Interconnecting Cisco Network Devices: Part 2 v3

Duration: *5 Day(s)*

Course Overview

This course provides students with the knowledge and skills needed to install, configure, operate, and troubleshoot a small enterprise network. It will ensure that students understand and are ready to deploy the latest shifts in technologies and solutions as follows: ■ Understanding of Quality of Service (QoS) elements and their applicability ■ How virtualized and cloud services will interact and impact enterprise networks

An overview of network programmability and the related controller types and tools that are available to support software defined network architectures A full suite of labs have been developed using the virtual IOS environment with flexible topologies that reinforce concepts with hands-on, guided discovery and challenge labs that align to each lesson module.

This course prepares for CCNA Routing and Switching ICND v3 Exam (200-105 ICND2)

Review this course online at https://www.alta3.com/courses/ICND2V3

Objectives

- Operate a medium-sized LAN with VLANs, trunking, and spanning tree protocols
- Configure and troubleshoot EIGRP and OSPF in IPv4 and IPv6
- Understand and manage QoS, virtualization, and cloud services
- Describe network device management including SNMP and Syslog

Who Should Attend

- Aspiring Network Administrators
- Entry-Level Network Engineers
- Network Support Technicians
- Help Desk Technicians

Prerequisites

Before attending this course, students should have successfully completed CCNA215: Interconnecting Cisco Networking Devices Part1 v3 or have equivalent work experience.

Students should also have the recommended knowledge and skills:

Understanding network fundamentals Implementing local area networks Implementing Internet connectivity Managing network devices Securing network devices Implementing basic IPv6 connectivity

Course Outline

Module 1 – Implement Scalable Medium-Sized Networks

1. Troubleshooting VLAN Connectivity
2. Building Redundant Switched Topologies

3. Improving Redundant Switched Topologies with EtherChannel
4. Understanding Layer 3 Redundancy

Module 2 – Troubleshooting Basic Connectivity

5. Troubleshooting IPv4 Network Connectivity
6. Troubleshooting IPv6 Connectivity

Module 3 – Implementing an EIGRP-Based Solution

7. Implementing EIGRP
8. Implementing EIGRP for IPv6
9. Troubleshooting EIGRP

Module 4 – Summary Challenge

10. Implementing and Troubleshooting Scalable Medium-Sized Network 1
11. Implementing and Troubleshooting Scalable Medium-Sized Network 2

Module 5 – Implement a Scalable OSPF-Based Solution

12. Understanding OSPF
13. Implementing Multiarea OSPF IPv4
14. Implementing OSPFv3 for IPv6
15. Troubleshooting Multiarea OSPF

Module 6 – Wide-Area Networks

16. Understanding WAN Technologies
17. Understanding Point-to-Point Protocols
18. Configuring GRE Tunnels
19. Configuring Single-Homed EBGP

Module 7 – Network Device Management

20. Implementing Basic Network Device Management and Security
21. Evolution of Intelligent Networks
22. Introducing QoS

Module 8 – Summary Challenge

23. Implementing and Troubleshooting Scalable Multiarea Network 1
24. Implementing and Troubleshooting Scalable Multiarea Network 2