

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.

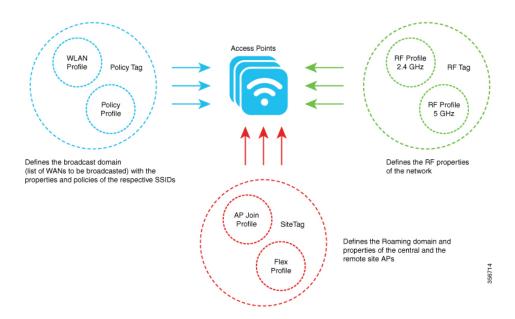
The controllers are deployable in physical form factors and can be managed using Cisco DNA Center, Netconf/YANG, web-based GUI, or CLI.

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.

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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

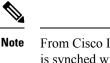


Initial Setup

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.



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.



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