



Forcepoint Email Security

CERTIFIED SYSTEM ENGINEER INSTRUCTOR LED COURSE



Forcepoint Email Security System Engineer Course

COURSE OVERVIEW

During this 5-day hands-on instructor led course, you will gain an understanding of the key core competencies and skills needed to practice as a System Engineer handling Forcepoint Email Security. The core competencies are deployment planning, installation, upgrading and troubleshooting.

This course prepares engineers or other professionals who are about to manage or lead system engineering development of Forcepoint Email Security from concept creation to production.

AUDIENCE

- Consultants, system architects, integrators
- Sales Engineers, Implementation Specialists, Deployment Specialists, Network Architects, Technical Support

COURSE OBJECTIVES

- Propose an Email Security deployment solution by identifying the most suitable platform, components and configurations for a given set of requirements.
- Successfully plan and execute an Email Security on-premises installation.
- Identify and mitigate common environmental factors within a deployment that can affect filtering efficacy.
- Plan and execute an Email Security upgrade using the Migration Tool.
- Perform troubleshooting steps and debugging to resolve common deployment issues.

PREREQUISITES FOR ATTENDANCE

- Completion of the Forcepoint Email Security Administrator Course and certification.
- Intermediate knowledge of networking and computer security concepts.
- A computer that meets the requirements noted at the end of this document.

CERTIFICATION EXAMS

This course prepares you to take and pass the Certified Forcepoint Email Security System Engineer Exam. The exam is included in the price of the course but the execution of the exam is not accomplished during the course. A minimum score of 80% on the multiple choice online exam is required to obtain certification.

Format:

Instructor Led In-person

Duration:

40 hours total - 5 days, 8 hours per day – plus 30-60 minutes of homework each session

Price:

\$7,000 USD non-discountable

Language:

English

COURSE DAILY AGENDA

SESSION 1 – DEPLOYMENT OVERVIEW AND INSTALLATION

Module 1: Email Security Components

- Required components
- Optional components
- Appliance offerings

Module 2: Deployment Platforms

- On-premises platform
- Hybrid platform
- Email Security in Azure platform

Module 3: Appliance Management Interfaces

- Command Line Interface (CLI)
- Forcepoint Security Appliance Manager (FSAM)

Module 4: Deployment Use Cases

- Small and middle business
- Large and enterprise business

Module 5: Installation planning

- Requirements
- Pre-installation considerations

Module 6: Email Security on-premises Installation

- Virtual Appliance on-premises deployment
- Installing Forcepoint Security Manager and Log Server

Module 7: Email Security in Azure

- Deployment process

SESSION 2 - ARCHITECTURE AND ENVIRONMENT

Module 8: Clustering

- Benefits of a configuration cluster
- Clustering with Hybrid and Data Security
- Clustering with PEM

Module 9: Load Distribution

- Third Party Load Balancer
- Load balancing with DNS



Module 10: Upstream MTA

- Simultaneous Connections
- True Source IP Detection

Module 11: Address rewriting

- Rewrite the envelope sender address
- Rewrite the display sender address

Module 12: DKIM Signing

- DKIM process
- Configuring DMARK in Forcepoint Security Manager

SESSION 3 – UPGRADING EMAIL SECURITY

Module 13: Plan the upgrade

- Review the documentation
- Component upgrade order

Module 14: Perform the upgrade

- 8.3 Appliance architecture changes
- Migration Tool
- Migration Process
- Virtual Appliance Hotfix
- Forcepoint Security Manager upgrade 8.2 – 8.5.0
- Migrate and upgrade Appliance

SESSION 4 – TROUBLESHOOTING OVERVIEW

Module 15: Troubleshooting & debug overview

- Troubleshooting tools
 - Real-time monitor
 - Forcepoint Security Manager logs
 - Counters
 - Command Line Troubleshooting
- Backend files and processes
 - Log on with root access to Email Security appliance
 - Backend files and processes
 - Debugging
- CLI debug command
 - Debugging Forcepoint Modules using the CLI
 - Debugging Postfix modules (requires root access)

Module 16: Installation Errors

- Email Log Server installation errors
- Forcepoint Management Server installation errors
- Appliance registration errors

Module 17: Mailflow Issues

- Delivery problems
 - Handling outbound/internal delivery problems
 - Handling inbound delivery problems
- Spam detection errors
 - False negative / False possible
 - Receiving backscatter / Sending backscatter
- Troubleshooting with “maillog”

SESSION 5 – TROUBLESHOOTING CONTINUED

Module 18: Log Database and Log Server Issues

- Cannot see logs form TRION Manager
- Log server failed to start
- Log DB extract, transform, and load process wrong
- Track on-box postgresSQL
- Debug log daemon

Module 19: Quarantine Issues

- Message queues
- Cannot see quarantine email in Blocked Messages
- Debug quarantine daemon

Module 20: PEM Issues

- End user login fail
- PEM portal load fail
- End user cannot receive notification
- End user cannot release messages
- PEM always permit/block list fail
- Debug PEM

Module 21: Email DLP Issues

- Email DLP registration fail
- Email DLP policy deployment fail
- Email DLP policy does not work normally
- Use multiple policy engines



Module 22: Cluster Problems

- Configuration and license synchronization
- Heartbeat request and response
- Secondary node cannot be synchronized
- Debug clustering

Module 23: Hybrid Issues

- Hybrid configuration file
- Hybrid logs cannot be synchronized
- Debug Hybrid

TERMS AND CONDITIONS

- System Engineer trainings are limited and may not address all of your unique requirements
- The training services in this course are provided pursuant to the Subscription Agreement
- Forcepoint provides the System Engineer course “AS IS” and makes no warranties of any kind, express or implied
- You must register for the System Engineer course offering within 90 days of the Order or the course is forfeited
- System Engineer courses must be completed within 6 months from purchase or the course is forfeited
- Assent to the Subscription Agreement constitutes acceptance of the above terms and conditions

For more information about other Forcepoint training offerings, please visit our [Customer](#) or [Partner](#) training page.

Questions about Forcepoint training? Contact Forcepoint Technical Readiness and Training at salestraining@forcepoint.com