

# 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

Stand 03.10.2024

## Dieser Kurs im Web



Alle tagesaktuellen Informationen und Möglichkeiten zur Bestellung finden Sie unter dem folgenden Link: [www.experteach.ch/go/FDNS](http://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.
<b>Termine in der Schweiz</b>	<b>2 Tage</b>
<b>Online Training</b>	<b>2 Tage CHF 2.420,-</b>
<b>Termin/Kursort</b>	Kurs Sprache Englisch
02.12.-03.12.24  Online	



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

