CCNA-IMPLEMENTING AND ADMINISTERING CISCO SOLUTIONS V1.0
BOOT CAMP

Course Code: 100527

Gain the foundational knowledge and skills necessary to install, configure, and operate a small to medium-sized Cisco network.

CCNA-Implementing and Administering Cisco Solutions v1.0 Boot Camp teaches professionals how to install, operate, configure, and verify a basic IPv4 and IPv6 network. You’ll learn how to configure network components, such as a switch, router, and Wireless LAN Controller. You'll also gain skills needed to manage network devices and identify basic security threats.

Who should take this course?

This course is recommended for those pursuing their Cisco Certified Network Associate (CCNA) certification, which is the starting point for all Cisco network infrastructure certifications. It’s ideal for entry-level networking engineers, administrators and technicians who support, operate and install Cisco networks.

The new CCNA course and certification now prepares associate-level IT professionals with skills in network security, automation and programmability. You can build a foundation for a broad spectrum of IT careers with the new CCNA.

Key Course Details

- This is an intensive, extended-hours boot camp. Participants should expect to be in class for 12 hours on each of the five days.

- Lab time:
  - 60 hours total over 90 days.
  - Labs are one-to-one and on virtual machines.
  - Be sure to log out of labs during class. Any remaining lab time can be used after class for additional practice and review.

Learn more about this topic, attend the live webinar Cisco LAN Switching Fundamentals. Register now.
What You’ll Learn

• Identify the components of a computer network and describe their basic characteristics
• Describe the features and functions of the Cisco IOS Software
• Describe LANs and the role of switches within LANs
• Describe Ethernet as the network access layer of TCP/IP and describe the operation of switches
• Install a switch and perform the initial configuration
• Describe the TCP/IP internet Layer, IPv4, its addressing scheme, and subnetting
• Describe the TCP/IP Transport layer and Application layer
• Explore functions of routing
• Implement basic configuration on a Cisco router
• Explain host-to-host communications across switches and routers
• Identify and resolve common switched network issues and common problems associated with IPv4 addressing
• Describe IPv6 main features, addresses and configure and verify basic IPv6 connectivity
• Describe, implement and verify VLANs and trunks
• Describe the application and configuration of inter-VLAN routing
• Explain the basics of dynamic routing protocols and describe components and terms of OSPF
• Explain how STP and RSTP work
• Configure link aggregation using EtherChannel
• Describe the purpose of Layer 3 redundancy protocols
• Describe basic WAN and VPN concepts
• Describe the operation of ACLs and their applications in the network
• Configure internet access using DHCP clients and explain and configure NAT on Cisco routers
• Describe the basic QoS concepts
• Describe the concepts of wireless networks, which types of wireless networks can be built and how to use WLC
• Describe network and device architectures and introduce virtualization
• Introduce the concept of network programmability and SDN and describe the smart network management solutions like Cisco DNA Center, SD-Access and SD-WAN
• Describe the management of Cisco devices
• Describe the current security threat landscape
• Describe threat defense technologies
• Implement basic steps to harden network devices

Who Needs to Attend

Target candidates for this course include individuals seeking the CCNA – Cisco
Certified Network Associate certification. The course is also appropriate for support technicians who are involved in the basic installation, operation, and verification of Cisco networks. Key job roles include entry-level network engineer, network administrator, network support technician, and help desk technician.

You should consider this course if you wish to perform the following 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.

**Prerequisites**

The knowledge and skills that students are expected to have before attending this course are:

- 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 have an understanding of the exam topics before taking the exam.
Global Knowledge

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CLASSROOM LIVE $4,195 USD 5 days

Classroom Live Outline
• Section 1: Exploring the Functions of Networking
• Section 2: Introducing the Host-To-Host Communications Model
• Section 3: Operating Cisco IOS Software
• Section 4: Introducing LANs
• Section 5: Exploring the TCP/IP Link Layer
• Section 6: Starting a Switch
• Section 7: Introducing the TCP/IP Internet Layer, IPv4 Addressing, and Subnets
• Section 8: Explaining the TCP/IP Transport Layer and Application Layer
• Section 9: Exploring the Functions of Routing
• Section 10: Configuring a Cisco Router
• Section 11: Exploring the Packet Delivery Process
• Section 12: Troubleshooting a Simple Network
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• Section 22: Explaining Basics of ACL
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• Section 26: Introducing Architectures and Virtualization
• Section 27: Explaining the Evolution of Intelligent Networks
• Section 28: Introducing System Monitoring
• Section 29: Managing Cisco Devices
• Section 30: Examining the Security Threat Landscape
• Section 31: Implementing Threat Defense Technologies
• Section 32: Securing Administrative Access
• Section 33: Implementing Device Hardening

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• Discovery 15: Configure a Router on a Stick
• Discovery 16: Configure and Verify Single-Area OSPF
• Discovery 17: Configure and Verify EtherChannel
• Discovery 18: Configure and Verify IPv4 ACLs
• Discovery 19: Configure a Provider-Assigned IPv4 Address
• Discovery 20: Configure Static NAT
• Discovery 21: Configure Dynamic NAT and PAT
• Discovery 22: Log into the WLC
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• Discovery 30: Configure and Verify NTP
• Discovery 31: Create the Cisco IOS Image Backup
• Discovery 32: Upgrade Cisco IOS Image
• Discovery 33: Configure WLAN Using WPA2 PSK Using the GUI
• Discovery 34: Secure Console and Remote Access
• Discovery 35: Enable and Limit Remote Access Connectivity
• Discovery 36: Configure and Verify Port Security
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• FASTLab 6: Implement Multiple VLANs and Basic Routing Between the VLANs
• FASTLab 7: Improve Redundant Switched Topologies with EtherChannel
• FASTLab 8: Implement Numbered and Named IPv4 ACLs
• FASTLab 9: Implement PAT
• FASTLab 10: Configure System Message Logging
• FASTLab 11: Secure Device Administrative Access
• FASTLab 12: Implement Device Hardening

Nov 2 - 6, 2020 | 8:30 AM - 8:30 PM | RESEARCH TRIANGLE PARK, NC
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ON-DEMAND $800 USD

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PRIVATE GROUP TRAINING  5 days

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.

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