

NCS540HWE

Implementing the Cisco NCS540 Series Routers

40 horas

Professional

Cisco

Cisco Continuing Education Credits

40 CE Credits

INTRODUÇÃO

The Implementing the Cisco NCS 540 Series Routers (NCS540HWE) training teaches you how to deploy Cisco NCS 540 Series routers, covering hardware, system architecture, QoS, timing, security, segment routing, MPLS VPNs, EVPN, and programmability.

OBJETIVO DO CURSO

Classify Cisco NCS 540 platform hardware variations, features, use cases, and positioning

Describe NCS 540 hardware architecture and packet queuing and forwarding

Explain the system architecture for traffic queuing, scheduling, and forwarding

Describe timing and synchronization methods on Cisco IOS XR

Describe Cisco NCS 540 fronthaul router family and features

Describe Cisco IOS XR software architecture and programmability

Explain how to install Cisco IOS XR software packages

Recognize and implement system security in Cisco IOS XR

Describe segment routing fundamentals and configure IS-IS/OSPF segment routing

Discuss TI-LFA implementation in Cisco IOS XR

Demonstrate SR-TE and traffic engineering components

Implement advanced SR-TE features and SR IPv6

Describe L3 MPLS VPN implementation in Cisco IOS XR

Implement L2 VPN operations in service provider environment

Explain EVPN and implement EVPN solutions

Implement model-driven telemetry

PÚBLICO-ALVO

System Engineers, Network Engineers, Field Engineers, Technical Support Personnel, Channel Partners and Resellers

PRÉ-REQUISITOS

No formal prerequisites. Recommended: core Cisco networking technologies, BGP/IS-IS/OSPF experience, router installation experience.

Course Outline

Cisco NCS 540 Series Hardware Overview
Cisco NCS 540 System Architecture
Cisco NCS 540 QoS Architecture
Timing and Synchronization
Cisco NCS 540 xHaul Design
Cisco IOS XR Software Fundamentals
Cisco IOS XR Software Installation and Upgrade
Cisco IOS XR Software System Security
Segment Routing Fundamentals
Segment Routing TI-LFA
Segment Routing Traffic Engineering
Advanced SR-TE Features
Segment Routing IPv6
Layer 3 MPLS VPN with Cisco IOS XR
Layer 2 VPNs and Ethernet Services
Cisco IOS XR EVPN Operation and Implementation
Cisco IOS XR Software Programmability
Model-Driven Telemetry

Lab Outline

Configure and Verify NTP
Cisco IOS XR Software Installation
Configure and Verify MPP
Configure and Verify uRPF
Configure and Verify Segment Routing
Configure and Verify SR TI-LFA with IS-IS and OSPF
Configure and Verify SR-TE with IS-IS and OSPF
Configure and Verify ODN and Flexible Algorithm
Configure and Verify SRv6
Configure and Verify Layer 3 VPN
Configure and Verify EVPN VPWS
Configure Devices with Model-Driven Programmability
Configure and Verify Model-Driven Telemetry