

F5 BIG IP GTM/DNS

Learn to install, configure and manage BIG-IP DNS to deliver intelligent, load-balanced DNS resolution across data centres.

2 Days

DURATION

12

MODULES

70

TOPICS

COURSE OVERVIEW

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.

WHO THIS COURSE IS FOR

Network Engineers

Network Administrators

DNS Administrators

Systems Engineers

Network Architects

PREREQUISITES

- Strong Knowledge of BIG-IP LTM
- DNS resolution process
- Experience configuring DNS content and resolution servers
- DNSSEC

LEARNING OBJECTIVES

- Describe the Domain Name System and the name resolution process
- Configure BIG-IP DNS listeners and DNS cache and Express acceleration
- Configure wide IPs and wide IP pools for intelligent resolution
- Establish iQuery communication between BIG-IP systems
- Apply static and dynamic load balancing methods to DNS queries
- Configure monitors and assign them to DNS resources
- Implement DNSSEC and BIG-IP DNS sync groups
- Apply iRules with wide IPs for advanced resolution control

12 Modules, 70 Topics

01

Setting Up the BIG-IP System

TOPICS

Introducing the BIG-IP System · Initially Setting Up the BIG-IP System · Archiving the BIG-IP Configuration · Leveraging F5 Support Resources and Tools

02

Introducing the Domain Name System (DNS) and BIG-IP DNS

TOPICS

Understanding the Domain Name System (DNS) · Reviewing the Name Resolution Process · Implementing BIG-IP DNS · Using DNS Resolution Diagnostic Tools

03

Accelerating DNS Resolution

TOPICS

- Introducing DNS Resolution with BIG-IP DNS
- 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

04

Implementing Intelligent DNS Resolutions

TOPICS

- 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)

05

Using LDNS Probes and Metrics

TOPICS

Introducing LDNS Probes and Metrics · Types of LDNS Probes · Excluding an LDNS from Probing · Configuring Probe Metrics Collection

06

Load Balancing Intelligent DNS Resolution

TOPICS

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

07

Monitoring Intelligent DNS Resources

TOPICS

Exploring Monitors · Configuring Monitors · Assigning Monitors to Resources · Monitoring Best Practices

08

Advanced BIG-IP DNS Topics

TOPICS

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

09

Final Configuration Projects

TOPICS

Review Questions

10

Additional Training and Certification

TOPICS

Getting Started Series Web-Based Training · F5 Instructor Led Training Curriculum · F5 Professional Certification Program

A

Working with Local BIND and ZoneRunner

TOPICS

Introducing BIND and ZoneRunner · Configuring BIND Files with ZoneRunner

B

Troubleshooting

TOPICS

Working with F5 Technical Support

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

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