Configuring BIG-IP DNS (formerly GTM)

This course gives networking professionals a functional understanding of the BIG-IP DNS system as it is commonly used. The course covers installation, configuration, and management of the BIG-IP DNS system, and includes a combination of lecture, discussion, and hands-on labs.

Kursinhalt
- Overview of the Domain Name System and DNS resolution flow through BIG-IP DNS
- Configuring DNS listeners
- Accelerating DNS resolution with DNS Express, DNS cache, and DNS server load balancing
- Intelligent DNS resolution with wide IPs and wide IP pools
- Using probes and metrics to assist the intelligent DNS resolution process
- Intelligent DNS load balancing methods
- Monitoring intelligent DNS resources
- Logging GSLB load balancing decisions
- Using DNSSEC
- Integrating iRules in the DNS resolution process
- Managing BIG-IP DNS sync groups

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

Zielgruppe
This course is intended for system and network administrators responsible for installation, setup, configuration, and administration of BIG-IP DNS systems.

Voraussetzungen
There are no F5-technology-specific prerequisites for this course: However, completing the following before attending would be helpful for students with limited BIG-IP administration and configuration experience:

- Administering BIG-IP instructor-led course

or
- F5 Certified BIG-IP Administrator

The following free web-based 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 DNS 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:

DNS resolution process; Experience configuring DNS content and resolution servers; DNSSEC

Dieser Kurs im Web
Alle tagesaktuellen Informationen und Möglichkeiten zur Bestellung finden Sie unter dem folgenden Link: www.experteach.ch/go/**FDNS**

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 der Schweiz	**2 Tage**
Online Training	**2 TageCHF 2.420,-**
Termin/Kursort	Kurssprache Englisch
23.06.-24.06.25 ONOnline	22.09.-23.09.25 ONOnline

Stand 07.05.2025

ExperTeach

Inhaltsverzeichnis

Configuring BIG-IP DNS (formerly GTM)

Chapter 1: Setting Up the BIG-IP System
- Introducing the BIG-IP System
- Initially Setting Up the BIG-IP System
- Archiving the BIG-IP Configuration
- Leveraging F5 Support Resources and Tools
- Provision the BIG-IP System and Confirm Network Configuration

Chapter 2: Introducing the Domain Name System (DNS) and BIG-IP DNS
- Understanding the Domain Name System (DNS)
- Reviewing the Name Resolution Process
- Implementing BIG-IP DNS
- Using DNS Resolution Diagnostic Tools

Chapter 3: Accelerating DNS Resolution
- Introducing DNS Resolution with BIG-IP DNS
- BIG-IP DNS Resolution Decision Flow
- Configuring BIG-IP DNS Listeners
- Resolving DNS Queries in the Labs (Lab Zone Records)
- Load Balancing Queries to a DNS Server Pool
- Accelerating DNS Resolution with DNS Cache
- Accelerating DNS Resolution with DNS Express
- Introducing Wide IPs
- Using Other Resolution Methods with BIG-IP DNS
- Integrating BIG-IP DNS into Existing DNS Environments

Chapter 4: Implementing Intelligent DNS Resolutions
- Introducing Intelligent DNS Resolution
- Identifying Physical Network Components
- Identifying Logical Network Components
- Collecting Metrics for Intelligent Resolution
- Configuring Data Centers
- Configuring a BIG-IP DNS System as a Server
- Configuring a BIG-IP LTM System as a Server
- Establishing iQuery Communication between BIG-IP Systems
- Configuring a Non-F5 Server
- Defining Links and Routers
- Configuring Wide IP Pools
- Configuring Wide IPs
- Managing Object Status
- Using the Traffic Management Shell (TMSH)

Chapter 5: Using LDNS Probes and Metrics
- Introducing LDNS Probes and Metrics
- Types of LDNS Probes
- Excluding an LDNS from Probing
- Configuring Probe Metrics Collection

Chapter 6: Load Balancing Intelligent DNS Resolution
- Introducing Load Balancing on BIG-IP DNS
- Using Static Load Balancing Methods
- Round Robin
- Ratio
- Global Availability
- Static Persist
- Other Static Load Balancing Methods
- Using Dynamic Load Balancing Methods
- Round Trip Time
- Completion Rate
- CPU
- Hops
- Least Connections
- Packet Rate
- Kilobytes per Second
- Other Dynamic Load Balancing Methods
- Virtual Server Capacity
- Virtual Server Score
- Using Quality of Service Load Balancing
- Persisting DNS Query Responses
- Configuring GSLB Load Balancing Decision Logs
- Using Manual Resume
- Using Topology Load Balancing

Chapter 7: Monitoring Intelligent DNS Resources
- Exploring Monitors
- Configuring Monitors
- Assigning Monitors to Resources
- Monitoring Best Practices

Chapter 8: Advanced BIG-IP DNS Topics
- Implementing DNSSEC
- Setting Limits for Resource Availability
- Using iRules with Wide IPs
- Introducing Other Wide IP Types
- Implementing BIG-IP DNS Sync Groups

Chapter 9: Final Configuration Projects

ExperTeach AG
Kronenstrasse 11 · 8735 St. Gallenkappel · Telefon: +41 55 420 2591 · Fax: +41 55 420 2592 · info@experteach.ch · www.experteach.ch