



Interconnecting Cisco Network Devices Part 2 Version 2.0 (ICND2)

Course	Duration
Cisco Network Devices Part 2 Version 2.0 (ICND2)	Hrs 30

Course Overview

The Interconnecting Cisco Networking Devices, Part 2 (ICND2) v2.0 course provides entry-level network administrators, network support, and help desk technicians with the knowledge and skills needed to install, configure, operate, and troubleshoot a small enterprise network. ICND2 v2.0 focuses on understanding redundant topologies, troubleshooting common networking issues, configuring EIGRP and multiarea OSPF in both IPv4 and IPv6, understanding WAN technologies, and becoming familiar with device management and Cisco licensing. The learner will encounter more troubleshooting and more lab time than with the previous version of ICND2.

Target 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.

Key job tasks:

Configure: Implement the identified solution by applying the planned implementation processes using Cisco IOS commands and applications in the correct order to the selected devices and portions of the network.

Verify: Use the appropriate show commands and applications to ensure that the solution was correctly implemented and is performing as desired.

Job roles: Entry-level network engineer, network administrator, network support technician, and help desk technician

Prerequisites

The knowledge and skills that a learner must have before attending this course are as follows:

- Understand network fundamentals
- Implement local area networks
- Implement Internet connectivity
- Manage network device security
- Implement WAN connectivity
- Implement basic IPv6 connectivity

Course Objectives:

- Upon completing this course, you will be able to meet these objectives:
- Operate a medium-sized LAN with multiple switches, supporting VLANs, trunking, and spanning tree
- Troubleshoot IP connectivity
- 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 SNMP, syslog, and NetFlow, and manage Cisco device configurations, Cisco IOS images, and licenses



Course Outline

Implementing Scalable Medium-Sized Networks

Module 1: Implementing Scalable Medium-Sized Networks

Lesson 1-1: Troubleshooting VLAN Connectivity

Practical: Troubleshooting VLANs and Trunks

Lesson 1-2: Building Redundant Switched Topologies

Practical: Optimizing STP

Lesson 1-3: Improving Redundant Switched Topologies with EtherChannel

Implementing an EIGRP-Based Solution, Implementing a Scalable, Multiarea Network, OSPF-Based Solution, WANs

Lesson 3-3: Implementing EIGRP for IPv6

Module 4: Implementing a Scalable, Multiarea Network, OSPF-Based Solution

Lesson 4-1: OSPF Overview

Lesson 4-1: Multiarea OSPF IPv4 Implementation

Practical: Configuring Multiarea OSPF

Lesson 4-2: Troubleshooting Multiarea OSPF

Practical: Troubleshooting Multiarea OSPF

Lesson 4-3: Examining OSPFv3

Practical: Configuring OSPF for IPv6

Module 5: Wide-Area Networks

Lesson 5-1: Understanding WAN Technologies

Lesson 5-1: Understanding WAN Technologies

Network Device Management

Module 6: Network Device Management

Lesson 6-1: Configuring Network Devices to Support Network Management Protocols

Lesson 6-1: Configuring Network Devices to Support Network Management Protocols

Practical: SNMP and Syslog Basic Configuration

Practical: Analyzing NetFlow Data

Lesson 6-2: Managing Cisco Devices

Lesson 6-3: Licensing

Practical: Managing Cisco Devices and Licensing

Practical: ICND2 Superlab

Implementing Scalable Medium-Sized Networks, Troubleshooting Basic Connectivity, Implementing an EIGRP-Based Solution

Practical : Configuring EtherChannel

Lesson 1-4 Understanding Layer 3 Redundancy

Module 2: Troubleshooting Basic Connectivity

Lesson 2-1: Troubleshooting IPv4 Network Connectivity

Lesson 2-1: Troubleshooting IPv4 Network

Practical : Troubleshooting IP Connectivity

Lesson 2-2: Troubleshooting IPv6 Network Connectivity

Module 3: Implementing an EIGRP-Based Solution

Lesson 3-1: Implementing EIGRP

Practical: Implementing EIGRP for IPv6

Lesson 3-2: Troubleshooting EIGRP

Practical: Troubleshooting EIGRP

Wide-Area Networks

Review of Day 3

Lesson 5-2: Configuring Serial Encapsulation

Practical: Configuring and Troubleshooting a Serial Connection

Lesson 5-3: Establishing a WAN Connection Using Frame Relay

Practical: Establishing a Frame Relay WAN

Lesson 5-4: Introducing VPN Solutions

Lesson 5-5: Configuring GRE Tunnels

Practical: Establishing a GRE Tunnel

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