

Enterprise Computing Solutions - Education Services

TRAINING OFFERING

Du kan nå oss här

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Configuring BIG-IP AFM: Advanced Firewall Manager v17.1

CODE: LENGTH: PRICE:

F5N BIG-AFM 16 Hours (2 days) kr21,500.00

Description

This 2-day course uses lectures and hands-on lab exercises to give participants real-time experience in setting up and configuring the BIG-IP® Advanced Firewall Manager system.

Students are introduced to the AFM user interface, stepping through various options that demonstrate how AFM is configured to build a network firewall and to detect and protect against DoS (Denial of Service) attacks. Reporting and log facilities are also explained and used in the course labs.

Further Firewall functionality and additional DoS facilities for DNS and SIP traffic are discussed. Course Topics

- Configuration and management of the BIG-IP AFM system
- · AFM Network Firewall concepts
- · Network firewall options and modes
- Network firewall rules, policies, address/port lists, rule lists and schedules
- IP Intelligence facilities of dynamic black and white lists, IP reputation database and dynamic IP shunning
- · Detection and mitigation of DoS attacks
- Event logging of firewall rules and DoS attacks
- · Reporting and notification facilities
- DoS Whitelists
- DoS Sweep/Flood
- DNS Firewall and DNS DoS
- SIP DoS
- Port Misuse
- Network Firewall iRules
- Various AFM component troubleshooting commands

Vouchers are purchased directly from the test delivery providers:

- Pearson Vue
- Certiverse

For details, view F5's Certification website.

Objectives

v17.1 Course Outline

Chapter 1: 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
Chapter Resources
BIG-IP System Setup Labs

Chapter 2: AFM Overview and Network Firewall

AFM Overview
AFM Release History
AFM Availability
What do you see?
Terminology
Network Firewall
AFM Contexts
AFM Modes
AFM Packet Processing

AFM Rules and Direction

Rules Contexts and Processing

Configuring Network Firewall

Network Firewall Rules

Geolocation

Redundant and Conflicting Rules

Stale Rules

Lists and Schedules

Rule Lists

Address Lists

Port Lists

Schedules

Policies

Policy Status and Firewall Policy Management

Inline Rule Editor

Send to Virtual

Packet Tester

Chapter 3: Logs

Overview

Event Logs

Logging Profiles

Log Throttling

Logging and Logging Profiles

BIG-IP Logging Mechanisms

Publisher

Log Destination

Custom Search

Logging Global Rule Events

Log Configuration Changes

QKView and Log Files

SNMP MIB

SNMP Traps

Chapter 4: IP Intelligence

Overview

Feature 1 Dynamic Black and White Lists

Black List Categories

Feed Lists

IP Intelligence Policies

IP Intelligence Log Profile

IP Intelligence Reporting

Troubleshooting IP Intelligence Lists

Feature 2 IP Intelligence Database

Licensina

Installation

Configuration

Troubleshooting

IP Intelligence iRule

Chapter 5: Device DoS

Denial of Service and DoS Protection Overview

Device DoS

Configuring Device DoS

Variant 1

Variant 2

Auto-Threshold Configuration

Variant 3

Bad Actor and Blacklist Address

Device DoS Profiles

DoS Protection Profile

Dynamic Signatures

DoS iRules

Chapter 6: Reports

Reports

Reporting

General Reporting Facilities

Time Series Chart

Details

Report Export

DoS Screens

Dashboard

Analysis

Custom Page

Settings

Scheduled Reports

Troubleshooting Scheduled Reports

Overview

Summary

Widgets

Custom Widgets

Deleting and Restoring Widgets

Firewall Manager

Chapter 7: DoS White Lists

White Lists

Configuration

tmsh

Source Address List

Chapter 8: DoS Sweep Flood Protection

Sweep Flood

Configuration

Chapter 9: IP Intelligence Shun

IP Intelligence Shun

Manual Configuration

Dynamic Configuration

IP Intelligence Policy

tmsh

Extending the Shun Feature

Remotely Triggered Black Hole

Scrubber

Chapter 10: DNS Firewall

DNS Firewall

Configuration

DNS Query

DNS Opcodes

Logging

Troubleshooting

Chapter 11: DNS DoS

DNS DoS

Configuration

DoS Protection Profile

Device DoS

Chapter 12: SIP DoS

Session Initiation Protocol (SIP)

Transactions and Dialogs

SIP DoS Configuration

DoS Protection Profile

Device DoS

SIP iRules

Chapter 13: Network Firewall iRules

Network Firewall iRules

iRule Events

Configuration

Recommended Practice

More Information

Chapter 14: Port Misuse

Port Misuse

Port Misuse Policy Attaching a Service Policy Log Profile

Audience

This course is intended for network operators, network administrators, network engineers, network architects, security administrators, and security architects responsible for installation, setup, configuration, and administration of the BIG-IP AFM system.

Prerequisites

Students must complete one of the following F5 prerequisites before attending this course:

Administering BIG-IP instructor-led course

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F5 Certified BIG-IP Administrator

The following free web-based courses, although optional, will be very helpful for any student with limited BIG-IP administration and configuration experience. These courses are available at F5 University:

Getting Started with BIG-IP web-based training

Getting Started with BIG-IP Local Traffic Manager (LTM) web-based training

Getting Started with BIG-IP Advanced Firewall Manager (AFM) web-based training

The following general network technology knowledge and experience are recommended before attending any F5 Global Training Services instructor-led course:

OSI model encapsulation

Routing and switching

Ethernet and ARP

TCP/IP concepts

IP addressing and subnetting

v12 Course Outline

Chapter 1: 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

Chapter 2: AFM Overview and Network Firewall

AFM Overview

AFM Release History

AFM Availability

What do you see?

Terminology

Network Firewall

AFM Contexts

AFM Modes

AFM Packet Processing

AFM Rules and Direction

Rules Contexts and Processing

Configuring Network Firewall

Network Firewall Rules

Geolocation

Redundant and Conflicting Rules

Stale Rules

Lists and Schedules

Rule Lists

Address Lists

Port Lists

Schedules

Policies

Policy Status and Firewall Policy Management

Inline Rule Editor

Chapter 3: Logs

Event Logs

Logging Profiles

Log Throttling

Traffic Flow Statistics

Logging and Logging Profiles

BIG-IP Logging Mechanisms

Publisher

Log Destination

Custom Search

Logging Global Rule Events

Log Configuration Changes

QKView

Other Log Files

SNMP MIB

SNMP Traps

Chapter 4: IP Intelligence

Overview

Feature 1 Dynamic Black and White Lists

Black List Categories

Feed Lists

IP Intelligence Policies

IP Intelligence Log Profile

IP Intelligence Reporting

Troubleshooting IP Intelligence Lists

Feature 2 IP Intelligence Database

Licensing

Installation

Configuration

Troubleshooting

IP Intelligence iRule

Chapter 5: Device DoS

Denial of Service and DoS Protection Overview

Configuring Device DoS

Configuring Device DoS Vectors

Variant 1

Rate and Leak Limit

Variant 2

Auto-Threshold Configuration

Variant 3

Bad Actor and Blacklist Attacking Address

Device DoS Profiles

DoS Protection Profile

Chapter 6: Reports

Reports

Reporting

General Reporting Facilities

Charts

Details

Report Export

Network Screens

DoS Screens

Settings

Overview

Summary

Widgets
Time Periods, Settings, Export, and Delete Options

Firewall Manager

Chapter 7: DoS White Lists

White Lists

Configuration

tmsh

Source Address List

Chapter 8: DoS Sweep Flood Protection

Sweep Flood

Configuration

Chapter 9: IP Intelligence Shun

IP Intelligence Shun

Manual Dynamic IP Intelligence Policy tmsh

Troubleshooting

Chapter 10: DNS Firewall

DNS Firewall DNS Query DNS Opcodes Troubleshooting

Chapter 11: DNS DoS

DNS DoS

DoS Protection Profile

Device DoS

Chapter 12: SIP DoS

Session Initiation Protocol (SIP) Transactions and Dialogs SIP DoS DoS Protection Profile Device DoS SIP iRules

Chapter 13: Network Firewall iRules

Network Firewall iRules iRule Events Use Cases Recommended Practice More Information

Chapter 14: DoS iRules

DoS iRules
iRule Events
Use Cases
More Information
NAT and private IP addressing
Default gateway
Network firewalls
LAN vs. WAN

The following course-specific knowledge and experience is suggested before attending this course:

HTTP and DNS protocols

Further Information

Course Changes since v15

Updates for the v16.1 release are minor. Course material including student guide and labs steps have been updated to reflect the version change and for any product changes to GUI appearance and screen options.

Session Dates

Date	Location	Time Zone	Language	Туре	Guaranteed	PRICE
16 Oct 2025	Virtual Classroom (CET)	CEDT	English	Instructor Led Online		kr21,500.00

Ytterligare information

Denna utbildning finns också som utbildning på plats. Kontakta oss för mer information.