



Administering BIG-IP (2 days)

Prerequisites (Recommended)

- [Getting Started with BIG-IP](#)
- [Getting Started with BIG-IP Local Traffic Manager](#)

Course 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.

V16 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