

CNIOS**Managing Cisco Network Operating Systems**

40 horas

Professional

Cisco

Cisco Continuing Education Credits

37 CE Credits**INTRODUÇÃO**

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.

OBJETIVO DO CURSO

Navigate the CLIs of IOS XE, NX-OS, and IOS XR

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 interact with Cisco TAC

Gain proficiency in navigating Cisco documentation

Secure network environments with hardening best practices

PÚBLICO-ALVO

Junior Network Engineers, NOC Engineers, IT Operations Engineers, Network Administrators

PRÉ-REQUISITOS

No formal prerequisites. Recommended: basic networking concepts, familiarity with Cisco network devices, basic network security knowledge.

Course Outline

Overview and 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

Cisco IOS XE CLI and Configuration Management

Unique Features of Cisco IOS XE

IOS XE Software Management and Upgrade

Introduction to Cisco NX-OS

Cisco NX-OS CLI and Configuration Management

Unique Features of Cisco NX-OS

NX-OS Software Management and Upgrade

Introduction to Cisco IOS XR

Cisco IOS XR CLI and Configuration Management

Unique Features of Cisco IOS XR

IOS XR Software Management and Upgrade

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

Lab Outline

Perform Basic Configuration on Cisco IOS XE Router

Configure OSPF on IOS XE

Configure NAT on Cisco IOS XE

Perform IOS XE Upgrade

Deploy Containerized Application on IOS XE

Perform Initial Cisco NX-OS Configuration

Configure Virtual Port Channel

Configure Fibre Channel on Cisco MDS

Configure VXLAN

Upgrade Cisco Nexus in vPC

Perform Initial Configuration on Cisco IOS XR Router

Configure L3 VPN on IOS XR

Perform IOS XR Upgrade

Manage Cisco Nexus with NETCONF

Automate Cisco IOS XR with Ansible

Troubleshoot Common Network Issues