مالتی مدیای 642-813 به زبان فارسی (22 ساعت)

این 2 شامل:

- 15 بخش آموزشی با بیش از 82 دقیقه (200 مطلب) به زبان انگلیسی و تشریح فارسی
- 7 بخش پوشتی مطالب از طریق 35 سفارشی فنی برای مرور

شامل Utilities DVD

- 20 لایسنس اولیه سرکت سیسکو (همراه با 8 ساعت آموزش اضافه)
- ابزارهای نرم افزاری، های مرتبه و Whitepaper

System Requirements
- Windows XP with SP2
- 512 MB RAM
- CD-ROM or DVD
- 1024 * 768 High Resolution Video Card & Monitor
CCNP SWITCH 642-813 (22 Hours)

Chapter-1  Enterprise Campus Network Design

1.1  IIN & SONA
1.2  Campus Network
1.3  Enterprise Model
1.4  Nonhierarchical Network Devices
    Layer-2 Switching, Layer-3 Routing
    Multilayer Switching, Configuration Interfaces

Chapter-2  Switch Operation

2.1  Layer-2 Switch Operation
    Transparent Bridging, Layer-2 Frame Path

2.2  Multi Layer Switch Operation
    Types of Multilayer Switching, Layer-3 Packet Path
    Multilayer Switching Exceptions

2.3  Switching Tables
    CAM, TCAM

2.4  Troubleshooting Switching Tables

Chapter-3  Switch Port Configuration

3.1  Ethernet Concepts
    Ethernet 10 Mbps, Fast Ethernet, Full-Duplex
    Gigabit Ethernet, 10-Gigabit Ethernet

3.2  Connecting Switches and Devices

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Ethernet and Gigabit Port Cables and Connectors

3.3 Switch Port Configuration
   Ports to Configure, Port Speed, Port Duplex Mode
   Error Conditions, Troubleshooting Port Connectivity

Chapter-4 VLANs and Trunks

4.1 VLANs
   Advantages, Containment of Broadcasts

4.2 VLAN Implementations
   End-to-End vs. Local VLANs

4.3 VLAN Assignment
   Dynamic, Static, Creating and Deleting VLANs
   Ports Association, Verification, Troubleshooting

4.4 Trunks & Frame Tagging
   Frame Tagging

4.5 VLAN Tagging Mechanisms
   ISL, 802.1Q

4.6 Native VLANs

4.7 VLAN Ranges, Mapping & Services

4.8 Dynamic Trunk Protocol

4.9 Configuring, Verifying & Troubleshooting Trunk Connections

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Chapter-5  VLAN Trunk Protocol

5.1  VLAN Trunk Protocol (VTP)
    Advantages, Management Domain, Modes
    Messages, Message Types, Versions, Pruning

5.2  Configuring, Verifying and Troubleshooting VTP

Chapter-6  Switch Port Aggregation with EtherChannel

6.1  EtherChannels, PAgP/LACP Protocols
    Operation, PAgP & LACP Protocols, Guidelines

6.2  EtherChannel Configuration
    Load Balancing, Verification

Chapter-7  Implementing STP

7.1  Transparent Bridging
    Forwarding & Filtering, Learning, Loops

7.2  Spanning Tree Protocol (STP)
    BPDU, STP Advantages

7.3  STP Components & Operation
    Bridge identifiers, Port priorities, Path Costs

7.4  STP Algorithm
    Root Switch, Root Ports, Designated Switches Ports
    Bridging Loops, Port States, Convergence Issues

7.5  Types of STP
    CST, PVST, PVST+
7.6 Configuring and Verifying STP
   Enabling and Disabling STP, Path Selections
   Port Cost, Port Priority, Verification

Chapter-8 Enhancements to STP

8.1 Cisco Enhancements to STP
   PortFast, UplinkFast, BackboneFast
   BDPU Guard, BDPU Filtering

8.2 Rapid STP
   BDPUUs, Port States, Port Roles
   Edge Port & Link Type, Topology Changes

8.3 Multiple Spanning Tree
   Regions, Internal Spanning Tree
   MST Configuration and Verification

8.4 Other STP Enhancements
   BPDU Skewing, Root Guard
   ULD, Loop Guard

8.5 Troubleshooting Tips & Debug Commands

Chapter-9 Multilayer Switching

9.1 Routing Considerations
   Client End Station and Route Processor Issues

9.2 Configuring Routing between VLANs
   Internal Route Processor, Switch Interfaces
9.3 Routing Configuration on a Switch
   External RP, Traditional Router Setup

9.4 Router on a Stick Setup
   Verifying your Router Configuration

9.5 Multi Layer Switching (MLS) Overview
   Processor & ASIC, NetFlow-based Switching
   Centralized, Distributed, Topology based Switching

9.6 MLS using CEF
   MLS Limitations, CEF Tables
   CEF Operation, LoadBalancing

9.7 CEF Example
   Configuration, Verification, Troubleshooting

Chapter-10  Layer-3 High Availability

10.1 HSRP Part I
    HSRP, HSRP Operation, Types of RPs

10.2 HSRP Part II
    HSRP Multicast Messages, HSRP States

10.3 Configuring HSRP
    Configuration, Interface Tracking, Verification

10.4 VRRP
10.5 VRRP Commands
10.6 GLBP Operation and Load Balancing

10.7 Redundancy with Switch Chassis Part I
    Redundant Switch Supervisors, RPR+, SSO
    Redundancy Mode, Supervisor Synchronization

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Chapter-11 Integrating Wireless LANs

11.1 WLAN Overview
11.2 802.11 Standards
   802.11b, 802.11a, 802.11h

11.3 Cisco's Unified Wireless Solution

11.4 Split MAC Architecture
   MESH and LWAPP, AWPP

11.5 Wireless Security
   Open Access, SSIDs, WEP, MAC Address Authentication
   WPA, WPA 2 Pre-Shared Key, Cisco Unified Wireless Security

11.6 WLAN QoS
   Implementation, Configuration

11.7 WLAN Security Issues
   802.1x and EAP Authentication Protocols
   Encryption and Authentication on LAPs

11.8 WLAN Management
   Cisco Unified Wireless Networks
   CiscoWorks, Cisco Wireless Control System

11.9 Configuring Switch Ports for WLAN Use
   Autonomous APs, LAPs, WLCs
Chapter-12  IP Telephony

12.1 Power Over Ethernet (PoE)
12.2 Configuring & Verifying PoE
12.3 Voice VLANs
12.4 Voice QoS
12.5 Diffserve QoS
12.6 Implementing QoS for Voice
12.7 AutoQoS
12.8 Verifying Voice QoS

Chapter-13  Securing Switch Access

13.1 Switch Security
13.2 Authentication, Authorization & Accounting (AAA)
13.3 Switch Port Security
13.4 Port-based Authentication with 802.1X
13.5 Mitigating Spoofing Attacks
   DHCP Snooping, IP Source Guard
   Dynamic ARP Inspection

Chapter-14  Securing with VLANs

14.1 VLAN ACLs
14.2 Private VLANs (PVLAN)
14.3 PVLAN Configuration
14.4 Securing VLAN Trunks
   Switch Spoofing, VLAN Hopping
Chapter-15  Configuring DHCP

15.1 Using DHCP with a Multilayer Switch
15.2 DHCP Overview and Addressing
15.3 Configuring DHCP
15.4 IP Helper Address & DHCP Relay Services
15.5 DHCP Verification Commands
15.6 DHCP Examples

Review Scenarios

- VLANs  Scenarios
- Spanning Tree Protocols  Scenarios
- Inter-VLAN Routing  Scenarios
- Gateway Redundancy  Scenarios
- Wireless LANs  Scenarios
- Switch Security  Scenarios
- Voice  Scenarios
Cisco LAN Switching Video Mentor (6 Hours)

Lab 1. Interface Configuration
Lab 2. Setting Up VLANs
Lab 3. Setting Up Trunk Links
Lab 4. Using the VLAN Trunking Protocol (VTP)
Lab 5. Working with the Spanning Tree Protocol (STP)
Lab 6. STP Topology Changes
Lab 7. Leveraging Rapid PVST+
Lab 8. Scaling STP with Multiple Spanning Tree (MST)
Lab 9. Protecting the STP Topology
Lab 10. Scaling Bandwidth with EtherChannel
Lab 11. Setting Up Multilayer Switching
Lab 12. First Hop Redundancy with HSRP
Lab 13. First Hop Redundancy with GLBP
Lab 14. Private VLANs
Lab 15. Using Access Control Lists (ACLs) to Control Traffic
Lab 16. Using Port Security
Lab 17. Preventing Spoofing Attacks
Lab 18. Quality of Service, Part 1
Lab 19. Quality of Service, Part 2
Lab 20. Monitoring Traffic
Ebooks

- CCNP Switch 642-813 Guide
- CCNP Switch Student Guides Volumes 1, 2
- CCNP Switch Portable Command Guide

Tools

- ASDM
- Cisco Network Assistant
- IP Subnet Calculator
- Packet Tracer 5.3
- SDM
- Subnet10
- Wildcard Calculator

Cisco Whitepapers

- List of 12 Key Cisco Switch related Whitepapers