32 characters long. |
| <b>password</b>  | Specifies a password for the account.                                                     |
| <i>password</i>  | The password for the account. Passwords can be 5 to 8 characters long.                    |
| <b>privilege</b> | (Optional) Specifies the account privilege level.                                         |
| <b>0</b>         | Gives the account level 0 privileges. This is the default.                                |
| <b>15</b>        | Gives the account level 15 privileges.                                                    |

## Usage Guidelines

The default privilege level is 0 if you do not provide the privilege option.

For information on the allowable characters in user names and passwords, see [Appendix A, "Naming Guidelines."](#)

Users that you create by using this command do not automatically have the HTTP access that is required for using the WLSE's web interface. To provide such users with HTTP access:

- 
- Step 1** Log into the Web interface as admin or as another user with system administrator privileges.

- Step 2** Select **Administration > User Admin**, then select **Manage Users**.
- Step 3** For each user you added by using the CLI:
- a. Select the username, then select the relevant role(s).
  - b. Click **Modify**.
- 

For more information about managing users, see the *User Guide for the Wireless LAN Solution Engine*.

## Example

This command creates a user account named user1 with password password1 and privilege level 15:

```
username user1 password password1 privilege 15
```

This command removes the user account:

```
no username user1
```

## webtimeout

Sets the timeout period for the Web interface. After the timeout expires, you are logged out. The default is 30 minutes (1800 seconds).

```
webtimeout [status | time seconds | default]
```

## Syntax Description

|                     |                                                                          |
|---------------------|--------------------------------------------------------------------------|
| <b>status</b>       | Shows the current web session timeout setting.                           |
| <b>time seconds</b> | Sets the web session timeout period.                                     |
| <b>default</b>      | Resets the web session timeout to the default 30 minutes (1800 seconds). |

## Example

```
webtimeout time 3600 seconds
```

# Maintenance Image Commands

This section describes the commands that are available when the system is booted from the maintenance image. For more information about the maintenance image, see the *Installation and Configuration Guide for the Wireless LAN Solution Engine*.

## erase config

This command is identical to the level-15 **erase config** command. For a description, see [erase config, page B-24](#).

## fsck

To check and repair the filesystem, use the fsck command.

```
fsck
```

### Syntax Description

This command has no arguments or keywords.

### Usage Guidelines

This command might prompt you for confirmation before making certain repairs.

### Example

The following command checks and repairs the filesystem:

```
fsck
```

## reload

This command is identical to the level 15 **reload** command. For a description, see [reload, page B-42](#).

