



SWITCH - Implementing Cisco IP Switched Networks v2.0








Course Summary

Upon completion of this course students will be able to configure and optimize a switched infrastructure using VLANs, STP, RSTP, MSTP, and HSRP. Additionally, students will be able to secure this switched infrastructure.

Duration

5 days

Objectives

-  Campus Network Security
-  First Hop Redundancy Implementation
-  Implementing High Availability Networks
-  Configuring Inter-VLAN Routing
-  Spanning Tree Implementation
-  Campus Network Architecture
-  Basic Concepts and Network Design Agenda



Audience











Network Engineers, Network Administrators, Support Engineers

Pre-Requisites






Taking ICND1 v2.0 and ICND2 v2.0 (or CCNAX v2.0) is highly recommended

Outline

Day 1






-  Analyzing Campus Network Structure
-  Comparing Layer 2 and Multilayer Switches
-  Using Cisco SDM Templates
-  Implementing LLDP
-  Implementing PoE
-  Implementing VLANs and Trunks
-  Introducing VTP
-  Implementing DHCP
-  Implementing DHCP for IPv6
-  Configuring Layer 2 Port Aggregation

Day 2






-  Implementing RSTP
-  Implementing STP Stability Mechanisms
-  Implementing Multiple Spanning Tree Protocol
-  Implementing Inter-VLAN Routing Using a Router
-  Configuring a Switch to Route



Day 3

-  Configuring Network Time Protocol
-  Implementing SNMP Version 3
-  Implementing IP SLA
-  Implementing Port Mirroring for Monitoring Support
-  Verifying Switch Virtualization




Day 4

-  Configuring Layer 3 Redundancy with HSRP
-  Configuring Layer 3 Redundancy with VRRP
-  Configure VRRP With Load Balancing
-  Configuring Layer 3 Redundancy with GLBP
-  Configuring First Hop Redundancy for IPv6

Day 5

-  Implementing Port Security
-  Implementing Storm Control
-  Implementing Access to External Authentication
-  Mitigating Spoofing Attacks
-  Securing VLAN Trunks
-  Configuring Private VLANs

Lab Requirements

-  Windows Enabled System - WinXP/Windows 7
-  4 – 8GB Memory
-  Cisco Packet Tracer Software