



Enterprise Computing Solutions - Education Services

## TRAINING OFFERING

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**Du kan nå oss här**

Kronborgsgränd 7, 164 46 Kista

Email: [edu.ecs.se@arrow.com](mailto:edu.ecs.se@arrow.com)

Phone: +46 8 555 188 00



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

CODE:	LENGTH:	PRICE:
F5N_BIG-DNS-I	16 Hours (2 days)	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

## Objectives

- 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

**v17.1 COURSE OUTLINE Chapter 1: Setting Up the BIG-IP System** BIG-IP System Setup Labs  
Understanding the Domain Name System (DNS)  
Reviewing the Name Resolution Process  
Implementing BIG-IP DNS

**Chapter 2: Introducing the Domain Name System (DNS) and BIG-IP DNS** Using DNS Resolution Diagnostic Tools  
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

**Chapter 3: Accelerating DNS Resolution** Integrating BIG-IP DNS into Existing DNS Environments

- 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

**Chapter 4: Implementing Intelligent DNS Resolutions** Using the Traffic Management Shell (TMSH)

- Introducing LDNS Probes and Metrics
- Types of LDNS Probes
- Excluding an LDNS from Probing

**Chapter 5: Using LDNS Probes and Metrics** Configuring Probe Metrics Collection

- 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

**Chapter 6: Load Balancing Intelligent DNS Resolution** Using Topology Load Balancing

- Exploring Monitors
- Configuring Monitors
- Assigning Monitors to Resources

**Chapter 7: Monitoring Intelligent DNS Resources** Monitoring Best Practices

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

**Chapter 8: Advanced BIG-IP DNS Topics**

**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**

På begäran, [kontakta oss](#)

## **Ytterligare information**

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