Enterprise Computing Solutions - Education Services

TRAINING OFFERING

You can reach us at:

Arrow Enterprise Computing Solutions Ltd, Part 1st Floor, Suite 1D/1, Central House, Otley Road, Harrogate, HG3 1UG

Email: education.ecs.baltic@arrow.com
Phone: 0870 251 1000

Configuring BIG-IP LTM: Local Traffic Manager v16.1

CODE:	LENGTH:	PRICE:
F5N_BIG-LTM-CFG-3	24 Hours (3 days)	€2,695.00

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.

By the end of this course, the student should be able to use both the Configuration utility, TMSH, and Linux commands to configure and manage BIG-IP LTM systems in an application delivery network. In addition, students should be able to monitor the BIG-IP system to achieve operational efficiency, and establish and maintain high availability infrastructure for critical business applications.

Objectives

Back up the BIG-IP system configuration for safekeeping
Configure virtual servers, pools, monitors, profiles, and persistence objects
Test and verify application delivery through the BIG-IP system using local traffic statistics
Configure priority group activation on a load balancing pool to allow servers to be activated only as needed to process traffic
Compare and contrast member-based and node-based dynamic load balancing methods
Configure connection limits to place a threshold on traffic volume to particular pool members and nodes
Differentiate between cookie, SSL, SIP, universal, and destination address affinity persistence, and describe use cases for each
Describe the three Match Across Services persistence options and use cases for each
Configure health monitors to appropriately monitor application delivery through a BIG-IP system
Configure different types of virtual services to support different types of traffic processing through a BIG-IP system
Configure different types of SNATs to support routing of traffic through a BIG-IP system
Configure VLAN tagging and trunking
Restrict administrative and application traffic through the BIG-IP system using packet filters, port lockdown, and virtual server settings
Configure SNMP alerts and traps in support of remote monitoring of the BIG-IP system
Use an F5-supplied iApp template to deploy and manage a website application service
Use iRules and local traffic policies appropriately to customize application delivery through the BIG-IP system
Configure the BIG-IP to detect and mitigate some common attacks at the network and application layers using LTM features such as SYN check, eviction policies, iRules and Local Traffic Policies

Audience

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

Prerequisites

Students must complete one of the following F5 prerequisites before attending this course:
Administering BIG-IP instructor-led course
F5 Certified BIG-IP Administrator
The following free web-based courses, although optional, will be very helpful for any student with limited BIG-IP administration and configuration experience. These courses are available at F5 University:
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
The following course-specific knowledge and experience is suggested before attending this course:
Web application delivery
HTTP, HTTPS, FTP and SSH protocols
TLS/SSL

Programme

v14.1 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
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
OneConnect
Offloading HTTP Compression to BIG-IP
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
Simplifying Application Deployment with iApps
Using iApps Templates
Deploying an Application Service
Leveraging the iApps Ecosystem on DevCentral
Chapter 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
Chapter 12: Securing Application Delivery with LTM
Understanding Todayâ€™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
Chapter 13: Final Lab Project
About the Final Lab Project
Possible Solution to Lab 13.1

Session Dates

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
10 Feb 2027	Virtual Classroom (CET / UTC +1)		English	Instructor Led Online		€2,695.00
07 Apr 2027	Virtual Classroom (CET / UTC +1)		English	Instructor Led Online		€2,695.00
02 Jun 2027	Virtual Classroom (CET / UTC +1)		English	Instructor Led Online		€2,695.00

Additional Information

This training is also available as onsite training. Please contact us to find out more.