

# Configuring BIG-IP DNS (formerly GTM) (TRG-BIG-DNS-IL)

ID TRG-BIG-DNS-IL Price US \$ 2,420.—(excl. VAT) Duration 2 days

#### Who should attend

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

### **Prerequisites**

There are no F5-technology-specific prerequisites for this course:

However, completing the following before attending would be very helpful for students with limited BIG-IP administration and configuration experience:

- Administering BIG-IP (TRG-BIG-OP-ADMIN) instructor-led course
- F5 Certified BIG-IP Administrator

The following 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 Global Traffic Manager (GTM) 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

### **Course Objectives**

- Provision the BIG-IP system for operation
- Back up the BIG-IP system configuration for safekeeping
- Describe how the Domain Name System (DNS) resolves host names into IP addresses
- Describe how the BIG-IP DNS system can participate in the DNS resolution process
- Use DNS Express on the BIG-IP DNS system to accelerate DNS resolution
- Cache DNS query responses on BIG-IP DNS to accelerate DNS resolution
- Load balance DNS queries to a pool of DNS servers and monitor pool health
- Configure the key features of the BIG-IP DNS system to perform intelligent DNS resolution
- Describe the LDNS probes used by BIG-IP DNS to support path-based load balancing
- Configure a wide IP pool to use a path load balancing method
- View and confirm DNS resolution behavior using path load balancing methods
- Use static and dynamic load balancing methods to intelligently resolve DNS queries
- Use persistence to effectively return one or more clients to the same virtual server on each query
- Use manual resume to control certain load balancing behavior in the event of an outage
- Configure and use load balancing decision logs to fine-tune and troubleshoot DNS resolution
- Configure monitors on the BIG-IP DNS system in support of DNS resolution
- Configure BIG-IP DNS to participate in the DNSSEC chain of trust
- Configure limit settings on virtual servers, servers, and wide IP pools to temporarily direct client traffic away from resources that may not be performing at certain thresholds of efficiency
- Configure iRules on a wide IP to customize intelligent DNS resolution
- Describe the other wide IP types provided with BIG-IP DNS
- Configure a BIG-IP DNS sync group

## Configuring BIG-IP DNS (formerly GTM) (TRG-BIG-DNS-IL)

 Apply all the principles learned throughout the course to configure a BIG-IP DNS system based on hypothetical specifications

### **Course Content**

- 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

# Configuring BIG-IP DNS (formerly GTM) (TRG-BIG-DNS-IL)

## **Training Centres worldwide**





### Fast Lane Institute for Knowledge Transfer (Switzerland) AG

Husacherstrasse 3 CH-8304 Wallisellen Tel. +41 44 832 50 80

info@flane.ch, https://www.flane.ch