

<http://www.cisco.com/c/en/us/training-events/training-certifications/exams/current-list/ccna-composite2.html>

<http://www.cisco.com/c/en/us/training-events/training-certifications/exams/current-list/ccna-composite2.html#~resources>

Recommended
Courses Detailed Outlines
Table 4.
Introduction to Networks and
Routing and Switching Essentials Detailed
Course
Outline

Ch
.
Introduction to Networks
Routing and Switching Essentials

1
Exploring the Network
Introduction to Switched Networks
1.1
Globally Connected
1.1
LAN Design
1.2
LANs, WANs, and the Internet
1.2
The Switched Environment
1.3
The Network as a Platform
1.4
The Changing Network environment
2
Configuring a Network Operating System
Basic Switching Concepts and
Configuration
2.1
IOS Bootcamp
2.1
Basic Switch Configuration
2.2
Getting Basic
2.2
Switch Security: Management and
Implementation
2.3
Addressing Schemes
3
Network Protocols and Communication
s
VLAN
s
3.1
Rules of Communication
3.1
VLAN Segmentation
3.2
Network Protocols and Standards
3.2
VLAN Implementations
3.3
Moving Data in the Network
3.3
VLAN Security and Design
4
Network Access Routing Concepts
4
.1
Physical Layer Protocols
4.1
Initial Configuration of a Router
4.2

Network Media
4.2
Routing Decisions
4.3
Data Link Layer Protocols
4.3
Router Operation
4.4
Media Access Control
5
Ethernet Inter - VLAN Routing
5.1
Ethernet Protocol
5.1
Inter - VLAN Routing Configuration
5.2
Address Resolution Protocol
5.2
Troubleshoot Inter -VLAN Routing
5.3
LAN Switches
5.3
Layer 3 Switching
6
Network Layer Static Routing
6.1
Network Layer Protocols
6.1
Static Routing Implementation
6.2
Routing
6.2
Configure Static and Default Routes
6.3
Routers
6.3
Review of CIDR and VLSM
6.4
Configuring a Cisco Router
6.4
Configure Summary and Floating Static
Routes
6.5
Troubleshoot Static and Default Route
Issues
7
Transport Layer Routing Dynamically
7.1
Transport Layer Protocols
7.1
Dynamic Routing Protocols
7.2
TCP and UPD
7.2
Distance Vector Routing Protocols
7.3
RIP and RIPng Routing
7.4
Link -State Dynamic Routing
7.5
The Routing Table
8
IP Addressing Single-Area OSPF
8.1
IPv4 Network Addresses
8.1
Characteristics of OSPF
8.2
IPv6 Network Addresses
8.2
Configuring Single-Area OSPFv2
8.3
Connectivity Verification
8.3
Configuring Single -Area OSPFv3
9

Subnetting IP Networks Access Control
Lists
9.1
Subnetting an IPv4 Network
9.1
IP ACL Operation
9.2
Addressing Schemes
9.2
Standard IPv4 ACLs
9.3
Design Considerations for IPv6
9.3
Extended IPv4 ACLs
9.4
Troubleshoot ACLs
9.5
IPv6 ACLs
10
Application Layer DHCP
10.1
Application Layer Protocols
10.1
Dynamic Host Configuration Protocol v4
10.2
Well-Known Application Layer Protocols
and Services
10.2
Dynamic Host Configuration Protocol v6
10.3
The Message Heard Around The World
11
It's a Network Network Address Translation
for IPv4
11.1
Create and Grow
11.1
NAT Operation
11.2
Keeping the Network Safe
11.2
Configuring NAT
11.3
Basic Network Performance
11.3
Troubleshooting NAT
11.4
Managing IOS Configuration Files
11.5
Integrated Routing Services

#####

Scaling Networks and Connecting Networks
Detailed Course Outlines

Ch.
Scaling Networks
Connecting Networks
1
Introduction to Scaling Networks
Hierarchical Network Design
1.1
Implementing a Network Design
1.1
Hierarchical Network Design Overview
1.2
Selecting Network Devices
1.2
Cisco Enterprise Architecture
1.3
Evolving Network Architectures
2
LAN Redundancy Connecting to the WAN
2.1

Spanning Tree Concepts	7.2
2.1	Site to Site GRE Tunnels
WAN Technologies Overview	7.3
2.2	Operation of EIGRP
Varieties of Spanning Tree Protocols	7.3
2.2	Introducing IPsec
Selecting a WAN Technology	7.4
2.3	Configuring EIGRP for IPv6
Spanning Tree Configuration	7.4
2.4	Remote Access
First-Hop Redundancy Protocols	8
3	EIGRP Advanced Configurations and
LinkAggregation Point-to-Point Connections	Troubleshooting Monitoring the Network
3.1	8.1
Link Aggregation Concepts	Advanced EIGRP Configurations
3.1	8.1
Serial Point-to-Point Overview	Syslog
3.2	8.2
Link Aggregation Configuration	Troubleshoot EIGRP
3.2	8.2
PPP Operation	SNMP
3.3	8.3
Configure PPP	Netflow
3.4	9
Troubleshoot WAN Connectivity	IOS Images and Licensing Troubleshoot
4	ing the Network
Wireless LANs Frame Relay	9.1
4.1	Managing IOS System Files
Wireless LAN Concepts	9.1
4.1	Troubleshooting with a Systematic
Introduction to Frame Relay	Approach
4.2	9.2
Wireless LAN Operation	IOS Licensing
4.2	9.2
Configure Frame Relay	Network Troubleshooting
4.3	
Wireless LAN Security	
4.3	
Troubleshoot Connectivity	
4.4	
Wireless LAN Configuration	
5	
Adjust and Troubleshoot Single-Area OSPF	
Network Address Translation for IPv4	
5.1	
Advanced Single-Area OSPF	
Configurations	
5.1	
NAT Operation	
5.2	
Troubleshooting Single-Area OSPF	
Implementations	
5.2	
Configuring NAT	
5.3	
Troubleshooting NAT	
6	
Multiarea OSPF Broadband Solutions	
6.1	
Multia area OSPF Operation	
6.1	
Teleworking	
6.2	
Configuring Multia area OSPF	
6.2	
Comparing Broadband Solutions	
6.3	
Configuring xDSL Connectivity	
7	
EIGRP Securing Site to Site Connectivity	
7.1	
Characteristics of EIGRP	
7.1	
VPNs	
7.2	
Configuring EIGRP for IPv4	