



Introduction to Cisco IOS XR100

What you'll learn in this course

The Introduction to Cisco IOS XR (IOSXR100) v2.1 course introduces you to the features and functions of the Cisco® Internetwork Operating System (Cisco IOS®) XR Software operating system. You learn the fundamental concepts on which the operating system is based and Cisco IOS XR basic operations, system administration, and troubleshooting.

Through a combination of lecture and hands-on lab exercises, you gain an understanding of all major aspects of the operating system, including the architecture, high-availability components, scalability features, configuration basics, basic software operations, configuration file overview, Authentication, Authorization, and Accounting (AAA) services, Network Time Protocol (NTP) configuration, packet filtering, and management plane protection. You also learn how to monitor the Cisco IOS XR operating system, and how to work with error messages and core dumps.

Course duration

- Instructor-led training: 4 days in the classroom with hands-on lab practice
- Virtual instructor-led training: 5 days of web-based classes with hands-on lab practice
- E-learning: Equivalent of 4 days of instruction with hands-on lab practice

How you'll benefit

This course will help you:

- Prepare to deploy, implement, configure, operate, and maintain Cisco IOS XR routers
- Gain hands-on practice using Cisco IOS XR software
- Deepen your understanding of the Cisco IOS XR software architecture and capabilities

Who should enroll

- System installers
- System integrators
- System administrators
- Network administrators
- Solution designers

Technology areas

- Service provider
- Networking

Course details

Objectives

After taking this course, you should be able to:

- Describe the Cisco IOS XR software architecture, high availability components, and scalability features
- Perform basic configurations on a Cisco IOS XR router
- Describe Cisco IOS XR software operations
- Describe the configuration file system
- Perform Cisco IOS XR software installations
- Configure AAA services
- Configure NTP
- Configure Simple Network Management Protocol (SNMP), telemetry, and logging
- Configure routing protocols
- Monitor processes
- Use error messages and core dumps

Recommended knowledge and training

Before taking this course, you should have the following knowledge and skills:

- Experience working with Command-Line Interface (CLI)–based network devices
- Knowledge of general routing concepts

How to enroll

To enroll in the IOSXR100 course or explore our larger catalog of courses on Cisco Digital Learning, contact us at <training@fastlane-mea.com>

Outline

- Cisco IOS XR Software Overview
- Cisco IOS XR Software Configuration Basics
- Cisco IOS XR Software Operations
- Configuration File System Overview
- Cisco IOS XR Software Installation
- AAA Security
- Network Time Synchronization
- SNMP, Telemetry, and Logging
- Basic Routing Configuration
- Packet Filtering
- Monitoring Process
- Core Dumps

Lab outline

- Initial Configuration of a Cisco IOS XR Router
- Configuration Commit and Rollback
- Configuration File System
- Cisco IOS XR Software Installation
- Configuring User Security Policies
- Cisco IOS XR AAA Configuration
- Configuring NTP
- Configuring SNMP, Telemetry, and Logging
- Configuring Routing Protocols
- Configuring IPv4 and IPv6 Filtering
- Configuring uRPF and MPP
- Using Monitoring and Restarting Processes

