

Interconnecting Cisco Networking Devices ICND2

Description

The Interconnecting Cisco Networking Devices, Part 2 (ICND2) v3.0 course provides network administrators with the knowledge and skills needed to install, configure, operate, and troubleshoot a small enterprise network. Key additions to this latest revision include; understanding of Quality of Service (QoS) elements and their applicability, how virtualized and cloud services will interact and impact enterprise networks, along with an overview of network programmability and the related controller types and tools that are available to support software defined network architectures.

Delegates will learn how to

- Operate a medium-sized LAN with multiple switches, supporting VLANs, trunking, and spanning tree
- Troubleshoot IP connectivity
- Describe how to configure and troubleshoot EIGRP in an IPv4 environment, and configure EIGRP for IPv6
- Configure and troubleshoot OSPF in an IPv4 environment and configure OSPF for IPv6
- Define characteristics, functions, and components of a WAN
- Describe how device management can be implemented using the traditional and intelligent ways.

Audience

Individuals seeking the Cisco CCNA Routing and Switching certification.

The course is also appropriate for pre- and post-sales network engineers involved in the installation and support of enterprise branch office networks.

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Outline

Implementing Scalable Medium-Sized Networks

- Troubleshooting VLAN Connectivity
- Building Redundant Switched Topologies
- Improving Redundant Switched Topologies with EtherChannel
- Understanding Layer 3 Redundancy

Troubleshooting Basic Connectivity

- Troubleshooting IPv4 Network Connectivity
- Troubleshooting IPv6 Network Connectivity

Implementing an EIGRP-Based Solution

- Implementing EIGRP
- Implementing EIGRP for IPv6
- Troubleshooting EIGRP

Summary Challenge

- Implementing and Troubleshooting Scalable Medium-Sized Network -1
- Implementing and Troubleshooting Scalable Medium-Sized Network -2

Implement a Scalable OSPF-Based Solution

- Understanding OSPF
- Implementing Multiarea OSPF IPv4
- Implementing OSPFv3 for IPv6
- Troubleshooting Multiarea OSPF

Wide-Area Networks

- Understanding WAN Technologies
- Understanding Point-to-Point Protocols

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- Configuring GRE Tunnels
- Configuring Single-Homed EBGp

Network Device Management

- Implementing Basic Network Device Management and Security
- Evolution of Intelligent Networks
- Introducing QoS

Summary Challenge

- Implementing and Troubleshooting Scalable Multiarea Network -1
- Implementing and Troubleshooting Scalable Multiarea Network -2

Prerequisites

We recommend that you have the following skills and knowledge before taking this course:

- Understanding of network fundamentals
- Ability to implement LANs
- Proficiency implementing Internet connectivity
- Basic network management skills
- Basic network security skills
- Ability to implement basic IPv6 connectivity