Implementing the Cisco NCS540 Series Routers (NCS540HWE)

ID NCS540HWE **Price** on request **Duration** 5 days

Who should attend

- System Engineers
- Network Engineers
- Field Engineers
- Technical Support Personnel
- Channel partners, resellers

Prerequisites

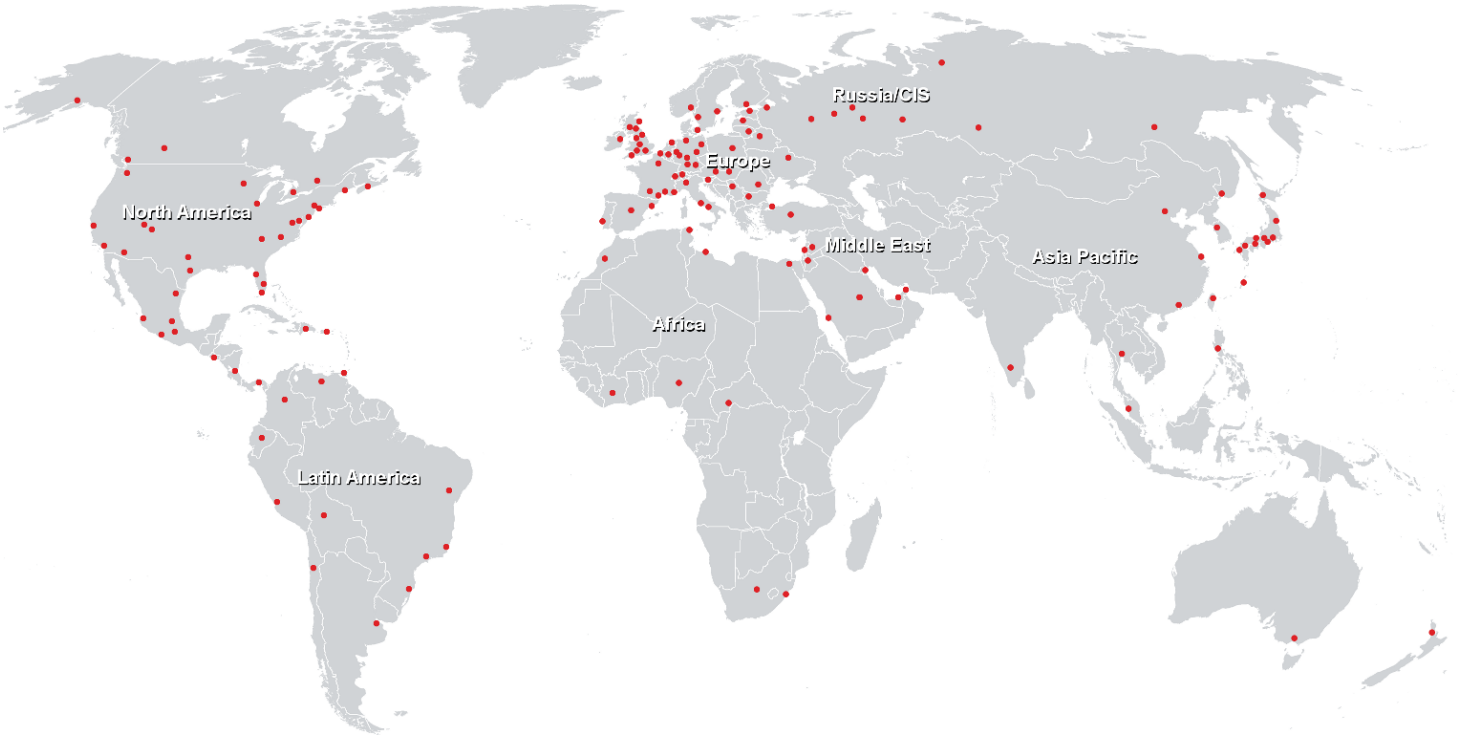
Before taking this offering, you should have:

- Knowledge of core Cisco networking technologies
- Understanding of implementing and operating Cisco networking solutions
- Recognition of general networking concepts and protocols
- Basic knowledge of router installation and some experience with installation tools
- Routing protocol configuration experience with Border Gateway Protocol (BGP), Intermediate System-to-Intermediate System (IS-IS), and Open Shortest Path First (OSPF)
- Knowledge of Layer 2 IEEE switching and related protocols
- Strong knowledge of MPLS configurations
- Experience troubleshooting Cisco routers in a large network environment

Course Objectives

- Classify the Cisco NCS 540 platform hardware and understand the variations between large, medium, small, and fronthaul form factors, their features, use cases, and positioning.
- Describe the hardware architecture of the NCS 540 Series and the components necessary for packet queuing and forwarding, understand the life of a packet on ingress and egress traffic.
- Explain the system architecture for traffic queuing, scheduling, and forwarding to introduce concepts of Cisco IOS XR modular QoS on the NCS 540 platform.
- Describe the methods and protocols for establishing timing and synchronization on Cisco IOS XR router platforms.
- Describe the Cisco NCS 540 Fronthaul router family and its features and how they can be used to make mobile network architecture simpler.
- Describe Cisco IOS XR Software architecture, its programmable features, and how to install software packages.
- Implement model-driven telemetry for enhanced network visibility and management.
- Recognize, implement, and manage system security features within Cisco IOS XR Software systems, ensuring the protection of network infrastructure and data.
- Describe the main factors leading to the development and deployment of segment routing, types of segments that are used in segment routing, Segment Routing Global Block (SRGB), and configure and verify IS-IS and OSPF segment routing operations.
- Demonstrate how segment routing works and how it protects links and nodes while explaining the basic loop avoidance, segment-routing traffic-engineering (SR-TE), and traffic engineering components used in segment routing.
- Implement and configure advanced segment routing for traffic engineering (SR-TE) features.
- Describe the components and functionality of Layer 3 Multiprotocol Label Switching (MPLS) VPNs implementation in Cisco IOS XR Software deployments.
- Identify the routing protocol and LDP information necessary for Layer 3 MPLS VPN troubleshooting.
- Implement Layer 2 VPN operations in a service provider environment.
- Explain how EVPN gets around the problems that regular Layer 2 VPNs have, what the model for EVPN delivery is, and how to implement and troubleshoot EVPN solutions.

Training Centres worldwide





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