



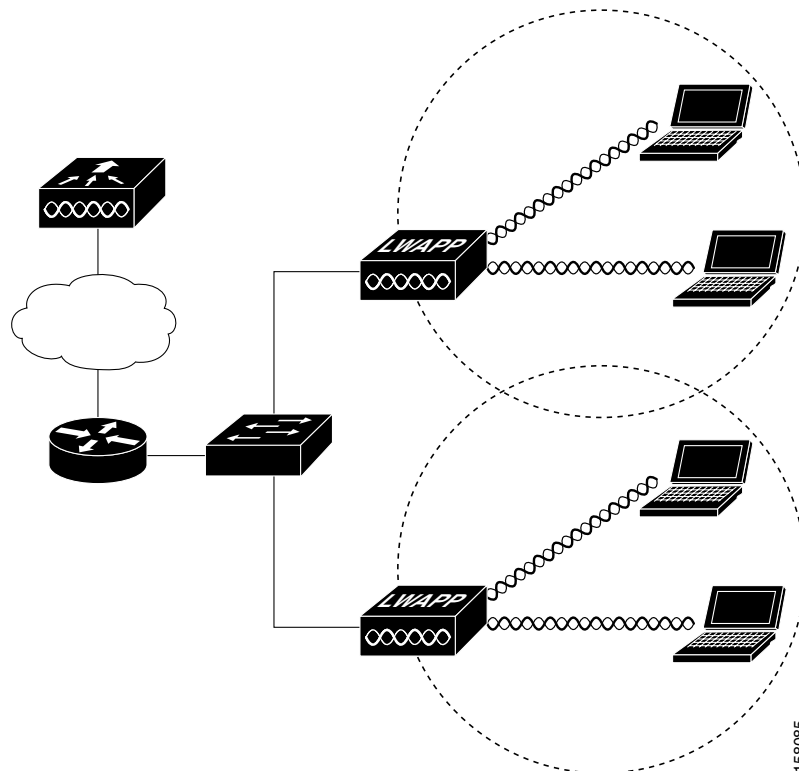
# APPENDIX **F**

## Priming Lightweight Access Points Prior to Deployment

This section describes an optional procedure designed to prime or stage your lightweight access points in a convenient location rather than after they are installed in possibly difficult to reach locations. This process can be used when a DHCP server is not reachable by your deployed access point and it helps limit potential installation problems to primarily Ethernet and power areas.

[Figure F-1](#) illustrates a typical priming configuration for your lightweight access points.

**Figure F-1** *Typical Lightweight Access Point Priming Configuration*



Before deploying your lightweight access points to their final locations, follow these steps to prime your access points:

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- Step 1** In a Layer 2 environment, where the lightweight access points are located on the same subnet as the controller, the access point communicates directly with the controller.
- Step 2** In a Layer 3 environment, ensure a DHCP server (typically on your switch) is enabled on the same subnet as your lightweight access points. The access points will receive its IP address and controller information using DHCP Option 43.

The lightweight access point must be able to find the IP address of the controller. This can be accomplished using DHCP, DNS, OTAP, or IP subnet broadcast. This guide describes the DHCP method to convey the controller IP address. For more information, refer to the [“Configuring DHCP Option 43 for Lightweight Access Points” section on page G-1](#).




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**Note** For a Layer 3 access point on a different subnet than the controller, ensure ensure the route to the controller has destination UDP ports 12222 and 12223 open for LWAPP communications. Ensure that the routes to the primary, secondary, and tertiary controllers allow IP packet fragments.

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- Step 3** Ensure that your controller is connected to a switch trunk port.
- Step 4** Configure the controller in LWAPP Layer 3 mode and ensure that its DS Port is connected to the switch. Use the CLI, web-browser interface, or Cisco WCS procedures as described in the appropriate controller guide.

- a.** In multi-controller environments, You can set one controller’s DS port to **Master** (you can use the *config network master-base disable* CLI command or you can use the controller GUI) so that new access points always associate with it. You can use the **show network config** CLI command to determine if the controller DS port is the master.

All access points associate to the master controller. From one location, you can configure access point settings, such as primary, secondary, and tertiary controllers. This allows you to redistribute your access points to other controllers on the network.

You can also use a Cisco WCS server to control, configure, and redistribute all your access points from a single location.

- Step 5** Apply power to the lightweight access points:
- a.** Connect your lightweight access points to untagged access ports on your POE capable switch. You can optionally use power modules or power injectors to power your access points.
- b.** After you power up the lightweight access point, it begins a power-up sequence that you can check by observing the access point LEDs. All LEDs blink sequentially back and forth, indicating that the access point is trying to find a controller.




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**Note** If the lightweight access point remains in this mode for more than 5 minutes, the access point is unable to find the master controller. Check the connection between the access point and the controller and ensure they are on the same subnet.

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- c.** If the lightweight access point shuts down (all LEDs off), check to ensure that sufficient power is available.

- d. When the lightweight access point associates with the controller, if the access point code version differs from the controller code version, the access point downloads the operating system code from the controller. All the access point LEDs blink simultaneously during the download.
- Step 6** If the operating system download is successful, the lightweight access point reboots. Normal operation is indicated when the radio LED is blinking to indicate radio activity.
- Step 7** Use the controller CLI, controller GUI, or Cisco WCS to configure the lightweight access point with primary, secondary, and tertiary controller names.
- Step 8** If the lightweight access point is in a Controller Mobility Group, use the controller CLI, controller GUI, or Cisco WCS to configure the Controller Mobility Group name.
- Step 9** Use controller CLI, controller GUI, or Cisco WCS to configure the access point-specific 802.11a, 802.11b, and 802.11g network settings.
- Step 10** If the configuration priming was successful, the radio LED is blinking to indicate normal operation.
- Step 11** Repeat Steps 4 to 9 for each access point.

When you successfully complete the configuration priming of all your lightweight access points, ensure that the Master setting is disabled on your controller. Also you can begin deploying the access points to their final destinations.

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