



CCNA ICND2

Overview:

The 640-816 Interconnecting Cisco Networking Devices Part 2 (ICND2) is the exam associated with the Cisco Certified Network Associate certification. Candidates can prepare for this exam by taking the Interconnecting Cisco Networking Devices Part 2 (ICND2) v1.0 course. This exam tests a candidate's knowledge and skills required to successfully install, operate, and troubleshoot a small to medium size enterprise branch network. The exam covers topics on VLSM and IPv6 addressing; extending switched networks with VLANs; configuring, verifying and troubleshooting VLANs; the VTP, RSTP, OSPF and EIGRP protocols; determining IP routes; managing IP traffic with access lists; NAT and DHCP; establishing point-to-point connections; and establishing Frame Relay connections.

Target Audience:

This training program is first step geared towards IT and help-desk professionals who want to get recognized for their skills or individuals who want to get ahead in the IT career path. Having proof of your skills and knowledge gives you the edge.

CCNA® Benefits

A CCNA certification shows that you have a basic, apprentice-level knowledge of networking in the small office/home office arena. You can install, configure, and operate a local area network (LAN), wide area network (WAN), and dial access services for small (up to 100-node) networks using a variety of protocols.

Steps To CCNA® Certification

To become a CCNA certified, students must pass

ICND1 and ICND 2 exams.

Suggested Prerequisites

- Network+ Certification

44075 Pipeline Plaza, Suite 120, Ashburn, VA 20147

Phone: 703-726-9666

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Exams:

- 640-816- Interconnecting Cisco Networking Devices Part 2 (ICND2)

Course Outline:

Exam Topics

The following topics are general guidelines for the content likely to be included on the Interconnecting Cisco Networking Devices Part 2 exam. However, other related topics may also appear on any specific delivery of the exam. In order to better reflect the contents of the exam and for clarity purposes, the guidelines below may change at any time without notice.

Configure, verify and troubleshoot a switch with VLANs and interswitch communications

- Describe enhanced switching technologies (including: VTP, RSTP, VLAN, PVSTP, 802.1q)
- Describe how VLANs create logically separate networks and the need for routing between them
- Configure, verify, and troubleshoot VLANs
- Configure, verify, and troubleshoot trunking on Cisco switches
- Configure, verify, and troubleshoot interVLAN routing
- Configure, verify, and troubleshoot VTP
- Configure, verify, and troubleshoot RSTP operation
- Interpret the output of various show and debug commands to verify the operational status of a Cisco switched network
- Implement basic switch security (including: port security, unassigned ports, trunk access, etc.)

Implement an IP addressing scheme and IP Services to meet network requirements in a medium-size Enterprise branch office network

- Calculate and apply a VLSM IP addressing design to a network
- Determine the appropriate classless addressing scheme using VLSM and summarization to satisfy addressing requirements in a LAN/WAN environment

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- Describe the technological requirements for running IPv6 (including: protocols, dual stack, tunneling, etc)
- Describe IPv6 addresses
- Identify and correct common problems associated with IP addressing and host configurations

Configure and troubleshoot basic operation and routing on Cisco devices

- Compare and contrast methods of routing and routing protocols
- Configure, verify and troubleshoot OSPF
- Configure, verify and troubleshoot EIGRP
- Verify configuration and connectivity using ping, traceroute, and telnet or SSH
- Troubleshoot routing implementation issues
- Verify router hardware and software operation using SHOW & DEBUG commands
- Implement basic router security

Implement, verify, and troubleshoot NAT and ACLs in a medium-size Enterprise branch office network.

- Describe the purpose and types of access control lists
- Configure and apply access control lists based on network filtering requirements
- Configure and apply an access control list to limit telnet and SSH access to the router
- Verify and monitor ACL's in a network environment
- Troubleshoot ACL implementation issues
- Explain the basic operation of NAT
- Configure Network Address Translation for given network requirements using CLI
- Troubleshoot NAT implementation issues

Implement and verify WAN links

- Configure and verify Frame Relay on Cisco routers
- Troubleshoot WAN implementation issues
- Describe VPN technology (including: importance, benefits, role, impact, components)
- Configure and vary PPP connection between Cisco routers

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Certification Exam Format:

Cisco Certification exams include the following test formats:

- Multiple-choice single answer
- Multiple-choice multiple answer
- Drag-and-drop
- Fill-in-the-blank
- Testlet
- Simlet
- Simulations

Duration: 40 hours/ 5 Days

Schedule: Boot Camp

Delivery Format: Classroom Instructor Led

Price: \$2600 all inclusive of 40 hours training, Cisco authorized study materials, practice exams and one exam voucher.

Retake Policy: Course can be retaken within 12 months of completion depending upon availability.

Certificate: Certificate of completion given to all students who meet the 85% attendance requirement and other course work completed during training.

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