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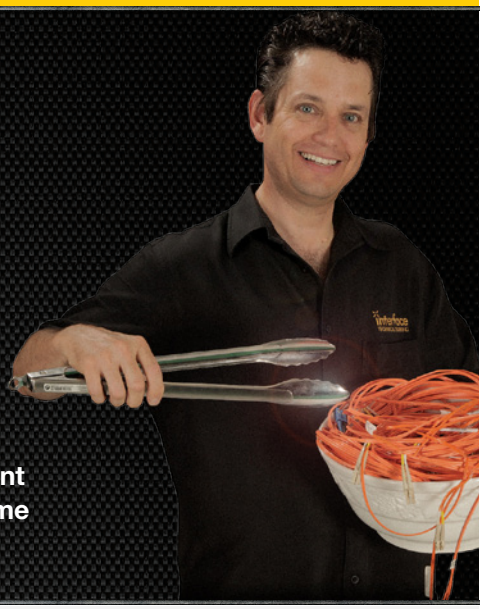
CISCO ROUTING & SWITCHING

CCNA220: ICND2 - Interconnecting Cisco Networking Devices Part2



Whether your goal is to familiarize yourself with Cisco® technology or to eventually become a Cisco® Certified Internetworking Expert - CCIE®, the CCNA® is the place to begin. CCNA220: ICND2 prepares you to take on the real-life challenges that are commonplace within medium-sized switched and routed internetworks in today's business-class systems, properly apply Cisco® solutions, and achieve mastery of CCNA® skills. This 5-day course escalates the scope of the CCNA210 course from a small network to a medium-sized switched and routed internetwork for business-class environments such as SMB. You will be operating in a 'live' dynamic, hands-on networking environment with tons of live Cisco® gear and all of the tools you need to be successful; come prepared to have a great experience and challenge yourself to learn.

AUDIENCE

CCNA220: ICND2 is a very challenging course designed for those candidates who have completed the CCNA210 - Mastering Entry-Level Internetworking', now possessing a firm background in IP data networking, have hands-on experience with Cisco® routers and switches, and are looking to increase their knowledge of installing, maintaining, and troubleshooting medium-sized switched and routed networks in a business-class environment, or for those who are looking to achieve the next level of Cisco® certification, the CCNA®. Note that prerequisite Cisco® experience for the CCNA220 is acquired in the 'CCNA210 - Mastering Entry-Level Internetworking' course and is not reiterated in this course.

PREREQUISITES

Should have completed course *CCNA210: ICND1 - Interconnecting Cisco Networking Devices Part 1* and feel as if they have mastered its content, or, through industry experience, already possess the equivalent skills. Since the CCNA220 builds onto the skills gained in the CCNA210 course and does not reiterate its content, it is critical that such knowledge and skills are already in place. Students new to internetworking and Cisco® hardware or career changers should begin with the *CCNA210 - Mastering Entry-Level Internetworking* course to maximize the return on their training investment.

WHAT YOU WILL LEARN

- Real-world working knowledge and mastery of critical skills required to operate medium-sized business-class networks using Cisco® routers and Cisco® Catalyst™ switches.
- Preparation for Cisco *Exam: 640-816 - ICND2*

  or
- Preparation for Cisco *Exam: 640-802 – CCNA Composite* (if CCNA210 skills are sound) Satisfies requirements to be awarded the Cisco® Certified Network Associate Certification – CCNA®

"The instructor was outstanding and always had everyone's full attention"

Cisco Student
Phoenix, AZ

$2995.00

- 5-day course
- CCNA Certification Course
- Promotional and package discounts may apply
- CLC Eligible

QUESTIONS?
Call 602-266-8585

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(course outline on back side)

COURSE OUTLINE

CCNA220: ICND2 - Interconnecting Cisco Networking Devices Part2

1. **Small Network Implementation**
   - » Introducing the Review Lab
   - » Cisco IOS CLI Functions
   - » Configuration Modes of Cisco IOS Software
   - » Help Facilities of the Cisco IOS CLI
   - » Commands Review
2. **Medium-Sized Switched Network Construction**
   - » Implementing VLANs and Trunks
   - » Understanding VLANs
   - » Understanding Trunking with 802.1Q
   - » Understanding VLAN Trunking Protocol
   - » Configuring VLANs and Trunks
   - » Optimizing Spanning Tree Performance
   - » Building a Redundant Switched Topology
   - » Recognizing Issues of a Redundant Switched Topology
   - » Resolving Issues with STP
   - » STP Operation
   - » Configuring RSTP
   - » Routing Between VLANs
   - » Understanding Inter-VLAN Routing
   - » Configuring Inter-VLAN Routing
   - » Securing the Expanded Network
   - » Overview of Switch Security Concerns
   - » Secure Switch Devices
   - » Troubleshooting Switched Networks
   - » Troubleshooting Switches
   - » Troubleshooting Port Connectivity
   - » Troubleshooting VLANs and Trunking
   - » Troubleshooting VTP
   - » Troubleshooting Spanning Tree
3. **Medium-Sized Routed Network Construction**
   - » Reviewing Routing Operations
   - » Reviewing Dynamic Routing
   - » Understanding Distance Vector Routing Protocols
   - » Understanding Link-State Routing Protocol
   - » Implementing VLSM
   - » Reviewing Subnets
   - » Introducing VLSMs
   - » Understanding Route Summarization
4. **Single-Area OSPF Implementation**
   - » Implementing OSPF
   - » Introducing OSPF
   - » Establishing OSPF Neighbor Adjacencies
   - » SPF Algorithm
   - » Configuring and Verifying OSPF
   - » Loopback Interfaces
   - » Verifying the OSPF Configuration
   - » Using OSPF debug Commands
   - » Load Balancing with OSPF
   - » OSPF Authentication
   - » Troubleshooting OSPF
   - » Components of Troubleshooting OSPF
   - » Troubleshooting OSPF Neighbor Adjacencies
   - » Troubleshooting OSPF Routing Tables
   - » Troubleshooting Plaintext Password Authentication
5. **EIGRP Implementation**
   - » Implementing EIGRP
   - » EIGRP Features
   - » Configuring and Verifying EIGRP
   - » Load Balancing with EIGRP
   - » Configuring EIGRP Authentication
   - » Troubleshooting EIGRP Authentication
   - » Troubleshooting EIGRP
   - » Components of Troubleshooting EIGRP
   - » Troubleshooting EIGRP Neighbor Issues
   - » Troubleshooting EIGRP Routing Tables
6. **Access Control Lists**
   - » Introducing ACL Operation
   - » Understanding ACLs
   - » ACL Operation
   - » Types of ACLs
   - » Additional Types of ACLs
   - » ACL Wildcard Masking
   - » Configuring and Troubleshooting ACLs
   - » Configuring Numbered Standard IPv4 ACLs
   - » Configuring Numbered Extended IPv4 ACLs
   - » Configuring Named ACLs
   - » Troubleshooting ACLs
7. **Address Space Management**
   - » Scaling the Network with NAT and PAT
   - » Introducing NAT and PAT
   - » Translating Inside Source Addresses
   - » Overloading an Inside Global Address
   - » Resolving Translation Table Issues
   - » Resolving Issues with Using the Correct Translation Entry
   - » Transitioning to IPv6
   - » Reasons for Using IPv6
   - » Understanding the IPv6 Address
   - » Assigning IPv6 Addresses
   - » Configuring IPv6
   - » Routing Considerations with IPv6
   - » DNS Considerations with IPv6
   - » Strategies for Implementing IPv6
8. **LAN Extension into a WAN**
   - » Introducing VPN Solutions
   - » VPNs and Their Benefits
   - » Types of VPNs
   - » Components of VPNs
   - » Introducing IPsec
   - » IPsec Protocol Framework
   - » Establishing a Point-to-Point WAN Connection with PPP
   - » Understanding WAN Encapsulations
   - » Overview of PPP
   - » Configuring and Verifying PPP
   - » Establishing a WAN Connection with Frame Relay
   - » Understanding Frame Relay
   - » Configuring Frame Relay
   - » Verifying Frame Relay
   - » Troubleshooting Frame Relay WANs
   - » Components of Troubleshooting Frame Relay
   - » Troubleshooting Frame Relay Connectivity Issues

Register by phone at 602-266-8585, or online at www.InterfaceTT.com.