

Overview of Cisco 9800 Series Wireless Controllers

Cisco Catalyst 9800 Series Wireless Controllers are the next generation of wireless controllers built for the Intent-based networking. The Cisco Catalyst 9800 Series 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 and virtual (private and public cloud) form factors and can be managed using Cisco Catalyst Center, Netconf/YANG, Cisco Prime Infrastructure, web-based GUI, or CLI.

The Cisco Catalyst 9800 Series Wireless Controllers are available in multiple form factors to cater to your deployment options:

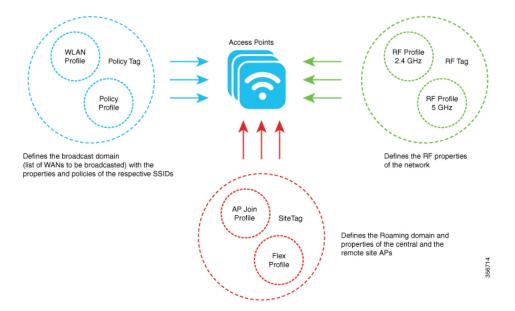
- Cisco Catalyst 9800 Series Wireless Controller Appliance
- Cisco Catalyst 9800 Series Wireless Controller for Cloud
- Cisco Catalyst 9800 Embedded Wireless for Switch

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.

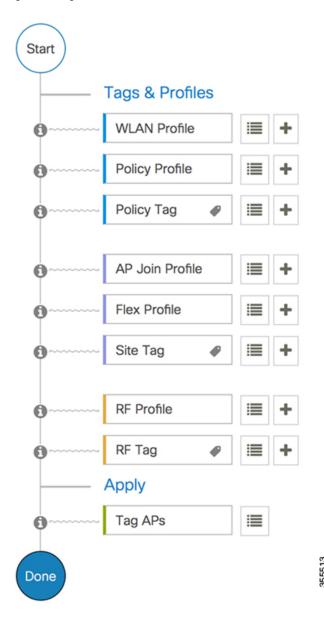
Configuration Workflow

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 Catalyst 9800 Series Wireless Controller 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.

Setting Up the Controller Using GUI

To set up the controller using GUI, see the *Configuring Wireless Controller* section in Cisco Catalyst 9800 Wireless Controller Series Web UI Deployment Guide.



Note

- If you make configuration changes in the Command Line Interface (CLI) and in the GUI simultaneously, you must click the **Refresh** button in the GUI to synch both the changes. You should always click the **Refresh** button in the GUI, to update the changes done through CLI.
- The banner text is fetched from the controller when you land on the login page. You will be able to see this request on the RADIUS server.

Setting Up the Controller Using CLI

To set up the controller using CLI, see the *Performing the Initial Configuration on the Controller* section of your respective controller installation guides.

- Cisco Catalyst 9800-80 Wireless Controller Hardware Installation Guide
- Cisco Catalyst 9800-40 Wireless Controller Hardware Installation Guide
- Cisco Catalyst 9800-L Wireless Controller Hardware Installation Guide
- Cisco Catalyst 9800-CL Cloud Wireless Controller Installation Guide

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.

Interactive Help