

FIREWALL v2.0 - Deploying Cisco ASA v8.4(1) Firewall Solutions

Course Outline

Module 1: Cisco ASA Adaptive Security Appliance Essentials

Lesson 1: Evaluating Cisco ASA Adaptive Security Appliance Technologies

- Firewalls and Security Domains
- Firewall Technologies
- Cisco ASA Adaptive Security Appliance Features

Lesson 2: Identifying Cisco ASA Adaptive Security Appliance Families

- Cisco ASA Adaptive Security Appliance Hardware
- Cisco ASA Appliance SSMs

Lesson 3: Identifying Cisco ASA Adaptive Security Appliance Licensing Options

- Cisco ASA Adaptive Security Appliance Licensing Options
- Cisco ASA Adaptive Security Appliance Licensing Requirements

Module 2: Basic Connectivity and Device Management

Lesson 1: Preparing the Cisco ASA Adaptive Security Appliance for Network Integration

- Managing the Cisco ASA Adaptive Security Appliance Boot Process
- Managing the Cisco ASA Adaptive Security Appliance Using the CLI
- Managing the Cisco ASA Adaptive Security Appliance Using Cisco ASDM
- Navigating Basic Cisco ASDM Features
- Managing the Cisco ASA Adaptive Security Appliance Basic Upgrade

Lesson 2: Managing Basic Cisco ASA Adaptive Security Appliance Network Settings

- Managing Cisco ASA Adaptive Security Appliance Security Levels
- Configuring and Verifying Basic Connectivity Parameters
- Configuring and Verifying Interface VLANs
- Configuring a Default Route
- Configuring and Verifying the Cisco ASA Security Appliance DHCP Server
- Troubleshooting Basic Connectivity

Lesson 3: Configuring Cisco ASA Adaptive Security Appliance Device Management Features

- Configuring and Verifying Basic Device Management Settings
- File System Management Overview
- Managing Cisco ASA Software and Feature Activation
- Configuring and Verifying Time Settings
- Configuring and Verifying Event and Session Logging
- Configuring and Verifying Remote Management Channels
- Configuring and Verifying AAA for Management Access
- Troubleshooting AAA for Management Access

Module 3: Network Integration

Lesson 1: Configuring Cisco ASA Adaptive Security Appliance NAT Features

- NAT on Cisco ASA Software Version 8.2 and Earlier
- NAT on Cisco ASA Software Version 8.3 and Later
- Configuring Object (Auto) NAT
- Configuring Manual NAT
- Tuning and Troubleshooting NAT on the Cisco ASA Adaptive Security Appliance

Lesson 2: Configuring Cisco ASA Adaptive Security Appliance Basic Access Control Features

- Connection Table and Local Host Table
- Configuring and Verifying Interface ACLs
- Configuring and Verifying Global ACLs
- Configuring and Verifying Object Groups
- Configuring and Verifying Public Servers
- Configuring and Verifying Other Basic Access Controls
- Troubleshooting ACLs

Lesson 3: Configuring Cisco ASA Adaptive Security Appliance Routing Features

- Static Routing
- Dynamic Routing
- EIGRP Configuration and Verification
- Multicast Support

Lesson 4: Configuring the Cisco ASA Adaptive Security Appliance Transparent Firewall

- Transparent Firewall Essentials
- Configuring and Verifying Transparent Firewall Mode
- Configuring and Verifying Transparent Firewall Layer 3 Through Layer 7 Access Controls
- Configuring and Verifying Transparent Firewall Layer 2 Access Controls
- Troubleshooting Transparent Firewall

Module 4: Cisco ASA Adaptive Security Appliance Policy Control

Lesson 1: Defining the Cisco ASA Adaptive Security Appliance MPF

- Cisco MPF Overview
- Configuring and Verifying Layer 3 and Layer 4 Policies
- Configuring and Verifying a Policy for Management Traffic

Lesson 2: Configuring Cisco ASA Adaptive Security Appliance Connection Policy and QoS Settings

- Basic Stateful Inspection Tuning Features
- Tuning Basic OSI Layer 3 and Layer 4 Inspection
- Configuring and Verifying Advanced Connection Settings
- Configuring and Verifying Support for Dynamic Protocols
- Configuring the Botnet Traffic Filter
- Configuring QoS on the Cisco ASA Adaptive Security Appliance
- Troubleshooting OSI Layer 3 and Layer 4 Inspection

Lesson 3: Configuring Cisco ASA Adaptive Security Appliance Advanced Application Inspections

- Layer 5 to Layer 7 Policy Control Overview
- Configuring and Verifying HTTP Inspection

- Configuring and Verifying FTP Inspection
- Supporting Other Layer 5 to Layer 7 Applications
- Troubleshooting Application Layer Inspection

Lesson 4: Configuring Cisco ASA Adaptive Security Appliance User-Based Policies

- AAA and Cut-Through Proxy Overview
- Configuring and Verifying Cut-Through Proxy Authentication
- Configuring Authentication Prompts and Timeouts
- Configuring and Verifying Cut-Through Proxy Authorization
- Configuring and Verifying Cut-Through Proxy Accounting
- Troubleshooting Cut-Through Proxy Operations

Module 5: Cisco ASA Adaptive Security Appliance High Availability and Virtualization

Lesson 1: Configuring Cisco ASA Adaptive Security Appliance Interface Redundancy Features

- Configuring and Verifying EtherChannel
- Configuring and Verifying Redundant Interfaces
- Troubleshooting EtherChannel and Redundant Interfaces

Lesson 2: Configuring Cisco ASA Adaptive Security Appliance Active/Standby High Availability

- Configuration Choices, Basic Procedures, and Required Input Parameters
- Configuring and Verifying Active/Standby Failover
- Tuning and Managing Active/Standby Failover
- Remote Command Execution
- Troubleshooting Active/Standby Failover

Lesson 3: Configuring Security Contexts on the Cisco ASA Adaptive Security Appliance

- Multiple-Context Mode
- Configuring Security Contexts
- Verifying and Managing Security Contexts
- Configuring and Verifying Resource Management
- Troubleshooting Security Contexts

Lesson 4: Configuring Cisco ASA Adaptive Security Appliance Active/Active High Availability

- Active/Active Failover
- Configuring and Verifying Active/Active Failover
- Tuning and Managing Active/Active Failover
- Troubleshooting Active/Active Failover

Lab Outline:

- Lab 2-1: Preparing the Cisco ASA Adaptive Security Appliance for Network Integration
- Lab 2-2: Configuring the Cisco ASA Adaptive Security Appliance for Secure Network Integration
- Lab 2-3: Configuring Management Features
- Lab 3-1: Configuring NAT
- Lab 3-2: Configuring Basic Cisco Access Control Features
- Lab 3-3: Configuring Transparent Firewall (Optional)
- Lab 4-1: Configuring MPF, Basic Stateful Inspections, and QoS
- Lab 4-2: Configuring MPF Advanced Application Inspections
- Lab 4-3: Configuring Cut-Through Proxy



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- Lab 5-1: Configuring Active/Standby High Availability
- Lab 5-2: Configuring Active/Active High Availability