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**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



### 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:**

You 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