



## Ports and Protocols

This appendix provides information about:

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- [Ports Hosted by the WLSE, page C-2.](#)
- [Transport Protocols and Authentication Methods Used by the WLSE, page C-3](#)

## Ports Used by the WLSE

[Table C-1](#) lists the ports that are hosted by other devices and servers and used by WLSE services.



**Note**

The NAT protocol is not used by the WLSE.

**Table C-1**      *Ports Used by WLSE*

Destination Port Number	Protocol and WLSE Service	Port Hosted By
TCP 21	FTP—IOS AP configuration	FTP server
TCP 22	SSH—IOS AP configuration	Access point
TCP 23	TELNET—IOS AP configuration	Access point
TCP 25	SMTP—fault notification	SMTP server

**Table C-1** Ports Used by WLSE (continued)

Destination Port Number	Protocol and WLSE Service	Port Hosted By
UDP 53	DNS—IOS AP configuration	DNS server
TCP 80	HTTP/HTTPS—access point configuration	Access point
TCP 9851	WHISK—repository for upgrading WLSE software	Windows repository server
UDP 161	SNMP—discovery, inventory, configuration of APs, configuration archive	Access point, other devices
UDP 162	SNMP—Traps received from APs	Trap receiver
UDP 514	SYSLOG—fault notification	Syslog server
UDP 1645 and 1646	RADIUS—AAA synthetic authentication (ACS versions prior to 3.2.3)	Cisco ACS server
UDP 1812 and 1813	RADIUS—AAA synthetic authentication (ACS 3.2.3 version)	Cisco ACS server
UDP 2887	WLCCP—Wireless Domain Service (WDS) radio management	Master WDS access point

## Ports Hosted by the WLSE

[Table C-2](#) lists the ports hosted by the WLSE and used by other devices and servers.

**Table C-2** Ports Hosted by WLSE

Destination Port Number	Protocol and WLSE Service	Source
TCP 443	HTTPS—WLSE secure Web port	Client browser
TCP 1741	HTTP—WLSE Web port	Client browser
TCP 2004	Default port used by remote agent for built-in AAA server. Used only for Windows domain authentication on the WLSE Express.	Windows domain controller
UDP ephemeral	TFTP—Firmware image transfer	Access point

**Table C-2** Ports Hosted by WLSE (continued)

Destination Port Number	Protocol and WLSE Service	Source
UDP 69	TFTP—Firmware image transfer, configuration archive	Access point
UDP 162	SNMP—Traps received from APs	Access point
UDP 1620	SNMP—Traps received from APs	Access point

## Transport Protocols and Authentication Methods Used by the WLSE

[Table C-3](#) lists the protocols and authentication methods that WLSE uses for its network management functions.

**Table C-3** WLSE Transport Protocol and Authentication Methods

Function	Telnet/SSH	Enable Password <sup>1</sup>	SNMP-RO Community	SNMP-RW Community	TFTP	HTTP
Discovery	--	-	X	-	-	-
Inventory	-	-	X	-	-	-
Config—Regular Job	X	X	-	-	X	-
Archive—Regular Job	-	-	X	X	X	-
Config—Auto Job	X	X	-	-	-	-
Startup Config	-	-	-	-	X	-
Firmware Upgrade	X	X	-	X	X	-
Faults	-	-	X	-	-	-

1. The enable password is used only if the access point is configured with an enable password.

