

# Troubleshooting BIG-IP®

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.

## Kursinhalt

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

Jeder Teilnehmer erhält die englischsprachigen Original-Unterlagen von F5 Networks in elektronischer Form.

## Zielgruppe

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.

## Voraussetzungen

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 training 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: HTTP, HTTPS, FTP and SSH protocols.

## Dieser Kurs im Web



Alle tagesaktuellen Informationen und Möglichkeiten zur Bestellung finden Sie unter dem folgenden Link: [www.experteach.at/go/FLTT](http://www.experteach.at/go/FLTT)

## Vormerkung

Sie können auf unserer Website einen Platz kostenlos und unverbindlich für 7 Tage reservieren. Dies geht auch telefonisch unter 06074 4868-0.

## Garantierte Kurstermine

Für Ihre Planungssicherheit bieten wir stets eine große Auswahl garantierter Kurstermine an.

## Ihr Kurs maßgeschneidert

Diesen Kurs können wir für Ihr Projekt exakt an Ihre Anforderungen anpassen.

Training		Preise zzgl. MwSt.	
Termine in Österreich	2 Tage	€ 2.200,-	
Online Training	2 Tage	€ 2.200,-	
Termin/Kursort	Kursprache Englisch		
03.04.-04.04.25	Online	06.11.-07.11.25	Online
10.07.-11.07.25	Online		

Stand 12.10.2024



# Inhaltsverzeichnis

## Troubleshooting BIG-IP®

### Chapter 1: Setting Up the BIG-IP System

- Introducing the BIG-IP System
- Initially Setting Up the BIG-IP System
- Archiving the BIG-IP System Configuration

### 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
- Reviewing High Availability (HA)

### Chapter 3: Troubleshooting Methodology

- Step-By-Step Process
- Step 1: State the Problem
- Step 2: Specify the Problem
- Step 3: Map the System
- Step 4: Develop Possible Causes
- Step 5: Test Theories
- Step 6: Iterate Until Root Cause Identified
- Documenting a Problem
- 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

- Troubleshooting with Layer 2/Layer 3 Tools
- Troubleshooting with Layer 3 Tools
- Troubleshooting Network Communication
- Troubleshooting Memory and CPU
- Troubleshooting with watch
- Troubleshooting with Additional tmsh commands

### Chapter 6: Troubleshooting Tools

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

### Chapter 7: Using System Logs

- Configuring Logging
- Log Files
- Understanding BIG-IP Daemons Functions
- Triggering an iRule
- Deploying and Testing iRules
- Application Visibility and Reporting

### Chapter 8: Troubleshooting Lab Projects

- Network Configurations for Project

