IT-CCNA - Implementing and Administering Cisco Solutions

Cisco - CCNA - Networking

Durata:	Lingue:	Certificazione:
5 Giorni	**Italiano**	**CCNA certification**

Descrizione del corso

The Implementing and Administering Cisco Solutions (CCNA) v1.0 course gives you a broad range of fundamental knowledge for all IT careers. Through a combination of lecture, hands-on labs, and self-study, you will learn how to install, operate, configure, and verify basic IPv4 and IPv6 networks. The course covers configuring network components such as switches, routers, and wireless LAN controllers; managing network devices; and identifying basic security threats. The course also gives you a foundation in network programmability, automation, and software-defined networking. This course helps you prepare to take the 200-301 Cisco® Certified Network Associate (CCNA®) exam. By passing this one exam, you earn CCNA certification. The 200-301 CCNA exam goes live on February 24, 2020.

Programma

This class includes lecture sections and some self-study sections.

- Lecture: Exploring the Functions of Networking
- Lecture: Introducing the Host-to-Host Communications Model
- Lecture: Operating Cisco IOS Software
- Lecture: Introducing LANs
- Lecture: Exploring the TCP/IP Link Layer
- Lecture: Starting a Switch
- Lecture: Introducing the TCP/IP Internet Layer, IPv4 Addressing, and Subnets
- Lecture: Explaining the TCP/IP Transport Layer and Application Layer
- Lecture: Exploring the Functions of Routing

- Lecture: Configuring a Cisco Router
- Lecture: Exploring the Packet Delivery Process
- Lecture: Troubleshooting a Simple Network
- Lecture: Introducing Basic IPv6
- Lecture: Configuring Static Routing
- Lecture: Implementing VLANs and Trunks
- Lecture: Routing Between VLANs
- Lecture: Introducing OSPF
- Self-Study: Building Redundant Switched Topologies
- Lecture: Improving Redundant Switched Topologies with EtherChannel
- Self-Study: Exploring Layer 3 Redundancy
- Self-Study: Introducing WAN Technologies
- Lecture: Explaining Basics of ACL
- Lecture: Enabling Internet Connectivity
- Self-Study: Introducing QoS
- Self-Study: Explaining Wireless Fundamentals
- Self-Study: Introducing Architectures and Virtualization
- Lecture: Explaining the Evolution of Intelligent Networks
- Lecture: Introducing System Monitoring
- Lecture:: Managing Cisco Devices
- Self-Study: Examining the Security Threat Landscape
- Self-Study: Implementing Threat Defense Technologies
- Lecture: Securing Administrative Access
- Lecture: Implementing Device Hardeni

Lab outline

- Get Started with Cisco Command-Line Interface (CLI)
- Observe How a Switch Operates
- Perform Basic Switch Configuration
- Implement the Initial Switch Configuration
- Inspect TCP/IP Applications
- Configure an Interface on a Cisco Router
- Configure and Verify Layer 2 Discovery Protocols
- Implement an Initial Router Configuration
- Configure Default Gateway
- Explore Packet Forwarding
- Troubleshoot Switch Media and Port Issues
- Troubleshoot Port Duplex Issues

- Configure Basic IPv6 Connectivity
- Configure and Verify IPv4 Static Routes
- Configure IPv6 Static Routes
- Implement IPv4 Static Routing
- Implement IPv6 Static Routing
- Configure VLAN and Trunk
- Troubleshoot VLANs and Trunk
- Configure a Router on a Stick
- Implement Multiple VLANs and Basic Routing Between the VLANs
- Configure and Verify Single-Area OSPF
- Configure and Verify EtherChannel
- Improve Redundant Switched Topologies with EtherChannel
- Configure and Verify IPv4 ACLs
- Implement Numbered and Named IPv4 ACLs
- Configure a Provider-Assigned IPv4 Address
- Configure Static NAT
- Configure Dynamic NAT and Port Address Translation (PAT)
- Implement PAT
- Log into the WLC
- Monitor the WLC
- Configure a Dynamic (VLAN) Interface
- Configure a DHCP Scope
- Configure a WLAN
- Define a Remote Access Dial-In User Service (RADIUS) Server
- Explore Management Options
- Explore the Cisco DNA™ Center
- Configure and Verify NTP
- Configure System Message Logging
- Create the Cisco IOS Image Backup
- Upgrade Cisco IOS Image
- Configure WLAN Using Wi-Fi Protected Access 2 (WPA2) Pre-Shared Key (PSK) Using the GUI
- Secure Console and Remote Access
- Enable and Limit Remote Access Connectivity
- Secure Device Administrative Access
- Configure and Verify Port Security
- Implement Device Hardening