

F5 Networks

F5DNS: F5 Networks Configuring BIG-IP: Domain Name System

\$2,420.00

- 2 Days

Upcoming Dates

Course Description

This course gives networking professionals a functional understanding of the BIG-IP DNS system as it is commonly used. The course covers configuration and ongoing management of the BIG-IP DNS system, and includes a combination of lecture, discussion, and hands-on labs.

Course Outline

Lesson 1: Setting Up the BIG-IP System

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

Lesson 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

Lesson 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

Lesson 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)

Lesson 5: Using LDNS Probes and Metrics

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

Lesson 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
- Virtual Server Capacity
- Virtual Server Score
- Using Quality of Service Load Balancing
- Persisting DNS Query Responses
- Configuring GSLB Load Balancing Decision Logs
- Using Manual Resume
- Using Topology Load Balancing

Lesson 7: Monitoring Intelligent DNS Resources

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

Lesson 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

Lesson 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

Administering BIG-IP; TCP/IP Addressing and Routing, WAN/LAN elements; and Data Center Server redundancy concepts.

What You Will Learn