

Managing Cisco Network Operating Systems (CNIOS)

ID CNIOS **Price 3,795.— €(excl. tax)** **Duration 5 days**

Course Overview

The **Managing Cisco Network Operating Systems (CNIOS)** training introduces the fundamental concepts of Cisco networking operating systems, including IOS XE, NX-OS, and IOS XR. This training is designed for individuals who are new to Cisco or networking professionals who want to deepen their understanding of Cisco operating systems used across various network devices. Upon completion of this training, you will be able to navigate the command-line interface (CLI), configure basic settings as well as advanced protocols, and understand the unique features and architectures of Cisco network operating systems.

This training includes five free additional modules through Cisco U. These modules provide valuable foundational knowledge on Cisco Network Operating Systems:

- Track 1 – 1: Overview of Cisco Network Operating Systems
- Track 1 – 2: Evolution of Cisco Operating Systems
- Track 1 – 3: Comparison of IOS, IOS XE, NX-OS, and IOS XR
- Track 6 – 22: Cisco Documentation Navigation
- Track 6 – 23: Cisco Operating Systems Licensing

Please note that this course lab access is valid for 60 hours or 90 days whichever is the shorter, so please ensure you exit the lab exercises when not in use. How You'll Benefit

This training will help you:

- Get familiar with Cisco IOS XE, NX-OS, and IOS XR operating systems
- Navigate CLIs of individual systems, perform initial setup, upgrade, and troubleshooting
- Navigate Cisco documentation, interact with Cisco Technical Assistance Center (TAC), and automate different platforms
- Configure important features, such as Virtual Port Channel (vPC), Fibre Channel, virtual extensible LAN (VXLAN), and router clustering
- Earn 37 CE credits toward recertification
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Who should attend

- Junior Network Engineers
- NOC Engineers
- IT Operations Engineers
- Network Administrators

Prerequisites

There are no formal prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are:

- Familiarity and basic understanding of core networking concepts
- Fundamental knowledge and understanding of Cisco network devices, such as routers and switches
- Basic understanding of network security concepts, including common threats, firewalls, and how to harden a network

These skills can be found in the following Cisco Learning Offerings:

- [Implementing and Administering Cisco Solutions \(CCNA\) v2.2](#)
- [Understanding Cisco Data Center Foundations \(DCFNDU\)](#)
- [Understanding Cisco Service Provider Network Foundations \(SPFNDU\)](#)
- [Network Administrator \(NETADM\)](#)
- [Network Fundamentals for Network Adjacent Engineers \(NETFND\)](#)

Course Objectives

- Navigate the CLIs of IOS XE, NX-OS, and IOSXR
- Perform initial setup, upgrades, and troubleshooting on various Cisco platforms
- Configure essential network features, such as vPCs, Fibre Channel, VXLAN, and router clustering
- Explore automation options and learn how to interact with Cisco TAC
- Gain proficiency in navigating Cisco documentation and

securing network environments

Detailed Course Outline

- Overview of Cisco Network Operating Systems
- Evolution of Cisco Network Operating Systems
- Comparison of Cisco IOS, IOS XE, NX-OS, and IOS XR
- Introduction to Cisco Modeling Labs
- Introduction to Cisco IOS XE
- Use of Cisco IOS XE CLI and Configuration Management
- Unique Features of Cisco IOS XE
- IOS XE Software Management and Upgrade Process
- Introduction to Cisco NX-OS
- Use of Cisco NX-OS CLI and Configuration Management
- Unique Features of Cisco NX-OS
- Cisco NX-OS Software Management and Upgrade Process
- Introduction to Cisco IOS XR
- Use of Cisco IOS XR CLI and Configuration Management
- Unique Features of Cisco IOS XR
- Cisco IOS XR Software Management and Upgrade Process
- Common Protocols and Configurations
- Automation and Programmability
- Cisco Network Automation Platforms
- Monitoring Tools
- Troubleshooting and Best Practices
- Cisco Documentation Navigation
- Cisco Operating Systems Licensing
- Security and Device Hardening
- Cisco Network Security Tools and Sites

About Fast Lane



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- ✓ Blended & Hybrid Learning
- ✓ Mobile Learning

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