Module Title   :   SWITCH v2.0 – Implementing Cisco IP Switched Networks 2.0

Duration   :   5 days

Summary

SWITCH v2.0, 5 day ILT, includes major updates and follows an updated blueprint. However, note that this course does not cover all items listed on the blueprint. Some older topics have been removed or simplified, while several new IPv6 routing topics have been added. Course content has been adapted to Cisco IOS Software Release 15 and technically updated. Course also introduces new type of labs, called discovery labs. Discovery labs are instructor guided lab through which student explores new topics in an interactive way. All labs are developed only as virtual labs. To get the full course experience, you should cover everything, including Introduction, Discovery labs, Summary, and Module Self-Check.

Course Objectives

Upon completing this course, the learner will be able to meet these overall objectives:

- Describe the hierarchical campus structure, basic switch operation, use of SDM templates, PoE, and LLDP
- Implement VLANs, trunks, explain VTP, implement DHCP in IPv4 and IPv6 environment, and configure port aggregation
- Implement and optimize STP mechanism that best suits your network - PVSTP+, RPVSTP+, or MSTP
- Configure routing on a multilayer switch
- Configure NTP, SNMP, IP SLA, port mirroring, and verify StackWise and VSS operation
- Implement First Hop redundancy in IPv4 and IPv6 environments
- Secure campus network according to recommended practices

Who Should Attend?

- Channel Partner / Reseller
- Customer
- Employee

Prerequisites

The knowledge and skills that a learner must have before attending this Curriculum are as follows:

- Describing network fundamentals
- Establishing Internet and WAN connectivity (IPv4 and IPv6)

- Managing network device security

- Operating a medium-sized LAN with multiple switches, supporting VLANs, trunking, and spanning tree

- Troubleshooting IP connectivity (IPv4 and IPv6)

- Configuring and troubleshooting EIGRP and OSPF (IPv4 and IPv6)

- Configuring devices for SNMP, Syslog, and NetFlow access

- Managing Cisco device configurations, Cisco IOS images, and licenses

It is highly recommended that this course be taken after the following Cisco courses:

- Interconnecting Cisco Networking Devices v2.0, Part 1 (ICND1 v2.0) and Part 2 (ICND2 v2.0)

- Interconnecting Cisco Networking Devices: Accelerated version 2.0 (CCNAX v2.0)

Course Outline

- Module 1: Basic Concepts and Network Design

- Module 2: Campus Network Architecture

- Module 3: Spanning Tree Implementation

- Module 4: Configuring Inter-VLAN Routing

- Module 5: Implementing High Availability Networks

- Module 6: First Hop Redundancy Implementation

- Module 7: Campus Network Security