



CCNA Routing and Switching

Duration: 6 Days

Language: English

Course Delivery: Classroom

Course Overview

The CCNA certification validates a networking professional's ability to install and configure Cisco switches and routers in multiprotocol internetworks using LAN and WAN interfaces, provide level 1 troubleshooting service, and improve network performance.

Target Audience

Networking Professionals and Internetworking Professionals

Course Details:

ICND1. Network Fundamentals

- TCP/IP and OSI layers.
- Fundamentals of Ethernet LAN.
- Fundamentals of WAN.
- Fundamentals of IPv4 addressing and Routing.
- Fundamentals of Transport and Applications.

ICND1. Implementing basic Ethernet LANs

- Using the Command-Line Interface.
- Analyzing Ethernet LAN Switching.
- Configuring Basic Switch Management.
- Configuring Switch Interfaces
- Troubleshooting Ethernet LANs.

ICND1. Ethernet: Design, VLAN, Troubleshooting

- Analyzing Ethernet LAN Design.
- Device Security features.
- Implementing Ethernet VLAN.
- VLAN Trunking Protocol.

ICND1. IPv4 addressing and subnetting

- IPv4 Subnetting and Analyzing Subnet Masks.
- Subnet Design and VLSM.

ICND1. Implementing IPv4

- 17. Operating Cisco Router.
- Static Route.
- DHCP on Routers.



- RIPv2.
- Troubleshooting tools and Troubleshooting IPv4 Routing.

ICND1. IPv4 Services: ACLs and NAT

- IPv4 ACL.
- NAT.

ICND1. IPv6

- IPv6 Addressing and Routing.

ICND1. Network Management

- Device Management Protocol.
- Managing IOS Files.
- IOS License Management.

ICND2. Ethernet LANs

- Implementing Ethernet VLAN.
- Spanning Tree Protocol concept.
- Spanning Tree Protocol implementation.
- LAN Troubleshooting.

ICND2. IPv4 Routing Protocols

- OSPF for IPv4.
- EIGRP for IPv4.
- Troubleshooting.
- External BGP.

ICND2. IPv4 Routing and Troubleshooting

- IPv4 Routing in the LAN.
- Implementing HSRP.
- Troubleshooting.

ICND2. ACLs and QoS

- IPv4 ACL.
- Quality of Service QoS.

ICND2. Wide Area Network

- Implementing Point-to-Point WANs.
- Private WANs with Ethernet and MPLS.
- Private WANs with VPNs.

ICND2. IPv6

- IPv6 Routing operation and troubleshooting.
- OSPF for ipv6.



- EIGRP for IPv6.
- IPv6 ACL.