



## Command Reference

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This appendix summarizes the Wireless LAN Solution Engine's command line interface (CLI) commands. When you make a configuration change using these commands, the system configuration is updated immediately.

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# Using the CLI

You can use the CLI by:

- Attaching a console to the WLSE
- Accessing the WLSE using Telnet

## 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 nonquoted set of characters.

Do not confuse the WLSE's CLI with the IOS CLI. Though they are similar, 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. For more information about user accounts and privileges, refer to [Administering Users, page 6-61](#).

## Checking Command Syntax

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

- If you enter a command line that does not contain any valid commands, the system displays `Command not found`.
- If you enter a valid command but omit required options, the system displays `Incomplete command`.

- If you enter a valid command but provide invalid options or parameters, the system displays Invalid input.

In addition, some commands have command-specific error messages that notify you that a command is valid, but that it 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.

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

## 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.

## Privilege Level 0 Commands

This section describes the privilege level 0 commands.

### exit

To log out of the system, use the `exit` 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 `ping` command.

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

## Syntax Description

<b>c</b>	Sets the number of echo packets to send.
<i>count</i>	Number of echo packets to send.
<b>i</b>	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.
<b>s</b>	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.
<b>n</b>	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 **show clock** command.

**show clock**

### Syntax Description

This command has no arguments or keywords.

### Usage Guidelines

Use the **show clock** command to display the system date and time. For more information about the system time, see the section “Setting System Date and Time” in the *Installation and Configuration Guide for the Cisco 1105 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 **show domain-name** 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 interface, use the **show interfaces** 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 **show process** 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 **show version** 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 **traceroute** command.

```

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

```

### Syntax Description

<b>-f</b>	(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.
<b>-m</b>	(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.
<b>-w</b>	(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.

*packetlength* (Optional) The length of the packet to send, in bytes. The default and minimum value is 40.

## Usage Guidelines

Use the **traceroute** command to trace the network route to a specified host and identify faulty gateways. The 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 them.

# auth

Use the **auth** command to enable secure remote authentication.

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

## Syntax Description

<b>cli</b>	Enables authentication using the Command Line Interface (CLI).
<b>http</b>	Enables authentication using Hypertext Transfer Protocol (HTTP).
<b>local</b>	Enables local authentication.
<b>tacacs</b>	Enables authentication using the Terminal Access Controller Access Control System (TACACS).
<b>radius</b>	Enables authentication using Remote Dial-In User Service (RADIUS).
<b>nt</b>	Enables authentication from an NT domain controller.
<i>secret</i>	Shared secret code of server.
<i>server1</i>	IP address or DNS name of server from which authentication will occur.
<i>server2</i>	IP address or DNS 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
```

# backup

Use the **backup** command to back up the WLSE.

**backup** [test]

## Syntax Description

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

## Usage Guidelines

To back up the WLSE, use the **backup** command. To configure the backup location, use the **backupconfig** command.

## Example

The following command backs up the WLSE:

```
backup
```

## Related Commands

**backupconfig**

**listbackup**

**restore**

**show backupconfig**

# backupconfig

Use the **backupconfig** command to set the configuration 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.

## Usage guidelines

To set the configuration for all backup and restore operations, use the **backup** command.

## Example

The following command will configure the backup and restore operations to backup to and restore from host 209.165.200.224, set the username to user1, and set the password to 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 {run [port] | timer seconds | holdtime seconds}
```

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

## Syntax Description

<b>run</b>	start cdp
<b>timer</b>	set cdp packets retransmission time.
<b>holdtime</b>	set cdp packet info hold time.
<i>port</i>	Ethernet port on which CDP will be enabled. Acceptable values are eth0-15.
<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

Cisco Discovery Protocol (CDP) is a protocol by which one Cisco device can recognize, and be recognized by, another Cisco device. The **run** command starts the system sending out signals to the other systems. The **timer** command sets the amount of time, in seconds, that these signals are sent. The **holdtime** sets the amount of time a system will recognize another system without receiving a signal. For example, if your system's holdtime is set to 30 seconds, and another system that has already been recognized by yours does not send a signal within that 30 seconds, your system will cease to recognize it. If you are using the **no cdp** command, the **timer** and **holdtime** commands set their respective values to the default value.

## 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 **clock** command. See the Usage Guidelines before using this command.

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

## Syntax Description

<b>set</b>	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, refer to “Setting System Date and Time” in the *Installation and Configuration Guide for the Cisco 1105 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 **df** 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
```

## erase config

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

### **erase config**

### Syntax Description

This command has no arguments or keywords.

### Usage Guidelines

Use this command to erase the configuration in Flash memory and reload the device.

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, refer to the *Installation and Configuration Guide for the Cisco 1105 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

To implement port filtering on the WLSE, use the **firewall** command.

```
firewall eth <0-5> [public | private] | [icmp telnet ssh snmp https 1741]
```

## Syntax Description

<i>eth &lt;0-5&gt;</i>	Port to be configured. Acceptable values are eth0-5.
<b>public</b>	Denies access via ICMP, Telnet, SNMP, and the HTTP 1741 port.
<b>private</b>	Denies no access.
<b>icmp</b>	Denies Internet Control Message Protocol (ICMP) ping messages.
<b>telnet</b>	Denies incoming Telnet connections.
<b>ssh</b>	Denies incoming SSH connections.
<b>snmp</b>	Denies incoming SNMP requests.
<b>https</b>	Denies all connections to the SSL HTTP port.
<b>1741</b>	Denies all connections to the HTTP 1741 port.

## Usage Guidelines

Use the firewall command to implement port filtering on the WLSE. 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 *dissable* icmp, Telnet, ssh, snmp, https, or to deny connections to the SSL HTTP port or the HTTP 1741 port, use its corresponding option.

## Example

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

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

```
firewall eth0 public ssh 1741
```
- The Ethernet 1 port 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 eth1 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 `gethostbyname` 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 hostname, use the **hostname** command.

**hostname** *name*

### Syntax Description

*name*                      New hostname for the WLSE; the name is case sensitive and may be from 1 to 22 alphanumeric characters.

### 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 **import** command:

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

## Syntax Description

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

## Usage Guidelines

To map a single hostname to an IP address, enter the import command as follows

```
import host hostname ipaddress
```

To import host files from an external, ftp accessible server, enter the import command as follows:

```
import hosts ftp-host username password path
```

To remove an individual IP address from a host file, use the **no** version of the **import** command as follows:

```
no import host hostname ipaddress
```

To remove an imported host file, use the **no** version of the **import** command as follows:

```
no import hosts
```

## Example

This 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
```

This command deletes the hosts imported in the example above:

```
no import hosts
```

## install configure

To define the repository that the Wireless LAN Solution Engine uses to install software updates and images, use the **install configure** command.

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

### Syntax Description

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

### Usage Guidelines

The **install configure** command defines the repository that the Wireless LAN Solution Engine uses. A repository is a remote or local server from where a system can download software updates and images. Only HTTP is supported.

### Example

The following command configures the Wireless LAN Solution Engine 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 **install list** command.

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

### Syntax Description

<b>all</b>	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.
<b>full</b>	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.
<b>page</b>	Displays only the names of all software updates and images on a configured repository. All other information is omitted.
<b>updates</b>	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.

### Usage Guidelines

The **install list** command displays software updates and images currently available on a repository. A repository is a remote or local server from where a system can receive software.

### Example

Enter the following command to display a list of all available software updates and images on a configured 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 **install update** command.

**install update** *package name*

## Syntax Description

<i>Package Name</i>	Name of the software update or image to be installed. To see the names of software updates and images available for installation, use the <b>install list</b> command. For more information, see the <a href="#">“install list” section on page B-22</a> .
---------------------	--

## 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*<0-5> {[**up** | **down**] | *ipaddress netmask* [**default-gateway address**] [**up** | **down**]}

## Syntax Description

<i>eth&lt;0-5&gt;</i>	Name of the interface port to be configured. Acceptable values are eth0-5.
<b>up</b>	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 <b>up</b> parameter after <i>ipaddress</i> and its required parameters, or do not specify the <b>up</b> or <b>down</b> parameters ( <b>up</b> is the default).
<b>down</b>	Disables the interface.  If you include the <i>ipaddress</i> parameter and want to disable the interface in the same command, enter the <b>down</b> 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.
<b>default-gateway</b>	Changes the IP address of the default gateway that connects the WLSE to the network.
<i>address</i>	The gateway IP address.

## 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

Use the **interface** command to configure an Ethernet interface.

If you change the IP address or hostname, follow these steps to ensure that applications using the system can connect to it correctly:

---

**Step 1** Stop and restart management services by entering:

```
# services stop
# services start
```

- Step 2** Verify that management applications that use the system can still connect to it.
- Step 3** Reconnect any applications that cannot connect to it using the system's new IP address or hostname.
- 

## Example

This command disables the Ethernet 1 interface:

```
interface eth1 down
```

This 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 **ip domain-name** command. To remove the default domain name, use the **no** form of the command.

```
ip domain-name name
```

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

## Syntax Description

*name* Domain name (e.g. cisco.com).

## Usage Guidelines

Use this command to define a default domain name.

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.

## 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 address of up to three name servers for name and address resolution, use the **ip name-server** command. To disable 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 system 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 system must have a functional DNS server configured to function 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 DNS 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 **listbackup** 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]]
```

## Usage Guidelines

Entering the **mail** command with no arguments will allow you to read email. Entering the **mail** command with the arguments listed will allow you to send email.

## Syntax Description

<b>to</b>	Sends email to the expressed recipient.
<i>user@host</i>	Recipient of the email.
<b>debug</b>	Debugs any email problems.

## Example

The following command sends an email message:

```
mail to johndoe@example.com
```

## mailcntrl clear

To delete the maillog, sendqueue, or userqueue, use the **mailcntrl clear** command.

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

## Syntax Description

<b>log</b>	Clears the WLSE's email log.
<b>sendqueue</b>	Clears the WLSE's sendqueue.
<b>userqueue</b>	Clears the WLSE's userqueue.

## 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 userlog, userqueue, or the sendqueue, 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. If no server is specified, the WLSE will use DNS to resolve the correct email server in your local domain.

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

### 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
```

## nslookup

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

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

### Syntax Description

<i>dns-name</i>	DNS 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 DNS 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

*ip-address* 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, refer to the “clock” section on page B-14.

**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

Use the **reload** command to reboot the system.

You are 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.

**reinitdb**

### Syntax Description

This command has no arguments or keywords.

### Usage Guidelines

The **reinitdb** command reinitializes the database. This erases all information contained within the database.

### Example

This command reinitializes the database:

```
reinitdb
```

## repository

To configure the Wireless LAN Solution Engine to be a repository server, use the **repository** command.

**repository source** *URL*

### Syntax Description

**source** Sets the location from where the local repository downloads software updates and images.

*URL* The IP address of an external server containing software updates and images.

## Usage Guidelines

The **repository** command allows the Wireless LAN Solution Engine 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 Wireless LAN Solution Engine to be a repository. To configure the Wireless LAN Solution Engine to install software updates and images from this repository, see the [“install configure” section on page B-21](#).

## Example

To configure the Wireless LAN Solution Engine 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 Wireless LAN Solution Engine's local repository, use the **repository add** command.

```
repository add package
```

## Syntax Description

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

## Usage Guidelines

The **repository add** command transfers software updates and images from a remote server to the Wireless LAN Solution Engine's local repository. 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 Wireless LAN Solution Engine's local repository, use the **repository delete** command.

```
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.

## Usage Guidelines

The **repository delete** command deletes software updates and images on the Wireless LAN Solution Engine's local repository. A repository is a remote or local server from where a system can receive software updates and images.

## 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 Wireless LAN Solution Engine's local repository, use the **repository server** command.

```
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.

## Usage Guidelines

The **repository server** command starts, stops, or displays the status of the Wireless LAN Solution Engine's local repository. A repository is a remote or local server from where a system can receive software updates and images.

## 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

To restore a configuration, use the **restore** command. If you use the **restore** command all current domains, roles, users, and discovery configuration information will be erased.

## Example

The following command will restore a backed up configuration:

```
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

Use this command to start, stop, or view status of the management services running on the system.

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 Wireless LAN Solution Engine'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 Wireless LAN Solution Engine'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
on [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 **show backupconfig** command displays the current backup and restore configuration.

```
show backupconfig
```

## Syntax Description

This command has no arguments or keywords.

## Usage Guidelines

To display the current backup and restore configuration, use the **show backupconfig** command. 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 **show bootlog** 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.

## 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 Wireless LAN Solution Engine'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 Wireless LAN Solution Engine'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 Wireless LAN Solution Engine's daemons log, use the **show daemonslog** 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 Wireless LAN Solution Engine'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 Wireless LAN Solution Engine's daemon manager log, use the **show dmgtlog** 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 Wireless LAN Solution Engine's 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(HSEC
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 hseaccesslog

To display the Wireless LAN Solution Engine's Web access log, use the **show hseaccesslog** command.

```
show hseaccesslog [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 Wireless LAN Solution Engine's Web access log, one page at a time:

```
show hseaccesslog 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 hseerrorlog

To display the Wireless LAN Solution Engine's Web error log, use the **show hseerrorlog** command.

```
show hseerrorlog [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 Wireless LAN Solution Engine's Web error log, one page at a time:

```
show hseerrorlog 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 hsslaccesslog

To display the Wireless LAN Solution Engine's Web SSL log, use the **show hsslaccesslog** command.

```
show hsslaccesslog [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 Wireless LAN Solution Engine's Web SSL log, one page at a time:

```
show hsslaccesslog 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

To display the software updates and images available on the configured repository, use the **show install logs** command.

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

### Syntax Description

short	Displays only the names of software updates and images on the configured repository
long	Displays the names and descriptions of software updates and images on the configured repository.
page	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

To display the IP chains for the selected interface, use the **show ipchains** command.

```
show ipchains eth<0-5>
```

## Syntax Description

*eth<0-5>* Name of the interface port to be configured. Acceptable values are eth0-5.

## 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

To display your Wireless LAN Solution Engine's host file, use the **show hosts** command.

```
show hosts [page]
```

## Syntax Description

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

## Example

The following command displays your Wireless LAN Solution Engine's host file one page at a time:

```
show hosts page
```

## show maillog

To display the Wireless LAN Solution Engine's mail log, use the **show maillog** command.

```
show maillog [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 Wireless LAN Solution Engine's 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 Wireless LAN Solution Engine'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 Wireless LAN Solution Engine's 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

**status** Displays the status of the local repository

**access-log** Displays the access-log of the local repository

**page** 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 show route 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 Wireless LAN Solution Engine's security log information, use the **show securitylog** 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 Wireless LAN Solution Engine's 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

To display the Wireless LAN Solution Engine's SNMP configuration, use the **show snmp-server** command.

```
show snmp-server
```

### Syntax Description

This command has no arguments or keywords.

### Example

The following command displays the Wireless LAN Solution Engine'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

To display the type of SSH enabled, use the **ssh-version** command.

```
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

Use this command to display syslog information.

To filter the command output to include only the records that contain the 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

To display information necessary for Cisco's Technical Assistance Center to assist you, use the **show tech** command.

**show tech [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 system information necessary for Cisco's Technical Assistance Center to assist you.

```

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 Wireless LAN Solution Engine's Telnet status, use the **show telnetenable** command.

**show telnetenable**

## Syntax Description

This command has no arguments or keywords.

## Example

The following command shows if Telnet is enabled or disabled:

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

## show tomcatlog

To display the Wireless LAN Solution Engine'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 Wireless LAN Solution Engine's 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

Use this command to shut down the WLSE in preparation for powering it off. All processes running on the WLSE will stop, and it 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 **snmp-server** 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.
<i>host</i>	Name or IP address of host to which to connect.
<i>command</i>	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.
<i>portnumber</i>	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 **telnetenable** 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.
<b>password</b>	Specifies a password for the account.
<i>password</i>	The password for the account.
<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

Use the **username** command to change the properties of a user account. To assign a user CLI privilege level 15, use the **username** command. You cannot assign CLI privilege level 15 through the Web interface. Use the **no** form of the command to remove a user account. The default privilege level is 0 if you do not provide the privilege option.

For more information about managing user accounts and privilege levels, refer to [Administering Users, page 6-61](#).

## 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
```

# 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, refer to the *Installation and Configuration Guide for the Cisco 1105 Wireless LAN Solution Engine*.

## erase config

This command is identical to the level 15 **erase config** command. For a description, see the [“erase config” section on page B-17](#).

## fsck

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

**fsck**

### Syntax Description

This command has no arguments or keywords.

### Usage Guidelines

Use the **fsck** command to check and repair the filesystem. The 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” section on page B-33](#).











