Over 35 Years Of Technology Training

Document Generated: 07/10/2025

Learning Style: On Demand

Technology: Cisco

Difficulty: Intermediate

Course Duration: 40 Hours

Securing the Web with Cisco Web Security Appliance (SWSA) v3.0 - On Demand

About this course:

This course shows you how to implement, use, and maintain Cisco® Web Security Appliance (WSA), powered by Cisco Talos, to provide advanced protection for business email and control against web security threats.

Through a combination of instructor video, text, and hands-on practice, you'll learn how to deploy proxy services, use authentication, implement policies to control HTTPS traffic and access, implement use control settings and policies, use the solution's anti-malware features, implement data security and data loss prevention, perform administration of Cisco WSA solution, and more.

This course helps prepare you for the Securing the Web with Cisco Web Security Appliance (300-725 SWSA) exam, which leads to CCNP® Security and the Cisco Certified Specialist - Web Content Security certifications.

Course Objective:

After taking this course, you should be able to:

- Describe Cisco WSA
- Deploy proxy services
- Utilize authentication
- Describe decryption policies to control HTTPS traffic
- Understand differentiated traffic access policies and identification profiles
- Enforce acceptable use control settings
- Defend against malware
- Describe data security and data loss prevention
- Perform administration and troubleshooting

Audience:

- Security architects
- System designers
- Network administrators
- Operations engineers
- Network managers, network or security technicians, and security engineers and managers responsible for web security
- Cisco integrators and partners

Prerequisite:

To fully benefit from this course, you should have knowledge of these topics:

- TCP/IP services, including Domain Name System (DNS), Secure Shell (SSH), FTP, Simple Network Management Protocol (SNMP), HTTP, and HTTPS
- IP routing

You are expected to have one or more of the following basic technical competencies or equivalent knowledge:

- Cisco certification (CCENT certification or higher)
- Relevant industry certification [International Information System Security Certification Consortium ($(ISC)^2$), Computing Technology Industry

Association (CompTIA) Security+, International Council of Electronic Commerce Consultants (EC-Council), Global Information Assurance Certification (GIAC), ISACA]
- Cisco Networking Academy letter of completion (CCNA 1 and CCNA 2)
- Windows expertise: Microsoft [Microsoft Specialist, Microsoft Certified Solutions Associate (MCSA), Microsoft Certified Solutions Expert (MCSE)], CompTIA (A+, Network+, Server+)

Course Outline:

Describing Cisco WSA

Technology Use Case
Cisco WSA Solution
Cisco WSA Features
Cisco WSA Architecture
Proxy Service
Integrated Layer 4 Traffic Monitor
Data Loss Prevention
Cisco Cognitive Intelligence
Management Tools
Cisco Advanced Web Security Reporting (AWSR) and Third-Party Integration
Cisco Content Security Management Appliance (SMA)

Deploying Proxy Services

Explicit Forward Mode vs. Transparent Mode
Transparent Mode Traffic Redirection
Web Cache Control Protocol
Web Cache Communication Protocol (WCCP) Upstream and Downstream Flow
Proxy Bypass
Proxy Caching
Proxy Auto-Config (PAC) Files
FTP Proxy
Socket Secure (SOCKS) Proxy
Proxy Access Log and HTTP Headers
Customizing Error Notifications with End User Notification (EUN) Pages

Utilizing Authentication

Authentication Protocols
Authentication Realms
Tracking User Credentials
Explicit (Forward) and Transparent Proxy Mode
Bypassing Authentication with Problematic Agents
Reporting and Authentication
Re-Authentication
FTP Proxy Authentication

Troubleshooting Joining Domains and Test Authentication
Integration with Cisco Identity Services Engine (ISE)

Creating Decryption Policies to Control HTTPS Traffic

Transport Layer Security (TLS)/Secure Sockets Layer (SSL) Inspection Overview
Certificate Overview
Overview of HTTPS Decryption Policies
Activating HTTPS Proxy Function
Access Control List (ACL) Tags for HTTPS Inspection
Access Log Examples

Understanding Differentiated Traffic Access Policies and Identification Profiles

Overview of Access Policies
Access Policy Groups
Overview of Identification Profiles
Identification Profiles and Authentication
Access Policy and Identification Profiles Processing Order
Other Policy Types
Access Log Examples
ACL Decision Tags and Policy Groups
Enforcing Time-Based and Traffic Volume Acceptable Use Policies, and End User Notifications

Defending Against Malware

Web Reputation Filters
Anti-Malware Scanning
Scanning Outbound Traffic
Anti-Malware and Reputation in Policies
File Reputation Filtering and File Analysis
Cisco Advanced Malware Protection
File Reputation and Analysis Features
Integration with Cisco Cognitive Intelligence

Enforcing Acceptable Use Control Settings

Controlling Web Usage
URL Filtering
URL Category Solutions
Dynamic Content Analysis Engine
Web Application Visibility and Control
Enforcing Media Bandwidth Limits
Software as a Service (SaaS) Access Control
Filtering Adult Content

Data Security and Data Loss Prevention

Data Security
Cisco Data Security Solution
Data Security Policy Definitions
Data Security Logs

Performing Administration and Troubleshooting

Monitor the Cisco Web Security Appliance
Cisco WSA Reports
Monitoring System Activity Through Logs
System Administration Tasks
Troubleshooting
Command Line Interface

References

Comparing Cisco WSA Models
Comparing Cisco SMA Models
Overview of Connect, Install, and Configure
Deploying the Cisco Web Security Appliance Open Virtualization Format (OVF) Template
Mapping Cisco Web Security Appliance Virtual Machine (VM) Ports to Correct Networks
Connecting to the Cisco Web Security Virtual Appliance
Enabling Layer 4 Traffic Monitor (L4TM)
Accessing and Running the System Setup Wizard
Reconnecting to the Cisco Web Security Appliance
High Availability Overview
Hardware Redundancy
Introducing Common Address Redundancy Protocol (CARP)
Configuring Failover Groups for High Availability
Feature Comparison Across Traffic Redirection Options
Architecture Scenarios When Deploying Cisco AnyConnect® Secure Mobility

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