



Configuring BIG-IP LTM (3 days)

Prerequisites (Mandatory)

- [Administering BIG-IP](#)
- or
- [F5 Certified Administrator](#)

Prerequisites (Recommended)

- [Getting Started with BIG-IP](#)
- [Getting Started with BIG-IP Local Traffic Manager](#)

Course Description

This course gives network professionals a functional understanding of BIG-IP Local Traffic Manager, introducing students to both commonly used and advanced BIG-IP LTM features and functionality. Incorporating lecture, extensive hands-on labs, and classroom discussion, the course helps students build the well-rounded skill set needed to manage BIG-IP LTM systems as part of a flexible and high-performance application delivery network.

V16 COURSE 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 2: Reviewing Local Traffic Configuration

- Reviewing Nodes, Pools, and Virtual Servers
- Reviewing Address Translation
- Reviewing Routing Assumptions
- Reviewing Application Health Monitoring
- Reviewing Traffic Behavior Modification with Profiles
- Reviewing the TMOS Shell (TMSH)
- Reviewing Managing BIG-IP Configuration Data

Chapter 3: Load Balancing Traffic with LTM

- Exploring Load Balancing Options
- Using Priority Group Activation and Fallback Host
- Comparing Member and Node Load Balancing

Chapter 4: Modifying Traffic Behavior with Persistence

- Reviewing Persistence
- Introducing Cookie Persistence
- Specifying Default and Fallback Persistence
- Introducing SSL Persistence
- Introducing SIP Persistence
- Introducing Universal Persistence
- Introducing Destination Address Affinity Persistence
- Using Match Across Options for Persistence

Chapter 5: Monitoring Application Health

- Differentiating Monitor Types
- Customizing the HTTP Monitor
- Monitoring an Alias Address and Port
- Monitoring a Path vs. Monitoring a Device
- Managing Multiple Monitors
- Using Application Check Monitors
- Using Manual Resume and Advanced Monitor Timer Settings

Chapter 6: Processing Traffic with Virtual Servers

- Understanding the Need for Other Virtual Server Types
- Forwarding Traffic with a Virtual Server
- Understanding Virtual Server Order of Precedence
- Path Load Balancing

Chapter 7: Processing Traffic with SNATs

- Overview of SNATs
- Using SNAT Pools
- SNATs as Listeners
- SNAT Specificity
- VIP Bounceback
- Additional SNAT Options
- Network Packet Processing Review

Chapter 8: Modifying Traffic Behavior with Profiles

- Profiles Overview
- TCP Express Optimization
- TCP Profiles Overview
- HTTP Profile Options
- HTTP/2 Profile Options
- OneConnect
- Offloading HTTP Compression to BIG-IP
- Web Acceleration Profile and HTTP Caching
- Stream Profiles
- F5 Acceleration Technologies

Chapter 9: Selected Topics

- VLAN, VLAN Tagging, and Trunking
- Restricting Network Access
- SNMP Features
- Segmenting Network Traffic with Route Domains

Chapter 10: Deploying Application Services with iApps

- Getting Started with iRules
- Understanding When iRules are Triggered
- Deploying iRules
- Constructing an iRule
- Testing and Debugging iRules
- Exploring iRules Documentation

Chapter 11: Customizing Application Delivery with iRules and Local Traffic Policies

- Getting Started with Local Traffic Policies
- Configuring and Managing Policy Rules

Chapter 12: Securing Application Delivery with LTM

- Understanding Today's Threat Landscape
- Integrating LTM Into Your Security Strategy
- Defending Your Environment Against SYN Flood Attacks
- Defending Your Environment Against Other Volumetric Attacks
- Addressing Application Vulnerabilities with iRules and Local Traffic Policies
- Detecting and Mitigating Other Common HTTP Threats

Chapter 13: Final Lab Project