

Administering BIG-IP v.15.1

Learn via: **Classroom / Virtual Classroom / Online**

Duration: **2 Gün**

Overview

This 2 day 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.

Who should attend

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:

- 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

What You Will Learn

- 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
- Always-On Management (AOM)
- User roles and administrative partitions
- vCMP concepts
- Customizing application delivery with iRules

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
- Chapter 2: Traffic Processing Building Blocks
 - 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
 - Saving and Replicating Configuration Data (UCS and SCF)
 - Viewing the BIG-IP Connection Table
 - Chapter Resources
- Chapter 3: Using NATs and SNATs
 - 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
 - Monitoring for and Mitigating Port Exhaustion
 - Chapter Resources
- 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 Resources
- Chapter 5: Modifying Traffic Behavior with Profiles
 - Introducing Profiles
 - Understanding Profile Types and Dependencies
 - Configuring and Assigning Profiles
 - Chapter Resources
- Chapter 6: Modifying Traffic Behavior with Persistence
 - Understanding the Need for Persistence
 - Introducing Source Address Affinity Persistence
 - Introducing Cookie Persistence
 - Introducing SSL Offload and SSL Re-Encryption
 - Managing Object State
 - Introducing Action on Service Down
- Chapter 7: Troubleshooting the BIG-IP System
 - Configuring Logging
 - Introducing BIG-IP System 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
 - Working with F5 Support
 - Information Required when Opening a Support Case
 - Providing Files to F5 Technical Support
 - Running End User Diagnostics
 - Chapter Resources
- Chapter 8: Administering the BIG-IP System
 - Leveraging Always-On Management (AOM)
 - Expanding Availability with Device Service Clustering (DSC)
 - Viewing BIG-IP System Statistics
 - Defining User Roles and Administrative Partitions
 - Leveraging vCMP

- Chapter Resources
- Chapter 9: Customizing Application Delivery with iRules
 - Identifying iRules Components
 - Triggering iRules with Events
 - Leveraging the iRules Ecosystem on DevCentral
- Chapter 10: Additional Training and Certification
 - Getting Started Series Web-Based Training
 - F5 Instructor Led Training Curriculum
 - F5 Professional Certification Program