



BIG IP F5 LTM ADMINISTRATOR

UPGRADE YOUR KNOWLEDGE

BIG IP F5 LTM Training

Course Overview

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 trainees to the BIG-IP system, its configuration objects, how it processes traffic, and how typical administrative and operational activities are performed.

Duration & Module Coverage

Duration: 8 Days (16hrs)

Session Options	Module Coverage
Session Weekdays[4] : 2 hours per day 4 days per week	Day 1 - Modules 1 Day 2 - Module 2 Day 3 - Module 3 Day 4 - Module 4
Session Weekends: 2 hours per day	Day 5 - Module 5 Day 6 - Module 6 Day 7 - Module 7 Day 8 - Module 8

Learning Goals

By the end of this course participants will be able to:

1. Demonstrate knowledge of the F5 LTM Load Balancers.
2. Understand load balancing technologies used in F5 Devices.
3. Configuration and troubleshooting of features in F5 LTM devices.

Pre-Requisites

This course is for network professionals looking to work in an F5 environment. Understanding of basic networking, routing, switching and firewalls is a pre-requisite to attend this training.

Teaching Methodology

This is a very hands-on course where participants carry out practical exercises according to the lab guide provided. The concepts are taught through implementation of real-world use-cases. Our exercises have been carefully designed to replicate scenarios participants will face in real life work conditions.



Who Should Take This Course?

This course is designed for security professionals with knowledge of basic networking looking forward to gain understanding of security technologies offered by BIG IP and configuration and troubleshooting of related platforms.

Course Content

1. Setting up 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

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)

3. Using NAT and SNAT

- 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



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

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

6. Modifying Traffic Behavior with Persistence

- Introducing Profiles
- Understanding Profile Types and Dependencies
- Configuring and Assigning Profiles
- Introducing SSL Offload and SSL Re-Encryption
- Managing Object State

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

8. 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 Behaviour
- Understanding Failover Managers and Triggers
- Achieving Stateful Failover with Mirroring

Practical Learning Exercises

A lab guide will be provided to each student with requirement scenarios. Along with lab guide required VMs will be provided to set up individual labs for self practice.

Similarly there would be scenarios for implementing, verifying and troubleshooting all modules covered in the course.