



Arrow ECS Finland Oy - 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

- 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

**v14.1 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

**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

Aikataulutamme kiinnostuksen mukaan. [Ota yhteyttä](#)

## Additional Information

[This training is also available as onsite training. Please contact us to find out more.](#)