ARROW

Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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Troubleshooting BIG-IP v.15.1

CODE:	LENGTH:	PRICE:
F5N_BIG-TRBL-INT2	16 Hours (2 days)	€1,795.00

Description

This 2 day 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.

• Configuration Project
• Troubleshooting Methodology
• F5 Support
• Troubleshooting - Bottom to Top
• Troubleshooting Tools

This course includes lectures, labs, and discussions.Topics Covered• Using System Logs

Objectives

At the end of this course, the student will be able to:
• Describe the role of the BIG-IP system as a full proxy device in an application delivery network
• Set up, start/restart/stop, license, and provision the BIG-IP system
• Create a basic network configuration on the BIG-IP system including VLANs and self IPs
• Use the Configuration utility and TMOS Shell (tmsh) to manage BIG-IP resources and use as a resource when troubleshooting
• Create, restore from, and manage BIG-IP archives
• Understand and implement troubleshooting methodology to find and resolve issues
• View resource status, availability, and statistical information and use this information to determine how the BIG-IP system is currently processing traffic
• Use iApps to update BIG-IP configuration
• Perform troubleshooting and problem determination activities including using the iHealth diagnostic tool, researching known issues and solutions on AskF5, submitting a problem ticket to F5 Technical Support, and view traffic flow using tcpdump
• Understand the tools (ping, netstat, tcpdump, ssldump, WireShark, diff, Kdiff3, Fiddler, BIG-IP logs, etc.) available to use to identify BIG-IP and network issues from bottom to top
• List log files available, understand log levels, and use the appropriate files, log levels, and filters for troubleshooting
• Use High Speed Logging (HSL) and SNMP trap implementations to perform troubleshooting and problem determination activities
• Describe the role of iRules in affecting traffic behavior and how to use them to aid with troubleshooting and problem determination

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

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   IMPORTANT INFORMATION:
F5 US has brought out a BIG-IP Admin exam which can be taken before attending the LTM course. Indeed, this test should be taken by anyone wanting to attend any of the F5 specialist classes (DNS, APM, ASM, AFM etc.) if they have not attended the BIG-IP Admin or LTM class.
Although this is not mandatory, F5 would like to stress the importance of anyone attending F5 specialist classes if they have not attended an Admin class or passed the test below with 70% or greater. Obviously, a 201 BIG-IP Administrator exam certification is an instant prerequisite.
Step 1: get an account on F5 University (https://university.f5.com)Step 2: goto: https://wbt.training.f5.com/wbt/go?id=2110

Take the test. Pass mark is 70%.Step 3: take a screen shot as proof of your results.
Please note that if this prerequisite is not met, Arrow ECS reserves the right to refuse entry to the class without refund.
The following free web-based courses, although optional, will be very helpful for any student with limited BIG-IP administration and configuration experience:
• 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:
• HTTP, HTTPS, FTP and SSH protocols

Programme

                                    ? Introducing the BIG-IP System
                                    ? Initially Setting Up the BIG-IP System
Chapter 1: Setting Up the BIG-IP System? Archiving the BIG-IP System 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 2: Reviewing Local Traffic Configuration? Reviewing High Availability (HA)
                                    ? Step-By-Step Process
                                    o Step 1: State the Problem
                                    o Step 2: Specify the Problem
                                    o Step 3: Map the System
                                    o Step 4: Develop Possible Causes
                                    o Step 5: Test Theories
                                    o Step 6: Iterate Until Root Cause Identified
                                    ? Documenting a Problem
Chapter 3: Troubleshooting Methodology? Putting Troubleshooting Steps to Use   Chapter 4: Working with F5 Support
? Leveraging F5 Support Resources
? AskF5.com
? DevCentral
? iHealth
? Leveraging F5 Labs
? Working with F5 Technical Support
? Running End User Diagnostics (EUD) - Hardware Only
? New Platform Diagnostic Tools
? Always-On Management (AOM) Subsystem
? Requesting Return Materials Authorization
? F5's Software Version Policy
? Managing the BIG-IP License for Upgrades
? Managing BIG-IP Disk Space
? Upgrading BIG-IP Software   Chapter 5: Troubleshooting – Bottom to Top
? Introducing Differences between BIG-IP and LINUX Tools
? Troubleshooting with Layer 1/Layer 2 Tools   ? tcpdump
? Troubleshooting with Layer 2/Layer 3 Tools   ? Wireshark
? Troubleshooting with Layer 3 Tools   ? ssldump
? Troubleshooting Network Communication   ? Fiddler
? Troubleshooting Memory and CPU   ? diff
? Troubleshooting with watch   ? KDiff3
? Troubleshooting with Additional tmsh commands   Chapter 6: Troubleshooting Tools? cURL

? Configuring Logging
? Log Files
? Understanding BIG-IP Daemons Functions
? Triggering an iRule
? Deploying and Testing iRules
Chapter 7: Using System Logs? Application Visibility and Reporting   Chapter 8: Troubleshooting Lab Projects
? Network Configurations for Project

Follow on courses

F5N_BIG-LTM-CFG-3, Configuring BIG-IP LTM: Local Traffic Manager v.15.1
F5N_BIG-DNS-I, Configuring BIG-IP DNS (formerly GTM) v.15.1
F5N_BIG-AWF-CFG, Configuring F5 Advanced WAF (previously licensed as ASM) v15.1
F5N_BIG-EGW-APM, Configuring BIG-IP APM: Access Policy Manager v.15.1
F5N_BIG-AFM, Configuring BIG-IP AFM: Advanced Firewall Manager v.15.1
Other courses available:F5N_BIG-IRULE-CFG, Developing iRules for BIG-IP v.15.1

Session Dates

On request. Please contact us

Additional Information

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