

## **Enterprise Computing Solutions - Education Services**

# NABÍDKA ŠKOLENÍ

Prosím kontaktujte nás zde

Arrow ECS, a.s., 28. října 3390/111a, 702 00 Ostrava

Email: training.ecs.cz@arrow.com Phone: +420 597 488 811



### Configuring BIG-IP DNS (formerly GTM) v16.1

Kód: DÉLKA: CENA:

F5N\_BIG-DNS-I 16 Hours (2 DENNÍ) Kč bez DPH 39,900.00

#### **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.

#### Cíle

- 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

#### Určeno pro

This course is intended for system and network administrators responsible for installation, setup, configuration, and administration of BIG-IP DNS systems.

#### Vstupní znalosti

Students are required to complete one of the following F5 prerequisites before attending this course:

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(https://university.f5.com):

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

#### **Program**

Chapter 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

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

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
- Resolving DNS Queries in the Labs (Lab Zone Records) 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
- Accelerating DNS Resolution with DNS Express • Introducing Wide IPs

Load Balancing Queries to a DNS Server Pool

Accelerating DNS Resolution with DNS Cache

- Using Other Resolution Methods with BIG-IP DNS
- Integrating BIG-IP DNS into Existing DNS Environments Using the Traffic Management Shell (TMSH)

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
- Virtual Server Capacity
- Virtual Server Score

Chapter 5: Using LDNS Probes and Metrics • Using Quality of Service Load Balancing

- Introducing LDNS Probes and Metrics
- Types of LDNS Probes
- Excluding an LDNS from Probing Configuring Probe Metrics Collection
- Persisting DNS Query Responses
- Configuring GSLB Load Balancing Decision Logs
- Using Manual Resume
- Using Topology Load Balancing

Chapter 8: Advanced BIG-IP DNS Topics

Chapter 7: Monitoring Intelligent DNS Resources • Implementing DNSSEC

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

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

#### Termíny školení

Termíny školení na vyžádání, kontaktujte nás prosím

#### Dodatečné informace

Školení je možné zajistit na míru. Kontaktujte nás pro bližší informace.