

CCNA

Implementing and Administering Cisco Solutions

Platinum Learning Business Enablement

This course gives you a broad range of fundamental knowledge for all IT careers. Through a combination of lecture and hands-on labs, 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.

Course Contents

- Exploring the Functions of Networking
- Introducing the Host-to-Host Communications Model
- Operating Cisco IOS Software
- Introducing LANs
- Exploring the TCP/IP Link Layer
- Starting a Switch
- Introducing the TCP/IP Internet Layer, IPv4 Addressing, and Subnets
- Explaining the TCP/IP Transport Layer and Application Layer
- Exploring the Functions of Routing
- Configuring a Cisco Router
- Exploring the Packet Delivery Process
- Troubleshooting a Simple Network
- Introducing Basic IPv6 Lecture
- Configuring Static Routing
- Implementing VLANs and Trunks
- Routing Between VLANs
- Introducing OSPF
- Building Redundant Switched Topologies*
- Improving Redundant Switched Topologies with EtherChannel
- Exploring Layer 3 Redundancy*
- Introducing WAN Technologies*
- Explaining Basics of ACL
- Enabling Internet Connectivity
- Introducing QoS*
- Explaining Wireless Fundamentals*
- Introducing Architectures and Virtualization*
- Explaining the Evolution of Intelligent Networks
- Introducing System Monitoring
- Managing Cisco Devices
- Examining the Security Threat Landscape*
- Implementing Threat Defense Technologies*
- Securing Administrative Access
- Implementing Device Hardening

* This is a self-study section with lectures on recorded videos.

E-Book You will receive the original course documentation from Cisco in English language as a Cisco E-Book.

Target Group

This course is designed for anyone seeking CCNA certification. The course also provides foundational knowledge for all support technicians involved in the basic installation, operation, and verification of Cisco networks.

The job roles best suited to the material in this course are:

- Entry-level network engineer
- Network administrator
- Network support technician
- Help desk technician

Prerequisites

- Basic computer literacy/basic computer literacy
- Basic PC operating system navigation skills
- Basic Internet usage skills
- Basic IP address knowledge

There are no formal prerequisites for CCNA certification, but you should make sure to have a good understanding of the exam topics.

Training	Prices, excl. of V.A.T.	
Classes in Germany	5 Days	€ 2,795
Classes in Austria	5 Days	€ 2,795
Classes in Switzerland	5 Days	€ 3,765
Online Training	5 Days	€ 2,795
Date/course venue	Course language German	
10/11-10/15/21 Berlin	05/16-05/20/22	Online
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CCNA

Routing, Switching, Design & IoT



Digital Learning
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Securing Administrative Access
Implementing Device Hardening

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



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