

# Overview of Cisco Embedded Wireless Controller on Catalyst Access Points

Cisco Embedded Wireless Controller on Catalyst Access Points are the next generation of wireless controllers built for the Intent-based networking. The Cisco controllers are IOS XE based and integrates the RF Excellence from Aironet with Intent-based Networking capabilities of IOS XE to create the best-in-class wireless experience for your evolving and growing organization.

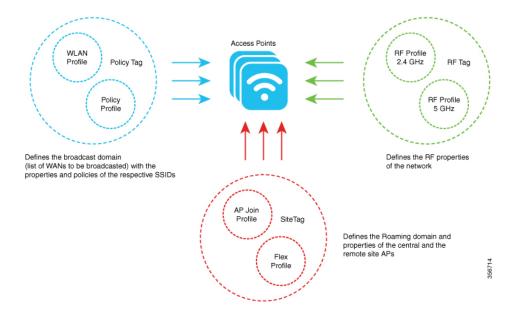
The controllers are deployable in physical form factors and can be managed using Cisco DNA Center, Netconf/YANG, web-based GUI, or CLI.

The configuration data model is based on design principles of reusability, simplified provisioning, enhanced flexibility and modularization to help manage networks as they scale up and simplify the management of dynamically changing business and IT requirements.

- Elements of the New Configuration Model, on page 1
- Configuration Workflow, on page 2
- Initial Setup, on page 3
- Interactive Help, on page 4
- Resetting Cisco Embedded Wireless Controller on Catalyst Access Points, on page 5
- Password Recovery, on page 6

### **Elements of the New Configuration Model**

The following diagram depicts the elements of the new configuration model.



#### Tags

The property of a tag is defined by the property of the policies associated to it, which in turn is inherited by an associated client or an AP. There are various type of tags, each of which is associated to different profiles. Every tag has a default that is created when the system boots up.

#### **Profiles**

Profiles represent a set of attributes that are applied to the clients associated to the APs or the APs themselves. Profiles are reusable entities that can be used across tags.

## **Configuration Workflow**

The following set of steps defines the logical order of configuration. Apart from the WLAN profile, all the profiles and tags have a default object associated with it.

- 1. Create the following profiles:
  - WLAN
  - Policy
  - AP Join
  - Flex
  - RF
- 2. Create the following tags:
  - Policy
  - Site

- RF
- 3. Associate tags to an AP.

Figure 1: Configuration Workflow



## **Initial Setup**

#### **Setting up the Controller**

The initial configuration wizard in Cisco Embedded Wireless Controller on Catalyst Access Points is a simplified, out-of-the-box installation and configuration interface for controller. This section provides

instructions to set up a controller to operate in a small, medium, or large network wireless environment, where access points can join and together as a simple solution provide various services, such as corporate employee or guest wireless access on the network.



Note

From Cisco IOS XE Amsterdam 17.1.x onwards, date and time will not reflect in the web UI unless it is synched with Network Time Protocol (NTP).



Note

When the AP has rebooted in the EWC mode, it broadcasts a provisioning SSID ending with the last digits of the MAC address. You can connect to the provisioning SSID using the PSK **password**.

You can then open a browser and you are redirected to mywifi.cisco.com which takes you to the AP web UI. Enter the username as **webui** and password as **cisco**.



Note

We recommend that you use the **wireless ewc-ap factory-reset** command to reset the EWC device to Day0 state (with the configuration wizard). This command also resets all the APs and EWC-APs in the network to Day0 state. You can use the **erase startup-config** command to remove the configuration from the device. However, this is not synced to other devices in the network.



Note

After completing the Day0 wizard, the internal AP disjoins, and rejoins after one minute.



Note

The wireless management must be the AP Gigabit port and you cannot have several SVIs configured in IOS-XE.



Note

You must run the write memory command after copying a new TAR file.

## **Interactive Help**

The Cisco Catalyst 9800 Series Wireless Controller GUI features an interactive help that walks you through the GUI and guides you through complex configurations.

You can start the interactive help in the following ways:

- By hovering your cursor over the blue flap at the right-hand corner of a window in the GUI and clicking **Interactive Help**.
- By clicking Walk-me Thru in the left pane of a window in the GUI.

• By clicking **Show me How** displayed in the GUI. Clicking **Show me How** triggers a specific interactive help that is relevant to the context you are in.

For instance, **Show me How** in **Configure > AAA** walks you through the various steps for configuring a RADIUS server. Choose **Configuration > Wireless Setup > Advanced** and click **Show me How** to trigger the interactive help that walks you through the steps relating to various kinds of authentication.

The following features have an associated interactive help:

- Configuring AAA
- Configuring FlexConnect Authentication
- Configuring 802.1x Authentication
- · Configuring Local Web Authentication
- Configuring OpenRoaming
- Configuring Mesh APs



Note

If the WalkMe launcher is unavailable on Safari, modify the settings as follows:

- 1. Choose **Preferences** > **Privacy**.
- 2. In the Website tracking section, uncheck the Prevent cross-site tracking check box to disable this action.
- 3. In the Cookies and website data section, uncheck the Block all cookies check box to disable this action.

## Resetting Cisco Embedded Wireless Controller on Catalyst Access Points

To reset the controller on Catalyst APs to factory defaults, follow the steps given below:

#### **Procedure**

- **Step 1** Unplug the Access Point from its power source.
- **Step 2** Plug in the console cable and open serial session on your computer or laptop.
- **Step 3** Press and hold the **Mode/Reset** button on the AP.
- **Step 4** Plug in the AP back to its power source while still pressing the **Mode/Reset** button.
- **Step 5** Continue holding the button until a prompt is displayed in the serial session on your computer or laptop.

Note The console session also displays for how long the button has been pressed. At least 20 seconds of button press is required for a complete restart.

#### What to do next

When the AP reboots, use the default credentials Cisco/Cisco to log in.

## **Password Recovery**

For password recovery, you must do a factory reset of the AP. For more information about resetting factory defaults, see the Resetting Cisco Embedded Wireless Controller on Catalyst Access Points section.