

Threat Actor Tools
Malware
Common Network Attacks
IP Vulnerabilities and Threats
TCP and UDP Vulnerabilities
IP Services
Network Security Best Practices
Cryptography

4. ACL Concepts

Purpose of ACLs
Wildcard Masks in ACLs
Guidelines for ACL Creation
Types of IPv4 ACLs

5. ACL Concepts for IPv4 Configuration

Configure Standard IPv4 ACLs
Modify IPv4 ACLs
Secure VTY Ports with a
Standard IPv4 ACL
Structure of an Extended IPv4
ACL
Configure Extended IPv4 ACLs

6. NAT for IPv4

NAT Characteristics
Types of NAT
NAT Advantages
Configure Static NAT
Configure Dynamic NAT
Configure PAT
NAT and IPv6

7. WAN Concepts

Purpose of WANs
WAN Operations
Private WAN Infrastructures
Public WAN Infrastructure
Selecting WAN Services
Serial Communications

Broadband Connections

8. VPN and IPsec Concepts

- VPN Technology

- Types of VPNs

- IPsec

9. QoS Concepts

- Network Transmission Quality

- Traffic Characteristics

- Queuing Algorithms

- QoS Models

- QoS Implementation Techniques

10. Network Management

- Device Discovery with CDP

- Device Discovery with LLDP

- NTP

- SNMP Operation

- Syslog Operation

- Router and Switch File

- Maintenance

- IOS Image Management

LEARNING MATERIALS:

Online curriculum and assessments from Cisco Academy web portal. Provided to students with no additional charge.

Optional Student Resources:

CCNA 200-301 Official Cert Guide Library (CISCO Press), Odem Wendall, 2019,
13: 978 ISBN-13: 978-1-58714-714-2

Other materials may be required and may be made available directly to the student or

COURSE APPROVAL:

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