

# Implementing Cisco Catalyst 9000 Switches (ENC9K) v4.0

**Duration: 24 Hours (3 Days)**

## Course Overview

The Implementing Cisco Catalyst 9000 Switches (ENC9K) v4.0 course is designed to provide IT professionals with the knowledge and skills needed to configure, manage, and troubleshoot Cisco Catalyst 9000 Series Switches. The course covers a spectrum of features such as Automation, cloud management, security, and the overall performance capabilities of these switches. Learners will explore the various models within the 9000 family, including the 9200, 9300, 9400, 9500, and 9600 series, each tailored for specific network requirements and scenarios. Through a combination of lectures, hands-on labs, and self-study, participants will gain an understanding of the architecture, management, and operations of the Catalyst 9000 family, emphasizing Cisco DNA Center Automation and Cisco SD-Access solutions. The course also delves into advanced topics such as Encrypted Traffic Analytics, Perpetual PoE, and IoT Convergence features, equipping learners with the expertise to deploy these switches in modern, dynamic networks. By completing this course, IT professionals will be able to leverage the full potential of the Catalyst 9000 series, enhancing network efficiency and security.

## Audience Profile

The Implementing Cisco Catalyst 9000 Switches" course is designed for IT professionals seeking advanced knowledge of Cisco switch solutions.

- Network Engineers
- System Administrators
- Network Administrators
- Network Architects
- IT Managers
- Technical Solution Architects
- Cisco Integrators/Partners
- Field Engineers
- Consulting Systems Engineers
- Network Designers
- Network Analysts
- Data Center Operations Staff
- Network Operations Staff
- IT Professionals looking to enhance their expertise in Cisco networking
- Professionals pursuing Cisco certification in switching technologies

## Course Syllabus

- Configure and troubleshoot network issues using WebGUI.
- Host applications on Cisco Catalyst 9000 Series Switches using the CLI.
- Configure a switch stack on Cisco Catalyst 9300 Series Switches.
- Enable and verify switch-to-switch MACSec.
- Enable and verify Encrypted Traffic Analytics.
- Explore switch management automation and programmability.

- Automate networks using Ansible Playbooks and Terraform Scripts on Cisco IOS XE.
- Configure Perpetual PoE and Fast PoE on Cisco Catalyst 9000 Series Switches.
- Configure packet capture on Cisco Catalyst 9300 Series Switches.
- Perform GIR (Graceful Insertion and Removal) on a Cisco Catalyst 9000 Series Switch.
- Host applications on Cisco Catalyst 9300 using Cisco DNA Center.
- Integrate Cisco DNA Center with Cisco ISE.
- Provision underlay networks with Cisco DNA Center LAN automation.