

Implementing Cisco Catalyst 9000 Series Switches (ENC9K) v1.0 - On Demand

Modality: On Demand

Duration: 40 Hours

CLC: 7 Units

Course Information

About this course:

This course will take you through the capabilities, architecture, and implementation of the Cisco Catalyst 9000 switching platform.

The course will cover various features of Cisco IOS XE platform via hands-on learning experience and will teach you to manage devices from a single dashboard called Cisco DNA Center. You will also learn to provide end-to-end security and automation with centralized management using Cisco DNA Center, and the use of Cisco Catalyst 9000 family of switches to enable Software-Defined Access (SD-Access).

The e-learning format of this class offers an immersive, practice-based learning experience at your own pace. Using enterprise-grade Cisco equipment and software, this hands-on training is designed to be as effective as classroom training, with easily consumable segments of video, text, discovery labs, review questions, and assessments.

Course Objective:

Upon completing this course, students will be able to:

- Examine management capabilities of the Cisco Catalyst 9000 family of switches
- Describe the Cisco Catalyst 9000 family of switches deployed in a Cisco StackWise Virtual environment and an SD-Access fabric
- Describe the new Cisco IOS XE software management, patchability, and graceful insertion and removal (GIR) of features on the Cisco Catalyst 9000 switching family
- Describe the scalability and performance features supported by the Cisco Catalyst 9000 switching family
- Describe the Cisco Catalyst 9000 family's support for security, quality of service (QoS), and Internet of Things (IoT) convergence features
- Describe the Cisco Catalyst 9000 family's support for cloud hosting and connectivity, along with automation features
- Explore the SD-Access solution fundamentals, deployment models for the Cisco Catalyst 9000 family, and the use of Cisco DNA Center to manage infrastructure devices
- Review the Cisco Catalyst 9000 switching family, identify the switches' features, and examine the functionalities purpose-built for Cisco DNA and the SD-Access solution
- Describe the Cisco Catalyst 9300 Series Switch architecture, model types, port types, uplink

modules, and components, including power supplies and stacking cables

- Describe the Cisco Catalyst 9400 Series Switches, different modular chassis, supervisor and line card options, architectural components, uplink and power redundancy, and Multigigabit ports
- Describe the Cisco Catalyst 9500 Series Switches, model types, switch components, RFID support, architecture, and switch profiles
- Position the different Cisco Catalyst 9000 family switch model types in the network, and map older Cisco Catalyst switches to the 9000 family for migration

Audience:

- Network managers
- System engineers
- Network engineers
- Network designers

Prerequisite:

Students are recommended, but not required to have the following knowledge and skills:

- Familiarity with the Cisco IOS XE operating system
- Awareness of Cisco Identity Services Engine (ISE) as an authentication platform and policy manager
- Cisco CCNP Routing and Switching certification or equivalent experience
- Knowledge of configuring LAN routing and switching with legacy Cisco Catalyst switches

The Cisco learning offering below can help you prepare for this course:

- Introduction to APIC EM Deployment

Course Outline:

- **Introducing the Cisco Catalyst 9000 Family of Switches**
- **Introducing Cisco Catalyst 9300 Series Switches**
- **Introducing Cisco Catalyst 9400 Series Switches**
- **Introducing Cisco Catalyst 9500 Series Switches**
- **Positioning Cisco Catalyst 9000 Family Switches**
- **Examining the Management Capabilities of the Cisco Catalyst 9000 Switching Family**
- **Deploying Cisco Catalyst 9000 Family Switches in Cisco StackWise Virtual and SD-Access Fabric**
- **Describing New Features on Cisco Catalyst 9000 Family Switches**
- **Describing Scale and Performance Features on Cisco Catalyst 9000 Family Switches**
- **Describing Security, QoS, and IoT Convergence Features on Cisco Catalyst 9000 Family Switches**
- **Describing Cloud and Automation Features on Cisco Catalyst 9000 Family Switches**
- **Describing Cisco SD-Access Solution and Cisco Catalyst 9000 Family Switches**

