

Training: F5 Networks
Configuring BIG-IP ASM Application Security Manager



FORM OF TRAINING	MATERIALS	PRICE	DURATION
Traditional	Hardcopy	3995 USD	4 days
Traditional	CTAB Tablet	4125 USD	4 days
Distance learning	Hardcopy	3995 USD	4 days
Distance learning	CTAB Tablet	3995 USD	4 days

LOCATIONS

Krakow - 5 Tatarska Street, II floor, hours: 9:00 am - 4:00 pm
Warsaw - 17 Bielska Street, hours: 9:00 am - 4:00 pm

TRAINING TERMS

2019-09-23 | 4 days | Warszawa (Special offers)
2019-10-21 | 4 days | Kraków (Special offers)
2019-11-18 | 4 days | Warszawa (Special offers)

TRAINING GOALS:

The **BIG-IP Application Security Manager** course gives participants a functional understanding of how to deploy, tune, and operate **BIG-IP Application Security Manager (ASM)** to protect their web applications from HTTP-based attacks. The course includes lecture, hands-on labs, and discussion about different ASM components for detecting and mitigating threats from multiple attack vectors such web scraping, Layer 7 Denial of Service, brute force, bots, code injection, and zero day.

Audience:

This course is intended for security and network administrators who will be responsible for the installation, deployment, tuning, and day-to-day maintenance of the Application Security Manager.

Course is based on the system version v13.1.

CONSPECT:

- Setting Up the BIG-IP System
 - Introducing the BIG-IP System
 - Initially Setting Up the BIG-IP System
 - Archiving the BIG-IP Configuration

- Leveraging F5 Support Resources and Tools
- Traffic Processing with BIG-IP
 - Identifying BIG-IP Traffic Processing Objects
 - Understanding Network Packet Flow
 - Understanding Profiles
 - Overview of Local Traffic Policies and ASM
- Web Application Concepts
 - Anatomy of a Web Application
 - An Overview of Common Security Methods
 - Examining HTTP and Web Application Components
 - Examining HTTP Headers
 - Examining HTTP Responses
 - Examining HTML Components
 - How ASM Parses File Types, URLs, and Parameters
 - Using the Fiddler HTTP proxy tool
- Web Application Vulnerabilities
 - OWASP Top 10 Vulnerabilities
- Security Policy Deployment
 - Comparing Positive and Negative Security
 - Using the Deployment Wizard
 - Deployment Wizard: Local Traffic Deployment
 - Deployment Wizard: Workflow
 - Reviewing Requests
 - Security Checks offered by Rapid Deployment
 - Configuring Data Guard
- Policy Tuning and Violations
 - Post-Configuration Traffic Processing
 - Defining False Positives
 - How Violations are Categorized
 - Violation Ratings
 - Enforcement Settings and Staging: Policy Control
 - Defining Signature Staging
 - Defining Enforcement Readiness Period
 - Defining Learning
 - Violations and Learning Suggestions
 - Learning Mode: Automatic or Manual

- Defining Learn, Alarm and Block settings
- Interpreting Enforcement Readiness Summary
- Configuring the Blocking Response Page
- Attack Signatures
 - Defining Attack Signatures
 - Creating User-Defined Attack Signatures
 - Attack Signature Normalization
 - Attack Signature Structure
 - Defining Attack Signature Sets
 - Defining Attack Signature Pools
 - Updating Attack Signatures
 - Understanding Attack Signatures and Staging
- Positive Security Policy Building
 - Defining Security Policy Components
 - Choosing an Explicit Entities Learning Scheme
 - How to learn: Add All Entities
 - Staging and Entities: the Entity Lifecycle
 - How to Learn: Never (Wildcard Only)
 - How to Learn: Selective
 - Learning Differentiation: Real Threats vs. False Positives
- Cookies and Other Headers
 - ASM Cookies: What to enforce
 - Understanding Allowed and Enforced Cookies
 - Configuring Security Processing on HTTP Headers
- Reporting and Logging
 - Reporting Capabilities in ASM
 - Viewing DoS Reports
 - Generating an ASM Security Events Report
 - Viewing Log files and Local Facilities
 - Understanding Logging Profiles
- User Roles and Policy Modification
 - Understanding User Roles & Partitions
 - Comparing Policies
 - Editing and Exporting Security Policies
 - Examples of ASM Deployment Types
 - Overview of ASM Synchronization

- Collecting Diagnostic Data with asmqview
- Lab Project
 - Lab Project 1
- Advanced Parameter Handling
 - Defining Parameters
 - Defining Static Parameters
 - Understanding Dynamic Parameters and Extractions
 - Defining Parameter Levels
 - Understanding Attack Signatures and Parameters
- Automatic Policy Building
 - Overview of Automatic Policy Building
 - Choosing a Policy Type
 - Defining Policy Building Process Rules
 - Defining the Learning Score
- Web Application Vulnerability Scanners
 - Integrating ASM with Vulnerability Scanners
 - Importing Vulnerabilities
 - Resolving Vulnerabilities
 - Using the Generic XML Scanner Output
- Login Enforcement & Session Tracking
 - Defining a Login URL
 - Defining Session Awareness and User Tracking
- Brute force and Web Scraping Mitigation
 - Defining Anomalies
 - Mitigating Brute Force Attacks
 - Defining Session-Based Brute Force Protection
 - Defining Dynamic Brute Force Protection
 - Defining the Prevention Policy
 - Mitigating Web Scraping
 - Defining Geolocation Enforcement
 - Configuring IP Address Exceptions
- Layer 7 DoS Mitigation
 - Defining Denial of Service Attacks
 - Defining General Settings L7 DoS profile
 - Defining TPS-Based DoS protection
 - Defining Operation Mode

- Defining Mitigation Methods
- Defining Stress-Based Detection
- Defining Proactive Bot Defense
- Using Bot Signatures
- ASM and iRules
 - Defining Application Security iRule Events
 - Using ASM iRule Event Modes
 - iRule Syntax
 - ASM iRule Commands
- XML and Web Services
 - Defining XML
 - Defining Web Services
 - Configuring an XML Profile
 - Schema and WSDL Configuration
 - XML Attack Signatures
 - Using Web Services Security
- Web 2.0 Support: JSON Profiles
 - Defining Asynchronous JavaScript and XML
 - Defining JavaScript Object Notation
 - Configuring a JSON Profile
- Review and Final Labs

REQUIREMENTS:

Before attending the Troubleshooting, ASM, DNS, APM, AAM, AFM, VIPRION or iRules courses is mandatory:

- to take part in the BIG-IP Admin or LTM course
- or possession of F5-CA or F5-CTS LTM certification
- or pass special assessment test with score 70% or greater.

To take assessment test:

Step 1: get an account on F5 University <https://university.f5.com>

Step 2: goto My Training and find Administering BIG-IP Course Equivalency Assessment

Take the test. Pass mark is 70%

Step 3: take a screen shot as proof of results

If this prerequisite is not met, F5 Networks have the right to refuse entry to the class.

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by F5 Networks (course completion). This course also will help to prepare you for the F5 Networks ASM Specialist certification (F5-CTS) exams Exam 303 - ASM Specialist, which is available through the [Pearson VUE test centers](#).

TRAINER:

Certified F5 Networks Trainer.