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

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.

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.

How you'll benefit

This class will help you:

- Deploy high-availability email protection against the dynamic, rapidly changing threats affecting your organization
- Gain leading-edge career skills focused on enterprise security
- Earn 24 Cisco CE credits toward recertification

Why Attend with Current Technologies CLC

- Our Instructors are the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

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Objectives

After taking this course, you should be able to:

- 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

Course Duration
4 day
Course Price
$3,895.00
Methods of Delivery
- ILT
- V-ILT

Certification Exam
300-720
Cisco CE Credits
24

Who Should Attend

The primary audience for this course is as follows:

- Security Engineer
- Security Administrators
- Security Architects
- Operations Engineers
- Network Engineer
- Network Administrator
- Network or Security Technicians
- Network Manager

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- Systems 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

Course Outline

Module 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

Module 2: Administering the Cisco Email Security Appliance

- Distributing Administrative Tasks

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- 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

Module 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

Module 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

Module 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

Module 6: Using Mail Policies

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

- Email Security Manager Overview
- Mail Policies Overview
- Handling Incoming and Outgoing Messages Differently
- Matching Users to a Mail Policy
- Message Splintering
- Configuring Mail Policies

Module 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

Module 8: 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

Module 9: Using Message Filters to Enforce Email Policies
- Message Filters Overview
- Components of a Message Filter

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- 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

Module 10: 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

Module 11: 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

Module 12: 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

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

- 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

Module 13: 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

Module 14: 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

Module 15: 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

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

- Managing Policy, Virus, and Outbreak Quarantines
- Working with Messages in Policy, Virus, or Outbreak Quarantines
- Delivery Methods

Module 16: 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

Module 17: 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

Module 18: 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 License

LAB OUTLINE

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- 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
- Domain Keys Identified Mail (DKIM)
- Sender Policy Framework (SPF)
- Forged Email Detection
- Configure the Cisco SMA for Tracking and Reporting