Arrow ECS Finland Oy - Education Services

TRAINING OFFERING

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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
15 May 2024	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.