Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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Configuring BIG-IP DNS (formerly GTM) v16.1

CODE:	LENGTH:	PRICE:
F5N_BIG-DNS-I	16 Hours (2 days)	€1,995.00

Description

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.

Topics covered in this course include:
v14.1 Course Topics
BIG-IP initial setup (licensing, provisioning, and network configuration)
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

Objectives

v14.1 COURSE OUTLINE
Chapter 1: Setting Up the BIG-IP System
Introducing the BIG-IP System
Initially Setting Up the BIG-IP System
Configuring the Management Interface
Activating the Software License
Provisioning Modules and Resources
Importing a Device Certificate
Specifying BIG-IP Platform Properties
Configuring the Network
Configuring Network Time Protocol (NTP) Servers
Configuring Domain Name System (DNS) Settings
Configuring High Availability Options
Archiving the BIG-IP Configuration
Leveraging F5 Support Resources and Tools
BIG-IP System Setup Labs

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
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

Review Questions

Audience

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 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
Need more information - please go to F5 webpage under "Education"

Session Dates

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
10 Mar 2027	Virtual Classroom (CET / UTC +1)		English	Instructor Led Online		€1,995.00
26 May 2027	Virtual Classroom (CET / UTC +1)		English	Instructor Led Online		€1,995.00

Additional Information

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