



CISCO TRAINING

Implementing Cisco Catalyst 9000 Series Switches

Master the implementation and management of Cisco Catalyst 9000 series switches to build modern, scalable network infrastructures.

DURATION

2 hours

LEVEL

Intermediate

FORMAT

Instructor-Led

- Globally Recognized Certification

- Expert-Led Hands-On Training

- Flexible Scheduling

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COURSE OVERVIEW

This intensive 2-hour course, 'Implementing Cisco Catalyst 9000 Series Switches', is meticulously designed to equip network professionals with the essential skills for deploying, configuring, and managing Cisco's flagship enterprise switching platform. Participants will gain practical expertise in leveraging the powerful features of the Catalyst 9000 series, including its advanced IOS XE operating system, high-availability capabilities like StackWise Virtual, and integrated security features. The curriculum delves into core switching concepts, essential configurations, and an introduction to the automation and programmability aspects that define modern network infrastructures.

By focusing on practical implementation, this course ensures that engineers can confidently integrate Catalyst 9000 switches into existing or new enterprise environments. You will learn to optimize network performance, enhance security posture, and prepare your network for future demands. Mastering the Catalyst 9000 series is crucial for any IT professional seeking to build robust, scalable, and secure networks, offering a significant boost to their career trajectory in network infrastructure management and design.

Duration	2 hours
Level	Intermediate
Vendor	Cisco

COURSE CURRICULUM

01 Module 1: Cisco Catalyst 9000 Series Overview and Initial Configuration

- Introduction to Cisco Catalyst 9000 Series Portfolio (9200, 9300, 9400, 9500, 9600)
- Understanding Cisco IOS XE Operating System and its Architecture
- Initial Device Access and Setup Procedures
- Basic Interface and VLAN Configuration
- Managing Device Connectivity (Console, SSH, Telnet)

02 Module 2: Core Switching Features and High Availability

- Understanding Layer 2 Switching Concepts on Catalyst 9000
- Spanning Tree Protocol (STP) Enhancements and Best Practices
- Configuring Link Aggregation (EtherChannel) for Performance and Redundancy
- Implementing StackWise Virtual for Chassis-Level Redundancy
- Introduction to StackPower for Power Redundancy

03 Module 3: Security and Quality of Service (QoS)

- Securing Access Ports with Port Security
- Mitigating DHCP Attacks with DHCP Snooping
- Understanding and Implementing MACsec Encryption
- Introduction to Cisco TrustSec for Policy Enforcement
- Configuring Basic QoS Mechanisms: Classification, Marking, and Queuing

04 Module 4: Automation, Programmability, and Monitoring

- Introduction to Cisco DNA Center Integration with Catalyst 9000
- Fundamentals of NETCONF/RESTCONF for Configuration Management
- Basic Python Scripting for Network Automation Use Cases
- Utilizing Telemetry and Proactive Monitoring Tools for Network Health
- Troubleshooting Common Catalyst 9000 Deployment Issues

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

- > **Senior Enterprise Network Engineer (Cisco Infrastructure)**
- > **Cisco Network Deployment Specialist**
- > **Solutions Architect (Campus and Branch Networks)**

FREQUENTLY ASKED QUESTIONS

Q: What are the recommended prerequisites or prior knowledge needed to fully benefit from this 'Implementing Cisco Catalyst 9000 Series Switches' course?

To gain the most from this course, participants should possess a solid foundational understanding of networking concepts, including routing and switching fundamentals, ideally equivalent to a Cisco CCNA certification level. Practical experience with Cisco IOS Command Line Interface (CLI) is highly beneficial, as the course dives directly into configuration and implementation tasks.

Q: How will this course specifically prepare me to manage advanced Catalyst 9000 features like StackWise Virtual or integrate with Cisco DNA Center in a production environment?

This course provides hands-on practical configurations for deploying and managing StackWise Virtual, teaching you best practices for achieving high availability and simplified management. Furthermore, it introduces the core concepts and initial steps for integrating Catalyst 9000 switches with Cisco DNA Center, enabling you to leverage its centralized management, automation, and SD-Access capabilities in a real-world enterprise setting.

Q: Beyond basic configuration, what specific troubleshooting and optimization skills will I acquire that are directly applicable to enterprise-level Catalyst 9000 networks?

You will develop practical skills to diagnose common configuration discrepancies, troubleshoot Layer 2 switching issues, and identify performance bottlenecks related to QoS settings on Catalyst 9000 switches. The course emphasizes methods to verify security policy effectiveness (e.g., Port Security, MACsec) and optimize network stability and scalability through proper feature implementation and verification commands.

ABOUT COMPUTER PRIDE



East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+

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10,000+

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READY TO ENROL?

Take the next step in your technology career.

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