F5 NETWORKS CONFIGURING BIG-IP LTM: LOCAL TRAFFIC MANAGER

Course Code: 100561

Learn how to install, configure, and manage BIG-IP LTM systems.

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.

What You'll Learn

- BIG-IP initial setup (licensing, provisioning, and network configuration)
- A review of BIG-IP local traffic configuration objects
- Using dynamic load balancing methods
- Modifying traffic behavior with persistence (including SSL, SIP, universal, and destination address affinity persistence)
- Monitoring application health with Layer 3, Layer 4, and Layer 7 monitors (including transparent, scripted, and external monitors)
- Processing traffic with virtual servers (including network, forwarding, and reject virtual servers)
- Processing traffic with SNATs (including SNAT pools and SNATs as listeners)
- Configuring high availability (including active/standby and N+1 sync failover device groups, connection and persistence mirroring, and sync-only device groups)
- Modifying traffic behavior with profiles (including advanced HTTP profile options, caching, compression, and OneConnect profiles)
- Advanced BIG-IP LTM configuration options (including VLAN tagging and trunking, SNMP features, and packet filters)
- Deploying application services with iApps
- Customizing application delivery with iRules and local traffic policies

Who Needs to Attend

This course is intended for system and network administrators responsible for installation, setup, configuration, and administration of the BIG-IP LTM system.

Prerequisites

You must complete one of the following:

- Administering BIG-IP v12
- BIG-IP Local Traffic Manager (LTM) Essentials
- Achieve F5 Certified BIG-IP Administrator certification

You should understand:

- TCP/IP Addressing and Routing including the Address Resolution Protocol, Direct and Indirect Routing, and TCP Handshakes
- Command Line Configuration
- Common elements of and differences between WAN and LAN components
- Fundamental programming concepts

In addition, you should be proficient in:

- The Linux File System
- PICO editor or VI editor
- The TCPDUMP program

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CLASSROOM LIVE	$3,630 USD	3 Day

Classroom Live Outline

Lesson 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

Lesson 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

Lesson 3 : Load Balancing Traffic with LTM

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

Lesson 4 : Modifying Traffic Behavior with Persistence

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

Lesson 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

Lesson 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

Lesson 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
- **Lesson 8 : Modifying Traffic Behavior with Profiles**
- Profiles Overview
- TCP Express Optimization
- TCP Profiles Overview
- HTTP Profile Options
- OneConnect
- Offloading HTTP Compression to BIG-IP
- HTTP Caching
- Stream Profiles
- F5 Acceleration Technologies

Lesson 9 : Selected Topics

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

Lesson 10 : Deploying Application Services with iApps

- Simplifying Application Deployment with iApps
- Using iApps Templates
- Deploying an Application Service
- Leveraging the iApps Ecosystem on DevCentral

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

- Getting Started with iRules
- Triggering an iRule
- Introducing iRule Constructs
- Leveraging the DevCentral Ecosystem
- Deploying and Testing iRules
- Getting Started with Local Traffic Policies
- What Can You Do with a Local Traffic Policy?
- How Does a Local Traffic Policy Work?
- Understanding Local Traffic Policy Workflow
- Introducing the Elements of a Local Traffic Policy
- Specifying the Matching Strategy
- What Are Rules?
- Understanding Requires and Controls
- Configuring and Managing Policy Rules
- Configuring a New Rule
- Including Tcl in Certain Rule Settings

Lesson 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

Lesson 13 : Final Lab Project

- About the Final Lab Project
- Possible Solution to Lab 14.0

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Jun 4 - 6, 2025 | 6:00 AM - 2:30 PM PDT

Jun 4 - 6, 2025 | 7:00 AM - 3:30 PM PDT

Jul 9 - 11, 2025 | 7:00 AM - 3:30 PM PDT

Aug 13 - 15, 2025 | 7:00 AM - 3:30 PM PDT

Sep 17 - 19, 2025 | 7:00 AM - 3:30 PM PDT

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PRIVATE GROUP TRAINING	3 Day

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.