

# **Configuring Cisco Catalyst 9800 and Intro to WIFI6 v1.0 (CC9800)**

**Modality: Virtual Classroom**

**Duration: 2 Days**

**CLC: 25 Units**

## **About this course:**

Configuring Cisco Catalyst 9800 and Intro to WIFI6 v1.0 is a two-day course designed to help students understand how the Catalyst 9800 Series wireless controllers combine the best of RF excellence with IOS XE benefits. This course begins with a description of the Cisco Catalyst 9800 and its benefits while introducing the learner to WIFI6. The configuration, migration, and troubleshooting will also be covered in this instructor-led course.

## **Course Objective:**

Upon completing this course, the learner will be able to meet these overall objectives:

- Describe Cisco Catalyst 9800
- Understand the Benefits for Catalyst 9800
- Configure Catalyst 9800
- Migrate to the Catalyst 9800
- Troubleshoot the Catalyst 9800
- Understand and Discuss WIFI6

## **Audience:**

The primary audience for this course is as follows:

- Cisco Partners and customers interested in the Catalyst 9800 wireless controller

## **Prerequisite:**

The knowledge and skills that a learner should have before attending this course are as follows:

- Understanding of Wi-Fi technologies (CCNA Level)

## **Course Outline:**

### **Introduction**

- Cisco Catalyst 9800 Overview
- Intent Based Networking (IBN)
- Cisco Catalyst Next Gen Wireless Architecture
- Cisco Catalyst 9800 Wireless – Platform Support

## Cisco Catalyst 9800 Wireless Controller Appliances

- Cisco Catalyst 9800 Wireless Controller Series: C9800-80-K9
- Cisco Catalyst 9800 Wireless Controller Series: C9800-40-K9
- Cisco Catalyst 9800 Wireless Controller Cloud Series: C9800-CL-K9

## Cisco Catalyst 9800 use in Private and Public Cloud Environments

- Private
- Public
- Hybrid

## What is WiFi 6 and Why do we need it?

- Use Cases – how WiFi 6 will change Business and Industry
- WiFi6 technical – a leap from previous WiFi technologies
- Design Considerations
- Cisco WiFi6 Portfolio and Interoperability
- Configure WiFi6 on Cat 9800

## Cisco Catalyst 9800 Series Embedded Controller for SDA

- SD-Access Everywhere
- Wireless Assurance with DNA Center
- Catalyst 9800 SD-Access Wireless
- Catalyst 9800 SD-Access Embedded Wireless Controllers

## High Availability

- Reducing downtime for Upgrades and Unplanned Events
- High Availability (Client SSO)
- High Availability (AP & Client SSO)

## Software Updates

- Software Updates
- SSO
- Patching
- Rolling Upgrades
- Wireless Controller SMU
- Rolling AP Update
- Image Upgrade

## Programmability and Telemetry

- Flexible management options with Cisco Catalyst 9800 Wireless Controllers
- Wireless Programmability “Stack”
- Config vs Operational YANG data models

- Model Driven Telemetry
- Security and Threat Detection
- Intent-based wireless networks Security
- Security and Threat Mitigation

## Catalyst 9800 Wireless Controller Configuration Model

- New Configuration Model
- AireOS vs. Catalyst 9800 Config Model
- Catalyst 9800 Config Model

## Wireless Basic Setup

- Wireless Basic Configuration Model
- Adding Local Site
- Adding Remote Site
- Provisioning APs to Site
- Day 0
- AP PnP

## Wireless Advanced

- Guided UI Configuration Workflow
- WLAN Profile
- Policy Profile
- AP Join profile
- RF Profile
- Static and Rule-Based AP Tagging

## Migration

- AireOS Config Translator
- Using the Tool
- Migration using Prime
- AireOS Config Translator on PI 3.5

## Troubleshooting

- IOS-XE logging architecture
- Packet tracing and packet captures
- Embedded Packet Capture web interface
- Useful commands and tools

## Lab Outline:

- Configure Windows 10 Client Access
- Configure Centralized WLAN Deployment with Catalyst 9800
- Configure Security in Centralized WLAN Deployment with Catalyst 9800 using ISE

- Configuring Guest Access using Catalyst 9800 and Anchor AirOS
- Implement Flex-Connect WLAN Deployment with Catalyst 9800
- High Availability SSO with Catalyst 9800
- Migrating Configuration from AireOS to Catalyst 9800 WLC using WebUI and Prime Infrastructure
- Catalyst 9800 Software Upgrade