



Enterprise Computing Solutions - Education Services

## TRAINING OFFERING

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# Configuring BIG-IP DNS (formerly GTM) v17.1

**CODE:** F5N\_BIG-DNS-I    **LENGTH:** 16 Hours (2 days)    **PRICE:** kr21,500.00

## 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:

v17.1 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  
Vouchers are purchased directly from the test delivery providers:  
• Pearson Vue  
• Certiverse  
For details, view F5's Certification website.

## Objectives

### v17.1 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**

## 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

På begäran, [kontakta oss](#)

## Ytterligare information

Denna utbildning finns också som utbildning på plats. [Kontakta oss för mer information.](#)