

CNS-203-3 Basic Administration for Citrix® NetScaler™ 9.2

Basic Administration for Citrix NetScaler 9.2 covers the initial configuration and administration of Citrix NetScaler 9.2. Learners gain an understanding of NetScaler features such as load balancing, SSL offload, classic and advanced expressions, rate limiting and AppExpert templates. Through an interactive course, simulations, hands-on labs and exercises, learners are guided through administrator tasks preparing them to manage Citrix NetScaler 9.2 deployments.

This course also provides information on the NetScaler 9.3 features.

Audience

This course is intended for system administrators or network operations personnel who configure and administer Citrix NetScaler products.

Preparatory Recommendations

Before taking this course, Citrix recommends that learners have the following knowledge:

- Intermediate knowledge of TCP/IP and HTTP protocols and an understanding of the OSI model
- Experience with network devices, networking protocols and aspects of application and site architecture
- Moderate exposure to UNIX or Linux
- Exposure to basic systems administration concepts, including logging, software upgrade procedures and high availability operations
- Familiarity with web server software
- Knowledge of network security threats and site protection concepts

Key Skills

Upon completion of this course, learners are able to:

- Identify NetScaler hardware components and deployment scenarios.
- Deploy a NetScaler system as a network gateway device.
- Create a high-availability pair and perform synchronization and forced failover.
- Secure NetScaler communications through access control lists, authentication, authorization, and auditing.
- Create and configure system entities, service monitors, and load-balancing virtual servers.
- Optimize traffic and maintain the security of private data with the SSL offload feature.
- Describe Global Server Load Balancing architecture and concepts.
- Use classic policy expressions for content filtering and compression.
- Configure policies and actions to transform header and other elements of web traffic.
- Describe content switching and the configuration process.
- Use application templates to optimize web traffic from specific applications.
- Monitor the NetScaler system with the Dashboard, Monitoring tool, and NetScaler logs.
- Describe the NetScaler 9.3 features.

Instructional Method

This course is offered as an instructor-led or self-paced online training course and can include virtual labs, simulations, or classroom discussion, as well as demonstrations and the practical application of concepts through hands-on exercises.

Course Length

25 hours or 5 days

Certification Preparation

The CNS-203-3 course prepares learners for the 1Y0-A21 Basic Administration for Citrix NetScaler 9.2 exam, a requirement for the NetScaler 9.2 Citrix Certified Administrator (CCA) certification.

Registration

For more information and to register for this course, please go to www.citrix.com/nstraining.

Topic Outline

Provided is the topic outline for CNS-203-3:

- Introducing and deploying Citrix NetScaler
 - Introduction to the NetScaler system
 - Planning a NetScaler deployment
 - Deployment scenarios
 - NetScaler platform and product editions
 - Product features
 - Hardware platforms and components
 - NetScaler architecture overview
 - Initial NetScaler access
- Networking
 - NetScaler-owned IP addresses
 - NetScaler modes
 - Network address translation
 - Virtual local area networks
 - Link Aggregation
 - Internet Control Message Protocol
 - Path MTU discovery
 - Dynamic routing support and route health injection
- Configuring high availability
 - Introduction to high availability
 - High availability node configuration
 - Propagation and synchronization
 - High availability management
- Securing the NetScaler system
 - NetScaler system communication
 - Access control lists
- Configuring load balancing
 - Load-balancing process
 - Entity management
 - Load-balancing traffic types
 - Service monitoring
 - Load-balancing topology, methods, and additional options
 - Advanced load balancing methods
 - Link load balancing
 - Custom load
 - Load monitor process
 - Service and virtual server management
 - Load Balancing Visualizer
- Configuring SSL offload
 - SSL and digital certificates
 - SSL concepts
 - SSL offload overview
 - Offload performance
 - SSL administration and deployment decisions
 - Deployment scenarios
 - Configuring SSL offload
 - Creating an SSL virtual server
 - Advanced SSL settings

- Configuring Global Server Load Balancing
 - GSLB concepts
 - Metric exchange protocol
 - GSLB DNS methods
 - GSLB persistence
 - Configuring DNS virtual servers
 - GSLB configuration
 - Implementing traditional GSLB, proximity-based GSLB, and GSLB failover for disaster recovery
 - GSLB entity relationship
 - GSLB site communication example
- Using AppExpert Classic to optimize traffic
 - Policy overview and basics
 - Hypertext Transfer Protocol
 - Expression structures
 - Content filtering
 - Introduction to compression
- Using AppExpert for responder, rewrite, and URL transform
 - Understanding the packet processing flow
 - Actions
 - Understanding bind points
 - Using pattern sets
 - Typecasting
 - Rewrite, responder, and URL transformation overview
 - Identifying packet processing flow
 - Basic configurations: policies and actions
 - Configuring rewrite actions
 - Rewrite policies
 - Responder actions and policies
 - Configuring URL transformation
- Using AppExpert for content switching
 - Introduction to content switching
 - Configuring content-switching virtual servers
 - Rule-based policy example
- Using AppExpert Advanced to optimize traffic
 - Compression with advanced policy expressions
 - Integrated caching
 - Cache policies and cache expressions
 - Graceful cache configuration changes
 - Cache content groups and aging
 - Content group settings
 - FlashCache
 - Global cache attributes
 - Caching management
 - AppExpert templates
 - Policy-based routing
- Management
 - Simple Network Management Protocol
 - SNMPv3
 - Dashboard
 - Reporting and monitoring tools
 - Auditing and logging
 - Configuring an auditing server
 - Global auditing parameters
 - Configuring auditing policies
 - NetScaler log management
 - Replacing a high availability node
 - Upgrading as a standalone NetScaler system
 - Upgrading a high availability pair

- Password recovery
- Network traffic capture using NSTCPDUMP
- TCPDUMP options and filter expressions
- Network traffic capture using NSTRACE.SH
- NSTRACE options and filter expressions

The CNS-203-2W course has an additional NetScaler 9.3 Features module with the following topics:

- Citrix NetScaler 9.3 Features
 - New NetScaler 9.3 Features
 - AppFlow
 - Branch Repeater load balancing
 - Remote Desktop Protocol load balancing
 - Database load balancing
 - OpenCloud Bridge
 - Citrix Application Firewall enhancements
 - DNS Security Extensions