

F5 Networks Troubleshooting BIG-IP

Duration: 2 Day(s)

Course Overview

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.

Review this course online at <https://www.alta3.com/courses/F5TS>

Objectives

- Troubleshoot BIG-IP system configurations effectively
- Utilize various troubleshooting tools and techniques
- Collaborate with F5 Support resources for complex issues
- Implement systematic troubleshooting methodologies

Who Should Attend

- BIG-IP administrators
- Network engineers
- Applications engineers
- Technical support specialists

Prerequisites

Administering BIG-IP, OSI model, TCP/IP addressing and routing, WAN, LAN environments, and server redundancy concepts; or having achieved TMOS Administration Certification

Course Outline

Lesson 1: Setting Up the BIG-IP System

1. Introducing the BIG-IP System
2. Initially Setting Up the BIG-IP System
3. Archiving the BIG-IP System Configuration

Lesson 2: Reviewing Local Traffic Configuration

4. Reviewing Nodes, Pools, and Virtual Servers
5. Reviewing Address Translation
6. Reviewing Routing Assumptions
7. Reviewing Application Health Monitoring
8. Reviewing Traffic Behavior Modification with Profiles
9. Reviewing the TMOS Shell (TMSH)
10. Reviewing Managing BIG-IP Configuration Data
11. Reviewing High Availability (HA)

Lesson 3: Troubleshooting Methodology

- 12. Step-By-Step Process
- 13. Step 1: State the Problem
- 14. Step 2: Specify the Problem
- 15. Step 3: Map the System
- 16. Step 4: Develop Possible Causes
- 17. Step 5: Test Theories
- 18. Step 6: Iterate Until Root Cause Identified
- 19. Documenting a Problem
- 20. Putting Troubleshooting Steps to Use

Lesson 4: Working with F5 Support

- 21. Leveraging F5 Support Resources
- 22. AskF5.com
- 23. DevCentral
- 24. iHealth
- 25. Leveraging F5 Labs
- 26. Working with F5 Technical Support
- 27. Running End User Diagnostics (EUD) - Hardware Only
- 28. New Platform Diagnostic Tools
- 29. Always-On Management (AOM) Subsystem
- 30. Requesting Return Materials Authorization
- 31. F5's Software Version Policy
- 32. Managing the BIG-IP License for Upgrades
- 33. Managing BIG-IP Disk Space
- 34. Upgrading BIG-IP Software

Lesson 5: Troubleshooting – Bottom to Top

- 35. Introducing Differences between BIG-IP and LINUX Tools
- 36. Troubleshooting with Layer 1/Layer 2 Tools
- 37. Troubleshooting with Layer 2/Layer 3 Tools
- 38. Troubleshooting with Layer 3 Tools
- 39. Troubleshooting with LINUX Tools
- 40. Troubleshooting Memory and CPU
- 41. Troubleshooting with watch
- 42. Troubleshooting with Additional tmsh commands

Lesson 6: Troubleshooting Tools

- 43. tcpdump
- 44. Wireshark

- 45. ssldump
- 46. Fiddler
- 47. diff
- 48. KDiff3
- 49. cURL

Lesson 7: Using System Logs

- 50. Configuring Logging
- 51. Log Files
- 52. Understanding BIG-IP Daemons Functions
- 53. Triggering an iRule
- 54. Deploying and Testing iRules
- 55. Application Visibility and Reporting

Lesson 8: Troubleshooting Lab Projects

- 56. Network Configurations for Project