

# **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) kr19,500.00

## **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.

Topics covered in this course Include: v13 Course Topics

Getting started with the BIG-IP system

Traffic processing with BIG-IP Local Traffic Manager (LTM)

Using the TMSH (TMOS Shell) command line interface

Using NATs and SNATs

Monitoring application health and managing object status

Modifying traffic behavior with profiles, including SSL offload and re-encryption

Modifying traffic behavior with persistence, including source address affinity and cookie persistence

Troubleshooting the BIG-IP system, including logging (local, high-speed, and legacy remote logging), and using tcpdump

User roles and administrative partitions

vCMP concepts

Customizing application delivery with iRules

## **Objectives**

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

v13 COURSE OUTLINE Chapter 1: Setting Up the BIG-IP System Leveraging F5 Support Resources and Tools

Identifying BIG-IP Traffic Processing Objects

**Network Packet Flow** 

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

Chapter 2: Traffic Processing Building Blocks Saving and Replicating Configuration Data (UCS and SCF)

Address Translation on the BIG-IP System

Mapping IP Addresses with NAT Solving Routing Issues with SNATs

Configuring SNAT Auto Map on a Virtual Server

Chapter 3: Using NATs and SNATs 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

Understanding the Need for Persistence

Introducing Source Address Affinity Persistence

Introducing Cookie Persistence

Introducing SSL Offload and SSL Re-Encryption

Managing Object State 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 7: Customizing Application Delivery with iRules

Chapter 6: Administering the BIG-IP System

Identifying iRules Components

Triggering iRules with Events

Leveraging the iRules Ecosystem on DevCentral

#### **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"

### **Session Dates**

Date	Location	Time Zone	Language	Туре	Guaranteed	PRICE
13 May 2024	Virtual Classroom (CET / UTC +1)	CEDT	English	Classroom		kr19,500.00

#### **Tilleggsinformasjon**

Denne treningen er også tilgjengelig som trening på stedet. Kontakt oss for å finne ut mer.