

Managing Cisco Network Operating Systems (CNIOS)

Category: Networking & Security | **Vendor:** Cisco

Duration: 40.00 hours (5 days)

32.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

The Managing Cisco Network Operating Systems (CN IOS) 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
-

About This Course

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
-

Who Should Attend

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

Prerequisites & Entry Requirements

General 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)
- Understanding Cisco Data Center Foundations (DCFNDU)
- Understanding Cisco Service Provider Network Foundations (SPFNDU)
- Network Administrator (NETADM) (<https://u.cisco.com/paths/network-administrator-171>)
- Network Fundamentals for Network Adjacent Engineers (NETFND) (<https://u.cisco.com/paths/network-fundamentals-network-adjacent-engineers-173>)

Learning Outcomes

Upon successful completion of this course, participants will be able to:

- 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

Skills You Will Learn:

- 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

Frequently Asked Questions

Q: What delivery options are available for Managing Cisco Network Operating Systems (CNIOS)?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
-

Q: How many CPD hours does this course provide?

The 5-day Managing Cisco Network Operating Systems (CNIOS) course provides up to 32.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Managing Cisco Network Operating Systems (CNIOS) training?

The training takes place over 5 day(s), with each day lasting approximately 40.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Managing Cisco Network Operating Systems (CNIOS)?

Yes, we provide corporate training, dedicated training, and closed classes for Managing Cisco Network Operating Systems (CNIOS). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Managing Cisco Network Operating Systems, Cisco Networking, CNIOS

Q: Why choose Nexus Human for Managing Cisco Network Operating Systems (CNIOS)?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Managing Cisco Network Operating Systems (CNIOS) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

✉ Email: info@nexushuman.com

🌐 Website: www.nexushuman.com

📞 Phone: +353 1 XXX XXXX (Ireland) | +44 20 XXXX XXXX (UK)

© 2026 Nexus Human. All rights reserved. This brochure was generated on 05/09/2026.