F5 Networks

F5LTMT12: F5 Networks Troubleshooting BIG-IP v12

This course gives networking professionals hands-on knowledge of how to troubleshoot a BIG-IP system using a number of troubleshooting techniques as well as troubleshooting and system tools.

$2,420.00

- 2 Days

Upcoming Dates

Course Description

This course includes lectures, labs, and discussions. Throughout this course you will have access to a BIG-IP that uses a typical Internal-External VLAN architecture with a pool of servers (HTTP, HTTPS, SSH, FTP, etc) along with web application servers. In the lab for this module, you will license the BIG-IP, set up the Internal and External VLANs, and create the Pools and Virtual Servers that you will use as part of your troubleshooting exercises.

In addition to the topics above, lab exercises will provide a chance to practice troubleshooting problems using the BIG-IP information, troubleshooting methodology, and tools that you have learned.

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 Configurations
- 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: Troubleshooting Methodology

- Troubleshooting Methodology
- Troubleshooting Methodology Steps
- Step 1: Define the Problem
- Step 2: Gather Information
- Step 3: Define Hypotheses

- Step 4: Develop a Test Plan
- Steps 5 and 6: Implement the Plan and Observe the Results
- Step 7: Repeat as Necessary
- Documenting a Problem
- Putting the Troubleshooting Steps to Use

Chapter 4: Working with F5 Support

- Leveraging AskF5
- Finding Resources on DevCentral
- Using the BIG-IP iHealth System
- Working with F5 Technical Support
- Running End User Diagnostics (EUD)
- Requesting Return Materials Authorization
- Understanding F5's Software Version Policy
- Managing Upgrades and Hotfixes
- Managing the BIG-IP License for Upgrades
- Managing BIG-IP Disk Space
- Upgrading BIG-IP Software

Chapter 5: Product Architecture

- Architecture Overview
- AOM
- Switch Fabric
- Host Subsystem

Chapter 6: Troubleshooting – Bottom to Top

- Host Architecture
- Layer 1/Layer 2 Tools
- Layer 2/Layer 3 Tools
- Layer 3 Tools
- Linux Tools
- Memory and CPU watch
- Additional tmsh commands
- End-User Diagnostics (EUD)

Chapter 7: Troubleshooting Tools

- tcpdump
- Wireshark
- Fiddler
- diff
- KDiff3
- ssldump
- cURL

Chapter 8: Using System Logs

- System Log Configuration
- Log Files
- BIG-IP Daemons
- Triggering an iRule
- Deploying and Testing iRules

Chapter 9: Troubleshooting Lab Projects

- Network Configurations for Projects

Chapter 10: Additional Training and Certification

- Getting Started Series Web-Based Training
- F5 Instructor Led Training Curriculum
- F5 Professional Certification Program

Appendix A: Support Requirements

- L1 and L2 Partner Support Requirements

Appendix B: iApps Template Usage

- Overview
- iApps Template Information
- Lab Expected Results
- iApps Template

Appendix C: Initial Configuration Steps

Audience

This course is intended for networking professionals who need to learn how to troubleshoot a BIG-IP.

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
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
HTTP, HTTPS, FTP and SSH protocols

What You Will Learn

After completing this course, students will learn:

- Configuration Project
- Troubleshooting Methodology
- F5 Support
- BIG-IP Product Architecture
- Troubleshooting - Bottom to Top
- Troubleshooting Tools
- Using System Logs