

Document Generated: 01/22/2025

Learning Style: On Demand

**Provider: Cisco** 

**Difficulty: Intermediate** 

**Course Duration: 40 Hours** 

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



#### **Course Information**

#### About this course:

This course will provide you skills to implement, use, and maintain Cisco® Web

Security Appliance (WSA), powered by Cisco Talos. Being a Cisco Web Security Appliance expert you will be able to provide advanced protection for business email, and full control against web security threats.

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

Upon completing this course, you will be fully prepared to take the Securing the Web with Cisco Web Security Appliance (300-725 SWSA) exam, passing which will lead to CCNP® Security and the Cisco Certified Specialist - Web Content Security certifications.

## **Course Objective:**

Yu should be able to do the following once you complete the course:

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

#### Audience:

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

#### **Prerequisite:**

You should have knowledge of these topics to fully benefit from this course:

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

You are expected to have one or more of the following basic technical

#### competencies or equivalent knowledge:

- 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+)
- Cisco certification (CCENT certification or higher)
- Relevant industry certification [International Information System Security Certification Consortium ((ISC)<sup>2</sup>), Computing Technology Industry Association (CompTIA) Security+, International Council of Electronic Commerce Consultants (EC-Council), Global Information Assurance Certification (GIAC), ISACA]

#### **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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