



Train. Employ. Empower.

# Securing Email with Cisco Email Security Appliance (SESA v3.1)

Price  
\$1,750.00

Duration  
4 Daytime Classes  
or  
8 Evening Classes

Delivery Methods  
Virtual, Private  
Group,

## CAREER SKILLS+™

The Securing Email with Cisco Email Security Appliance (SESA) v3.1 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.

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### Who Should Attend

- Security engineers
- Security administrators
- Security architects
- Operations engineers
- Network engineers
- Network administrators
- Network or security technicians
- Network managers
- System designers

Cisco integrators and partners

## Course 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

## Course Objectives

Describe and administer the Cisco Email Security Appliance (ESA)

Control sender and recipient domains

Control spam with Talos SenderBase and anti-spam

Use anti-virus and outbreak filters

Use mail policies

Use content filters

Use message filters to enforce email policies

Prevent data loss

Perform LDAP queries

Authenticate Simple Mail Transfer Protocol (SMTP) sessions

Authenticate email

Encrypt email

Use system quarantines and delivery methods

Perform centralized management using clusters

Test and troubleshoot

## Agenda

1 - 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  
2 - 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  
3 - 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  
4 - 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  
5 - 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  
6 - 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  
7 - 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  
8 - 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  
9 - 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  
10 - 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  
11 - 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  
12 - 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 Sender ID Verification  
Domain-based Message Authentication Reporting and Conformance (DMARC) Verification  
Forged Email Detection  
13 - 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 Listener's Host Access Table (HAT)  
Enabling TLS and Certificate Verification on Delivery  
Secure/Multipurpose Internet Mail Extensions (S/MIME) Security Services  
14 - 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  
15 - 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  
16 - 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  
17 - 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  
18 - Lab Outline  
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