

Securing Email with Cisco Email Security Appliance v3.0

Course#: SESA
Duration: 4 Days
Price: 0.00

Course Description

This course helps you prepare to take the exam, Securing Email with Cisco Email Security Appliance (300-720 SESA), which leads to CCNP Security and the Certified Specialist - Email Content Security certifications. The Securing Email with Cisco Email Security Appliance (SESA) v3.0 course shows you how to deploy and use Cisco Email Security Appliance to establish protection for your email systems against phishing, business email compromise, and ransomware, and to help streamline email security policy management. This hands-on course provides you with the knowledge and skills to implement, troubleshoot, and administer Cisco Email Security Appliance, including key capabilities such as advanced malware protection, spam blocking, anti-virus protection, outbreak filtering, encryption, quarantines, and data loss prevention.

Objectives

The 300-720 SESA exam certifies your knowledge of Cisco Email Security Appliance, including administration, spam control and anti-spam, message filters, data loss prevention, Lightweight Directory Access Protocol (LDAP), email authentication and encryption, and system quarantines and delivery methods.

After you pass 300-720 SESA:

You earn the Cisco Certified Specialist - Email Content Security certification.

You will have satisfied the concentration exam requirement for the new CCNP Security certification. To complete your CCNP Security certification, pass the Implementing and Operating Cisco Security Core Technologies (350-701 SCOR) exam or its equivalent.

Audience

Security engineers
Security administrators

Security architects
Operations engineers
Network engineers
Network administrators
Network or security technicians
Network managers
System designers
Cisco integrators and partners

Prerequisites

To fully benefit from this course, you should have one or more of the following basic technical competencies:

Cisco certification (Cisco CCENT certification or higher)
Relevant industry certification, such as (ISC)2, CompTIA Security+, EC-Council, Global Information Assurance Certification (GIAC), and ISACA
Cisco Networking Academy letter of completion (CCNA 1 and CCNA 2)
Windows expertise: Microsoft [Microsoft Specialist, Microsoft Certified Solutions Associate (MCSA), Microsoft Certified Systems Engineer (MCSE)], CompTIA (A+, Network+, Server+)

The knowledge and skills that a student must have before attending this course are:

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

CCNA-Implementing and Administering Cisco Solutions v1.0 Boot Camp

SCOR - Implementing and Operating Cisco Security Core Technologies v1.0

Content

Virtual Classroom Live Outline

Describing the Cisco Email Security Appliance

Cisco Email Security Appliance Overview

Technology Use Case

Cisco Email Security Appliance Data Sheet

SMTP Overview

Email Pipeline Overview

Installation Scenarios

Initial Cisco Email Security Appliance Configuration

Centralizing Services on a Cisco Content Security Management Appliance (SMA)

Release Notes for AsyncOS 11.x

Administering the Cisco Email Security Appliance

Distributing Administrative Tasks

System Administration

Managing and Monitoring Using the Command Line Interface (CLI)

Other Tasks in the GUI

Advanced Network Configuration

Using Email Security Monitor

Tracking Messages

Logging

Controlling Sender and Recipient Domains

Public and Private Listeners

Configuring the Gateway to Receive Email

Host Access Table Overview

Recipient Access Table Overview

Configuring Routing and Delivery Features

Controlling Spam with Talos SenderBase and Anti-Spam

SenderBase Overview

Anti-Spam

Managing Graymail

Protecting Against Malicious or Undesirable URLs

File Reputation Filtering and File Analysis

Bounce Verification

Using Anti-Virus and Outbreak Filters

Anti-Virus Scanning Overview

Sophos Anti-Virus Filtering

McAfee Anti-Virus Filtering

Configuring the Appliance to Scan for Viruses

Outbreak Filters

How the Outbreak Filters Feature Works

Managing Outbreak Filters

Using Mail Policies

Email Security Manager Overview

Mail Policies Overview

Handling Incoming and Outgoing Messages Differently

Matching Users to a Mail Policy

Message Splintering

Configuring Mail Policies

Using Content Filters

Content Filters Overview

Content Filter Conditions

Content Filter Actions

Filter Messages Based on Content

Text Resources Overview

Using and Testing the Content Dictionaries Filter Rules

Understanding Text Resources

Text Resource Management

Using Text Resources

Using Message Filters to Enforce Email Policies

Message Filters Overview

Components of a Message Filter

Message Filter Processing

Message Filter Rules

Message Filter Actions

Attachment Scanning

Examples of Attachment Scanning Message Filters

Using the CLI to Manage Message Filters

Message Filter Examples

Configuring Scan Behavior

Preventing Data Loss

Overview of the Data Loss Prevention (DLP) Scanning Process

Setting Up Data Loss Prevention

Policies for Data Loss Prevention

Message Actions

Updating the DLP Engine and Content Matching Classifiers

Using LDAP

Overview of LDAP

Working with LDAP

Using LDAP Queries

Authenticating End-Users of the Spam Quarantine

Configuring External LDAP Authentication for Users

Testing Servers and Queries

Using LDAP for Directory Harvest Attack Prevention

Spam Quarantine Alias Consolidation Queries

Validating Recipients Using an SMTP Server

SMTP Session Authentication

- Configuring AsyncOS for SMTP Authentication
- Authenticating SMTP Sessions Using Client Certificates
- Checking the Validity of a Client Certificate
- Authenticating User Using LDAP Directory
- Authenticating SMTP Connection Over Transport Layer Security (TLS) Using a Client Certificate
- Establishing a TLS Connection from the Appliance
- Updating a List of Revoked Certificates

Email Authentication

- Email Authentication Overview
- Configuring DomainKeys and DomainKeys Identified Mail(DKIM) Signing
- Verifying Incoming Messages Using DKIM
- Overview of Sender Policy Framework(SPF) and SIDF Verification
- Domain-based Message Authentication Reporting and Conformance (DMARC) Verification
- Forged Email Detection

Email Encryption

- Overview of Cisco Email Encryption
- Encrypting Messages
- Determining Which Messages to Encrypt
- Inserting Encryption Headers into Messages
- Encrypting Communication with Other Message Transfer Agents (MTAs)
- Working with Certificates
- Managing Lists of Certificate Authorities
- Enabling TLS on a Listeners Host Access Table (HAT)
- Enabling TLS and Certificate Verification on Delivery
- Secure/Multipurpose Internet Mail Extensions (S/MIME) Security Services

Using System Quarantines and Delivery Methods

- Describing Quarantines
- Spam Quarantine
- Setting Up the Centralized Spam Quarantine

- Using Safelists and Blocklists to Control Email Delivery Based on Sender
- Configuring Spam Management Features for End Users
- Managing Messages in the Spam Quarantine
- Policy, Virus, and Outbreak Quarantines
- Managing Policy, Virus, and Outbreak Quarantines
- Working with Messages in Policy, Virus, or Outbreak Quarantines
- Delivery Methods

Centralized Management Using Clusters

- Overview of Centralized Management Using Clusters
- Cluster Organization
- Creating and Joining a Cluster
- Managing Clusters
- Cluster Communication
- Loading a Configuration in Clustered Appliances
- Best Practices

Testing and Troubleshooting

- Debugging Mail Flow Using Test Messages: Trace
- Using the Listener to Test the Appliance
- Troubleshooting the Network
- Troubleshooting the Listener
- Troubleshooting Email Delivery
- Troubleshooting Performance
- Web Interface Appearance and Rendering Issues
- Responding to Alerts
- Troubleshooting Hardware Issues
- Working with Technical Support

References

- Model Specifications for Large Enterprises
- Model Specifications for Midsize Enterprises and Small-to-Midsize Enterprises or Branch Offices

Cisco Email Security Appliance Model Specifications for Virtual Appliances Packages and Licenses

Virtual Classroom Live Labs

Verify and Test Cisco ESA Configuration

Perform Basic Administration

Advanced Malware in Attachments (Macro Detection)

Protect Against Malicious or Undesirable URLs Beneath Shortened URLs

Protect Against Malicious or Undesirable URLs Inside Attachments

Intelligently Handle Unscannable Messages

Leverage AMP Cloud Intelligence Via Pre-Classification Enhancement

Integrate Cisco ESA with AMP Console

Prevent Threats with Anti-Virus Protection

Applying Content and Outbreak Filters

Configure Attachment Scanning

Configure Outbound Data Loss Prevention

Integrate Cisco ESA with LDAP and Enable the LDAP Accept Query

DomainKeys Identified Mail (DKIM)

Sender Policy Framework (SPF)

Forged Email Detection

Configure the Cisco SMA for Tracking and Reporting