Forcepoint Web Security System Engineer

WBIMP

During this five-day classroom-based instructor-led course, students will gain an understanding of the core competencies and skills needed to practice as a system engineer handling Forcepoint Web Security. The core competencies are design and deployment, component implementation, troubleshooting, and debugging. This course prepares engineers or other professionals who are about to manage or lead system engineering development of Forcepoint Web Security from concept creation to production.

Audience

- **Channel Partners:** Sales Engineers, Implementation Specialists, Deployment Specialists, Network Architects, Technical Support
- **Customers:** Deployment Specialists, Implementation Specialists, System Engineers
- **Forcepoint:** Sales Engineers, Professional Services, Technical Support

Course objectives

- Analyze key deployment considerations
- Calculate sizing and performance tuning
- Classify different deployment types
- Install and configure Web Security with appliances
- Assess how Web Security integrates with supported third-party solutions
- Configure tweaks to tune and balance settings to respond to daily needs
- Perform troubleshooting and debugging

Prerequisites for attendance

- Completion of the Forcepoint Web 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 Web Security System Engineer exam. The exam is included in the price of the course. The Web Security System Engineer exam is a two-part exam: Theoretical (multiple choice) and Practical (hands-on). Both exams will be administered on Day 5 of the course. A minimum score of 80% on the multiple-choice online exam and a 70% of the Hands-on exam is required to obtain the System Engineer certification.
Course outline

MODULE 1: DEPLOYMENT

- Define key deployment considerations
- Use best practices to review the system, hardware, and other pre-requisites for installation
- Identify which services to install and how to distribute them across different devices
- Prepare a Windows server for a Forcepoint installation
- Identify the location of the installation logs for troubleshooting installation problems
- Identify the features of Forcepoint Appliances
- Describe the hardware specifications and architecture of Forcepoint Appliances
- Identify the information needed for the initial configuration of an appliance
- Locate and install hotfixes
- Explain the principle differences between appliances running version 8.3 (or later) versus those running version 8.4 (or newer)
- Describe configuring SNMP on an appliance
- Define and discuss the methods of traffic redirection using a proxy including pros and cons of each
- Deploy and configure Explicit and Transparent Proxy
- Demonstrate understanding of PAC files, WPAD, GPO enforcement of proxy settings
- Compare Web Security component placement per network size
- Apply guidelines related to component deployment, limits, ratios and supported configurations
- Identify how Web Security integrates with third-party external services
- Detail the full scope and deployment workflow for simple, medium, and advanced network deployments
- List components and concepts used in sizing and performance tuning
- Apply Web Security sizing information provided by Forcepoint Performance Engineering
- Utilize the sizing guidelines to successfully provide deployment recommendations for small, medium, and large networks
- Compare and contrast various deployment types based on real-world deployment examples
- Describe Installation verification for a successful deployment
- Identify the Web Security installation footprint
- Describe methods of configuring the proxy for high availability
- List the components needed for disaster recovery
- Identify the disaster recovering guidelines and considerations
MODULE 2: CONFIGURATION
- Distinguish key settings in the Security Manager infrastructure components
- Install and use the Forcepoint Security Appliance Manager (FSAM)
- Identify and analyze Filtering and Policy Enforcement components
- Articulate the key features and functions in the proxy architecture
- Describe the pros and cons of various user identification agents
- Describe the functions of the User Service
- Defend the need for domain admin rights
- Compare XID agents with proxy authentication
- Design and implement proxy authentication based on a customer’s network size and Directory Service options
- Utilize best practices for managing encrypted traffic
- Implement User Identification components in single and multi-domain environments
- Evaluate the Logging and Reporting architecture

MODULE 3: TROUBLESHOOTING AND DEBUGGING
- Identify Web Security configuration files, diagnostic tools, tuning parameters, and verbose logging
- Describe the process of obtaining appliance root access
- Demonstrate appliance CLI commands and operations
- Utilize effective procedures for troubleshooting Security Manager components
- Detail proxy tuning and debugging procedures
- Identify proxy debugging tools and log files
- Debug the ant_server
- Troubleshoot proxy authentication
- Troubleshoot IWA
- Troubleshoot SSL decryption
- Inspect User Service architecture, main configuration files, troubleshooting, and debugging parameters
- Review Log Server and Log Database backend configuration files, tuning parameters, and troubleshooting procedures
Terms and conditions

- System Engineer trainings are limited and may not address all 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

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