Enterprise Computing Solutions - Education Services

# TRAINING OFFERING

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# Administering BIG-IP v17.1

| 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

| Date | Location | Time Zone | Language | Type | Guaranteed | PRICE |
|---|---|---|---|---|---|---|
| 08 Jun 2026 | Virtual Classroom (CET / UTC +1) | | English | Classroom | | €1,995.00 |

## Additional Information

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