IOSXR100

Introduction to Cisco IOS XR (IOSXR100) v2.0

32 horas | Service Provider | Cisco

INTRODUÇÃO

The Introduction to Cisco IOS XR (IOSXR100) v2.0 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.

OBJETIVO DO CURSO

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

PÚBLICO-ALVO

System installers
System integrators
System administrators
Network administrators
Solution designers

PRÉ-REQUISITOS

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

CONTEÚDO PROGRAMÁTICO

Cisco IOS XR Software Overview

Platform Overview

Cisco IOS XR Architecture

Cisco IOS XR High Availability

Cisco IOS XR Software Configuration Basics

Cisco IOS XR Configuration Operations

Cisco IOS XR Initial Configuration

Reviewing the Configuration

Cisco IOS XR Software Operations

Examining Configuration Operations

Examining Configuration Rollback and Recovery

Configuration File System Overview

Examining the Binary Configuration

Examining the Commit Database

Examining the ASCII Configuration

Examining the Nonvolatile Generation (NVgen) Files

Verifying Cisco Fabric Services (CFS) Integrity

Cisco IOS XR Software Installation

Software Package Basics

Installing Software Packages

AAA Security

AAA Fundamentals

Task-Based Security

Configuring a User Security Policy

Authentication with Remote Servers

Configuring Router to AAA Server Communication

Configuring Authentication

Terminal Access Controller Access-Control System Plus (TACACS+) Command Authorization

Configuring Accounting

AAA Troubleshooting

Network Time Synchronization

Network Time Protocol

SNMP, Telemetry, and Logging

Examining SNMP

Examining Telemetry

Examining Logging

Basic Routing Configuration

Configuring Intermediate System to Intermediate System (IS-IS)

Configuring Open Shortest Path First (OSPF)

Configuring Border Gateway Protocol (BGP)

Configuring Routing Protocol for LLN (RPL) Policy

Packet Filtering

Access Control Lists

Unicast Reverse Path Forwarding

Management Plane Protection

Monitoring Process

Examining Processes and Threads

Process Crashes

Commands for Debugging Processes

Restartability of Processes

Process Monitoring

Identifying Memory Problems

Memory Depletion

Core Dumps

Core Dump Fundamentals

Using Core Dump Information