

Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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Administering BIG-IP v16.1

CODE: LENGTH: PRICE:

F5N BIG-OP-ADMIN 16 Hours (2 days) €1,995.00

Description

This course gives network administrators, network operators, and network engineers a functional understanding of the BIG-IP system as it is commonly deployed in an application delivery network. The course introduces students to the BIG-IP system, its configuration objects, how it processes traffic, and how typical administrative and operational activities are performed. The course includes lecture, hands-on labs, interactive demonstrations, and discussions.

Objectives

Describe the role of the BIG-IP system as a full proxy device in an application delivery network

Set up, start/restart/stop, license, and provision the BIG-IP system out-of-the-box

Create a basic network configuration on the BIG-IP system including VLANs and self IPs

Use the Configuration utility and TMSH to manage BIG-IP resources such as virtual servers, pools, pool members, nodes, profiles, and monitors

Create, restore from, and manage BIG-IP archives

View resource status, availability, and statistical information and use this information to determine how the BIG-IP system is currently processing traffic

Use profiles to manipulate the way the BIG-IP system processes traffic through a virtual server

Perform basic troubleshooting and problem determination activities including using the iHealth diagnostic tool Support, and view traffic flow using TCPDUMP

Understand and manage user roles and partitions Configure and manage a sync-failover device group with more than two members Configure stateful failover using connection mirroring and persistence mirroring

Audience

This course is intended for network administrators, operators, and engineers responsible for managing the normal day-to-day operation and administration of a BIG-IP application delivery network. This course presents the prerequisite knowledge for many other of F5's BIG-IP instructor-led training courses.

Prerequisites

There are no required F5 prerequisites for this course. The following free web-based training 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

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

NAT and private IP addressing

Default gateway

Network firewalls

LAN vs. WAN

More information - F5 Webpage under "Education"

Programme

v14.1 COURSE OUTLINE

Chapter 1: Setting Up the BIG-IP System

Introducing the BIG-IP System

Initially Setting Up the BIG-IP System

Configuring the Management Interface

Activating the Software License

Provisioning Modules and Resources

Importing a Device Certificate

Specifying BIG-IP Platform Properties

Configuring the Network

Configuring Network Time Protocol (NTP) Servers

Configuring Domain Name System (DNS) Settings

Configuring High Availability Options

Archiving the BIG-IP Configuration

Leveraging F5 Support Resources and Tools

Chapter 2: Traffic Processing Building Blocks

Identifying BIG-IP Traffic Processing Objects

Configuring Virtual Servers and Pools

Load Balancing Traffic

Viewing Module Statistics and Logs

Using the Traffic Management Shell (TMSH)

Understanding the TMSH Hierarchical Structure

Navigating the TMSH Hierarchy

Managing BIG-IP Configuration State and Files

BIG-IP System Configuration State

Loading and Saving the System Configuration

Shutting Down and Restarting the BIG-IP System

Saving and Replicating Configuration Data (UCS and SCF)

Chapter 3: Using NATs and SNATs

Address Translation on the BIG-IP System

Mapping IP Addresses with NATs

Solving Routing Issues with SNATs

Configuring SNAT Auto Map on a Virtual Server

Monitoring for and Mitigating Port Exhaustion

Chapter 4: Monitoring Application Health

Introducing Monitors

Types of Monitors

Monitor Interval and Timeout Settings

Configuring Monitors

Assigning Monitors to Resources

Managing Pool, Pool Member, and Node Status

Using the Network Map

Chapter 5: Modifying Traffic Behavior with Profiles

Introducing Profiles

Understanding Profile Types and Dependencies

Configuring and Assigning Profiles

Introducing SSL Offload and SSL Re-Encryption

Managing Object State

Chapter 6: Modifying Traffic Behavior with Persistence

Understanding the Need for Persistence

Introducing Source Address Affinity Persistence

Managing Object State

Chapter 7: Administering the BIG-IP System

Configuring Logging

Legacy Remote Logging

Introducing High Speed Logging (HSL)

High-Speed Logging Filters

HSL Configuration Objects

Configuring High Speed Logging

Using TCPDUMP on the BIG-IP System

Leveraging the BIG-IP iHealth System

Viewing BIG-IP System Statistics

Defining User Roles and Administrative Partitions

Leveraging vCMP

Chapter 8: Configuring High Availability

Introducing Device Service Clustering (DSC)
Preparing to Deploy a DSC Configuration
Configuring DSC Communication Settings
Establishing Device Trust
Establishing a Sync-Failover Device Group
Synchronizing Configuration Data
Exploring Traffic Group Behavior
Understanding Failover Managers and Triggers
Achieving Stateful Failover with Mirroring

Session Dates

On request. Please Contact Us

Additional Information

This training is also available as onsite training. Please contact us to find out more.