



CHAPTER 1

Overview

This chapter describes the Cisco 2700 and 2710 series location appliances and their role in your network.

System Overview

Cisco 2700 and 2710 series location appliances operate within the Cisco Wireless LAN Solution infrastructure.

The location appliance is a slim 19 x 23 x 1.7 in. (48.3 x 58.4 x 4.3 cm) one-rack chassis designed to be mounted in a standard 19-in. (48.3-cm) EIA equipment rack.

Location appliances compute, collect, and store historical location data using Cisco wireless LAN controllers and access points to track the physical location of wireless devices. In this role, the location appliance acts as a server to one or more Cisco WCS servers.

Up to 2,500 laptop clients, palmtop clients, VoIP telephone clients, active Radio Frequency Identifier (RFID) asset tags, rogue access points and clients can be tracked.

The command-line interface (CLI) is used for initial configuration at startup, thereafter, the Cisco WCS interface is used for all location appliance configuration, operation, and data display.

After it is configured, each location appliance communicates directly with its associated controllers to collect operator-defined location data. The associated Cisco WCS server operators can then communicate with each location appliance to transfer and display operator-selected data.

The location appliance database is backed up on any WCS server, and its database is restored using that same WCS server at both operator-defined intervals and on an ad hoc basis. Similarly, the location appliance database is synchronized with the Cisco WCS Server database on a configured, periodic basis or on an ad hoc basis.

Operators can download new application code to all associated location appliances from any Cisco WCS Server using Cisco WCS 3.0 or later. Note that the other location appliance features and functions can be accessed from any version of Cisco WCS, but the application code download can be performed only from Cisco WCS 3.0 or later.

Operators can configure location appliances to collect data for Cisco Wireless LAN Solution clients, rogue access points and clients, active RFID asset tags, and statistics at separate operator-defined intervals.

Front and Back Panel Components

The location appliance uses two redundant back-panel 10/100/1000BASE-T ports to connect to one or two network segments. These ethernet port interfaces are identified as ethernet0 (eth0) and ethernet 1 (eth01).

Either the Ethernet 0 or Ethernet 1 port can be used to transmit location updates to WCS. However, Ethernet 0 is generally configured to communicate with WCS and Ethernet 1 port is generally used for out-of-band management. Both ports are configured as part of the installation script described in Chapter 2.

The ON/OFF switch is on the front panel and the power cord on the back panel. The location appliance includes a back-panel DB-9 console port for initial configuration using a CLI console.

Note that each location appliance can be installed in any Network Operations Center (NOC) or wiring closet from which it can communicate with its associated Cisco WCS Servers and controllers.

Figure 1-1 Location Appliance in a Typical Network Configuration

