

Training: F5
Troubleshooting BIG-IP

TRAINING GOALS:

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. 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.

Audience:

This course assumes that you have successfully completed the Administering BIG-IP course, or equivalent, and have hands-on experience working in a production BIG-IP environment for several months. You should have a solid understanding of the environment in which the BIG-IP is deployed. This course is meant for BIG-IP administrators, network engineers, applications engineers, etc., who will be responsible for troubleshooting problems associated with their BIG-IP system.

CONSPECT:

- 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
- 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
- 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
 - Document Everything
 - Putting the Troubleshooting Steps to Use
- 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
- Product Architecture
 - Architecture Overview
 - AOM
 - Switch Fabric
 - Host Subsystem
- 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)
- Troubleshooting Tools
 - tcpdump
 - Wireshark
 - Fiddler
 - diff
 - KDiff3
 - ssldump
 - cURL
- Using System Logs
 - System Log Configuration
 - Log Files
 - BIG-IP Daemons
 - Triggering an iRule
 - Deploying and Testing iRules
- Troubleshooting Lab Projects
 - Network Configurations for Projects
- Additional Training and Certification
 - Getting Started Series Web-Based Training
 - F5 Instructor Led Training Curriculum
 - F5 Professional Certification Program

REQUIREMENTS:

Before attending the Troubleshooting, ASM, DNS, APM, AAM, AFM, VIPRION or iRules courses is mandatory:

- to take part in the BIG-IP Admin or LTM course
- or possession of F5-CA or F5-CTS LTM certification
- or pass special assessment test with score 70% or greater.

To take assessment test:

Step 1: get an account on F5 University <https://university.f5.com>

Step 2: goto My Training and find Administering BIG-IP Course Equivalency Assessment

Take the test. Pass mark is 70%

Step 3: take a screen shot as proof of results

If this prerequisite is not met, F5 Networks have the right to refuse entry to the class.

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by F5 Networks (course completion).

TRAINER:

Certified F5 Networks Trainer.