

Administering BIG-IP

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.

Course Objectives

- Describe the role of the BIG-IP system as a full proxy device in an application delivery network
- Set up, start/restart/stop, license, and provision the BIG-IP system out-of-the-box
- Create a basic network configuration on the BIG-IP system including VLANs and self IPs
- Use the Configuration utility and TMSH to manage BIG-IP resources such as virtual servers, pools, pool members, nodes, profiles, and monitors
- Create, restore from, and manage BIG-IP archives
- View resource status, availability, and statistical information and use this information to determine how the BIG-IP system is currently processing traffic
- Use profiles to manipulate the way the BIG-IP system processes traffic through a virtual server
- Perform basic troubleshooting and problem determination activities including using the iHealth diagnostic tool
- Support, and view traffic flow using TCPDUMP
- Understand and manage user roles and partitions
- Configure and manage a sync-failover device group with more than two members
- Configure stateful failover using connection mirroring and persistence mirroring

Course Topics

- Getting started with the BIG-IP system
- Traffic processing with BIG-IP Local Traffic Manager (LTM)
- Using 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
- User roles and administrative partitions
- vCMP concepts
- Configuring high availability (including active/standby and connection and persistence mirroring)

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.

Prerequisites

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