Administering BIG-IP v.16.1

Learn via: **Classroom**

Duration: **2 Gün**

https://bilginc.com/tr/egitim/administering-big-ip-v-16-1-3004-egitimi/

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