Training: F5
Administering BIG-IP

TRAINING GOALS:

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.

Audience:
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.

CONSPECT:

- Setting Up the BIG-IP System
    - Introducing the BIG-IP System
    - Initially Setting Up the BIG-IP System
    - Archiving the BIG-IP Configuration
    - F5 Support Resources and Tools
- Traffic Processing Building Blocks
    - Identifying BIG-IP Traffic Processing Objects
    - Network Packet Flow
    - Configuring Virtual Servers and Pools
    - Load Balancing Concepts
    - Viewing Statistics and Logs
    - Using the Traffic Management Shell (tmsh)
    - BIG-IP Configuration State and Files
    - Saving and Replicating Configuration Data (UCS and SCF)
    - Viewing the BIG-IP Connection Table
- Using NATs and SNATs

- Address Translation on the BIG-IP System
- NAT Concepts
- Solving Routing Issues with SNATs
- Configuring SNAT Auto Map on a Virtual Serve
- Monitoring for and Mitigating Port Exhaustion

- 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

- Modifying Traffic Behavior with Profiles
  - Introducing Profiles
  - Understanding Profile Types and Dependencies
  - Configuring and Assigning Profiles

- 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

- Troubleshooting the BIG-IP System
  - Configuring Logging
  - Using tcpdump on the BIG-IP System
  - Leveraging the BIG-IP iHealth System
  - Working with F5 Technical Support

- Administering the BIG-IP System
  - Always-On Management (AOM)
  - Expanding Availability with Device Service Clustering
  - User Roles and Administrative Partitions
  - vCMP
  - iApps Overview

- Customizing Application Delivery with iRules
  - iRules Concepts

- iRules Events
- iRules Resources
- Additional Training and Certification
  - Getting Started Series Web-Based Training
  - F5 Instructor Led Training Curriculum
  - F5 Professional Certification Program

REQUIREMENTS:

The following general network technology knowledge and experience are required 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

Difficulty level

CERTIFICATE:

The participants will obtain certificates signed by F5 Networks (course completion). This course also will help to prepare you for the F5 Networks Administrator certification (F5-CA) exams Exam 101 - Application Delivery Fundamentals and Exam 201 - TMOS Administration, which is available through the **Pearson VUE test centers**.

TRAINER:

Certified F5 Networks Trainer.