

Implementing Cisco Catalyst 9000 Switches (ENC9K) V4.0

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HAPPENS EVERYDAY!***

Implementing Cisco Catalyst 9000 Switches (ENC9K) V4.0

Course Duration

3 days

Course Price

\$3,095.00
30 CLCs

Methods of Delivery

In-Person ILT
Virtual ILT
Onsite ILT

About this Class

The Implementing Cisco Catalyst 9000 Series Switches (ENC9K) v4.0 course provides you with insight into Cisco Catalyst 9000 Series Switches and its solution components. You will learn about the architecture, capabilities, positioning, and implementation of the Cisco Catalyst 9000 Series switches, as well as the management of the switches using CLI, Cisco DNA Center, and IOS-XE web user GUI. Additionally, you will be introduced to security, cloud, automation, and other important features of Cisco Catalyst 9000 Series switches.



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How you will benefit

This class will help you:

- Prepare for successful deployment of the Cisco Catalyst 9000 Series Switches
- Understand the role of Cisco Catalyst 9000 Series Switches in the SD-Access fabric
- Learn to provision Cisco Catalyst 9000 Series Switches using Cisco DNA center as the orchestration platform
- Gain hands-on practice through in-depth lab exercises

Why Attend with Current Technologies CLC

- Our Instructors are the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

Who Should Attend

The job roles best suited to the material in this course are:

- Network Designers
- Network Managers
- System Engineers

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Objectives

After taking this course, you should be able to:

- Review the Cisco Catalyst 9000 Series Switches identify the switches' features and examine the functionalities purpose-built for Cisco DNA and the SD-Access solution.
- Position the different Cisco Catalyst 9000 Series Switch model types in the network, and map older Cisco Catalyst switches to the 9000 family for migration.
- Identify the role and value of Cisco Silicon One in a campus environment.
- Examine management capabilities of the Cisco Catalyst 9000 Series Switches.
- Describe the scalability and performance features supported by the Cisco Catalyst 9000 Series Switches.
- Describe the Cisco Catalyst 9000 Series Switch support for security, Quality of Service (QoS), and Internet of Things (IoT) convergence features.
- Describe automation features, Application Programming Interface (API), Infrastructure as Code, and automation tools supported on Cisco Catalyst 9000 Series switches.
- Describe the new QoS, IoT, and BGP EVPN Features on Cisco Catalyst 9000 Series Switches.
- Describe the maintenance features on Cisco Catalyst 9000 Series switches.

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Cont. Objectives

After taking this course, you should be able to:

- Explore the SD-Access solution fundamentals, deployment models for the Cisco Catalyst 9000 Series Switch, and the use of Cisco DNA Center to manage infrastructure devices.
- Automate Day 0 device onboarding with Cisco DNA Center LAN Automation and Network PnP.
- Describe how to manage and host applications on Cisco Catalyst 9000 Series switches using Cisco DNA Center.
- Explore a modern approach to cloud-managed networking for Cisco Catalyst 9000 Series switches and wireless access points that uses the Meraki Dashboard and analytics.
- Describe the Cisco Catalyst 9200 Series Switch architecture, model types, port types, uplink modules, components including power supplies, and other switch features and capabilities.
- 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.
- Describe the Cisco Catalyst 9600 Series Switch architecture, supervisor and line card options, and high availability features.

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Course Outline

Module 1: Introducing the Cisco Catalyst 9000 Series Switches

Module 2: Positioning Cisco Catalyst 9000 Series Switches

Module 3: Cisco Catalyst Silicon One Architecture

Module 4: Exploring the Cisco Catalyst 9000 Series Switches Management Capabilities

Module 5: Scale and Performance Features on Cisco Catalyst 9000 Series Switches

Module 6: Security Features on Cisco Catalyst 9000 Series Switches

Module 7: Automation Features on Cisco Catalyst 9000 Series Switches

Module 8: QoS, IoT, and BGP EVPN Features on Cisco Catalyst 9000 Series Switches

Module 9: Maintenance Features on Cisco Catalyst 9000 Series Switches

Module 10: Cisco SD-Access Solution on Cisco Catalyst 9000 Series Switches

Module 11: Application Hosting on Cisco Catalyst 9000 Series Switches

Module 12: Cloud Management for Catalyst 9000 Series Using Meraki Dashboard

Module 13: Automating Network Changes with Cisco DNA Center

Module 14: Introducing Cisco Catalyst 9200 Series Switches

Module 15: Introducing Cisco Catalyst 9300 Series Switches

Module 16: Introducing Cisco Catalyst 9400 Series Switches

Module 17: Introducing Cisco Catalyst 9500 Series Switches

Module 18: Introducing Cisco Catalyst 9600 Series Switches

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Lab Outline

- **Lab 1:** Configure and Troubleshoot Network Issues Using WebGUI
- **Lab 2:** Application Hosting on Cisco Catalyst 9000 Series Switches Using the CLI
- **Lab 3:** Configure a Switch Stack Using Cisco Catalyst 9300 Series Switches
- **Lab 4:** Enable and Verify Switch-to-Switch MACSec
- **Lab 5:** Enable and Verify Encrypted Traffic Analytics
- **Lab 6:** Explore Switch Management Automation and Programmability
- **Lab 7:** Network Automation Using Ansible Playbooks and Terraform Scripts on the Cisco IOS XE
- **Lab 8:** Configure Perpetual PoE and fast PoE on the Cisco Catalyst 9000 Series Switches
- **Lab 9:** Configure Packet Capture on Cisco Catalyst 9300 Series Switches
- **Lab 10:** Perform GJR on a Cisco Catalyst 9000 Series Switch
- **Lab 11:** Application Hosting on Cisco Catalyst 9300 Using Cisco DNA Center
- **Lab 12:** Integrate Cisco DNA Center and Cisco ISE
- **Lab 13:** Provision Underlay Networks with Cisco DNA Center LAN Automation