

: 6 Days **Duration**

: RM 2,500.00 Fee

This course teaches learners how to install, operate, configure, and verify a basic IPv4 and IPv6 network, including configuring a LAN switch, configuring an IP router, identifying basic security threats, understanding redundant topologies, troubleshooting common network issues, connecting to a WAN, configuring EIGRP and OSPF in both IPv4 and IPv6, understanding wide-area network technologies, and getting familiar with device management and Cisco licensing. CCANX v2.0 is augmented by a virtual classroom presentation, which has additional slides and interactions for instructor use. In addition to the classic hardware-based lab, Cisco will offer a new set of Cisco Learning Lab Classroom Labs. Learner will encounter more troubleshooting, and more lab time than with the previous version of CCNAX.

Prerequisites

Basic computer literacy Basic PC operating system navigation skills Basic Internet usage skills Basic IP address knowledge.

Course Objectives

Upon completing this course, the learner will be able to meet these overall objectives:

- Describe network fundamentals and build simple LANs
- Establish Internet connectivity
- Manage network device security
- Describe IPv6 basics
- Troubleshoot VLAN issues, explain how STP works, configure EtherChannel, and understand the idea behind Layer 3 redundancy Troubleshoot IP connectivity
- Define the characteristics, functions, and components of a WAN Configure and troubleshoot EIGRP in an Ipv4 environment, and configure EIGRP for IPv6
- Configure, verify, and troubleshoot multi-area OSPF
- Describe SNMP, syslog and NetFlow, and manage Cisco device configurations, IOS images, and licenses

Contents

- 1. Building a Simple Network
- 2. Establishing Internet Connectivity
- 3. Managing Network Device Security
- 4. Introducing IPv6 Building a Medium-Sized Network
- 5. Troubleshooting Basic Connectivity Wide Area Networks
- 6. Implementing an EIGRP-Based Solution
- 7. Implementing a Scalable OSPF-Based Solution Network Device Management

Course Outline

1. Building a Simple Network

- Functions of Networking
- Host-to-Host Communications Model
- LANs
- Operating Cisco IOS Software Starting a Switch
- Ethernet and Switch Operation
- Troubleshooting Common Switch Media Issues

2. Establishing Internet Connectivity

- TCP/IP Internet Layer
- IP Addressing and SubnetsTCP/IP Transport LayerFunctions of Routing

- Configuring a Cisco Router
- Packet Delivery Process
- Enabling Static Routing
- Managing Traffic Using ACLsEnabling Internet Connectivity

3. Managing Network Device Security

- Securing Administrative Access
- Implementing Device Hardening
- Implementing Traffic Filtering with ACLs

4. Introducing IPv6 Building Medium Sized Network

- Basic IPv6Configuring IPv6 Routing
- Implementing VLANs and Trunks
- Routing Between VLANs
- Using a Cisco Network Device as a DHCP Server
- Troubleshooting VLAN Connectivity
- Building Redundant Switched Topologies
 Improving Redundant Switched Topologies with EtherChannel
- Layer 3 Redundancy

5. Troubleshooting Basic Connectivity & Wide Area Networks

- Troubleshooting IPv4 Network Connectivity
- Troubleshooting IPv6 Network Connectivity
- WAN Technologies
- Configuring Serial Encapsulation
- Establishing a WAN Connection Using Frame Relay
- VPN Solutions
- Configuring GRE Tunnels

6. Implementing an EIGRP-Based Solution

- Implementing EIGRP

Troubleshooting EIGRP Implementing EIGRP for IPv6 Implementing a Scalable, OSPF-Based Solution & Network Device Management

- Implementing OSPF
- Multiarea OSPF IPv4 Implementation
- Troubleshooting Multiarea OSPF
- OSPFv3
- Configuring Network Devices to Support Network Management Protocols
- Managing Cisco Devices
- Licensing



