

F5 Networks Administering BIG-IP v12 (F5-NetAdmin-v11)

Modality: Virtual Classroom

Duration: 2 Days

About this Course:

The primary objective of this course is to provide professionals with the prerequisite knowledge and conceptual understanding of key network administration concepts. Candidates planning to enroll in F5 BIG-IP Training Course including GTM, LTM, EM, & ASM can greatly benefit from the teachings of this course. This is a beginner-level 2 days training program nurturing professionals with the skillset needed to develop proficiency in BIG-IP System Network Administration.

This course will help professionals perform day-to-day functions and operations with greater ease and learn the art of streamlining business operations and processes. The main goal of this course is to help professionals develop a functional understanding of managing the BIG-IP v12 Product Family.

Course Objectives:

The core objective of this course is to help professionals develop a better understanding and sound knowledge of the following key concepts:

- Fundamentals of BIG-IP Systems
- Practical and Theoretical Knowledge of BIG-IP Systems
- Using Local Traffic Manager (LTM) for Processing Traffic in BIG-IP Systems
- Basic Knowledge of TMSH Command Line Interface
- Essentials of SNATs and NATs
- Monitoring and Management of Health Applications and Object Status
- Traffic Behavior Modification by Using Profiles such as Re-encryption and SSL Offload
- Fundamentals of AOM (Always-on Management)
- Traffic Behavior Modification by Using Cookie Persistence & Source Address Affinity
- BIG-IP Systems Troubleshooting to fix Legacy Remote Logging, Speed, & Efficiency
- Role of Users and Administrative Partitions
- Conceptual Understanding of vCMP Core Concepts
- Application Delivery Customization by Using iRules

Audience:

- Network Operators & IT Professionals
- Professionals responsible for the Management of Day-to-Day BIG-IP Operations

Prerequisites:

There are no obligatory prerequisites for the F5 Networks Administering BIG-IP v12 (F5-NetAdmin-v11) course. However, it is highly recommended for students to enroll in these prerequisite courses before registering for this course.

- Web-Based BIG-IP Fundamental Training Course
- Essentials of Local Traffic Manager (LTM) BIG-IP Web-Based Training Program

Course Outline:

Lesson 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

Lesson 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)

Lesson 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

Lesson 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

Lesson 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

Lesson 6: Modifying Traffic Behavior with Persistence

- Understanding the Need for Persistence
- Introducing Source Address Affinity Persistence
- Managing Object State

Lesson 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

Lesson 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