Securing the Web with Cisco Web Security Appliance (SWSA)

Cisco

- **Nível:** Avançado
- **Duração:** 14h

Sobre o curso

In this Cisco Web Security Appliance training you learn how to implement, use, and maintain a 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 expert instruction 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 you prepare to take the exam, **Securing the Web with Cisco Web Security Appliance** (300-725 SWSA), which leads to **CCNP® Security** and the **Cisco Certified Specialist – Web Content Security.**

This class will help you:

- Implement Cisco WSA to secure web gateways, provide malware protection, and use policy controls to address the challenges of securing and controlling web traffic
- Gain valuable hands-on skills for high-demand responsibilities focused on web security

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

Destinatários

Individuals involved in the deployment, installation and administration of a Cisco Web Security Appliance:

- 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

Pré-requisitos

Attendees should meet the following prerequisites :

- 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 or higher) -ICND1 Recommended
- Relevant industry certification (ISC)2, (CompTIA) Security+, EC-Council, GIAC, ISACA
- Cisco Net 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+)

Metodologia

Instructor-led training: 2 days in the classroom with hands-on lab practice

Programa

- Describing Cisco WSA
- Deploying Proxy Services
- Utilizing Authentication
- Creating Decryption Policies to Control HTTPS Traffic
- Understanding Differentiated Traffic Access Policies and Identification Profiles
- Defending Against Malware
- Enforcing Acceptable Use Control Settings
- Data Security and Data Loss Prevention
- Performing Administration and Troubleshooting

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

Labs:

- Lab 1: Configure the Cisco Web Security Appliance
- Lab 2: Deploy Proxy Services
- Lab 3: Configure Proxy Authentication
- Lab 4: Configure HTTPS Inspection
- Lab 5: Create and Enforce a Time/Date-Based Acceptable Use Policy
- Lab 6: Configure Advanced Malware Protection
- Lab 7: Configure Referrer Header Exceptions
- Lab 8: Utilize Third-Party Security Feeds and MS Office 365 External Feed
- Lab 9: Validate an Intermediate Certificate
- Lab 10: View Reporting Services and Web Tracking
- Lab 11: Perform Centralized Cisco AsyncOS Software Upgrade Using Cisco SMA