

Module Title : CNS-218-1I- Citrix NetScaler Essentials

Duration : 3 days

Overview

Designed for students with little or no previous NetScaler experience, this course is best suited for individuals who will be deploying and/or managing Citrix NetScaler environments.

Learn the skills required to implement Citrix NetScaler Essential components including secure Load Balancing, High Availability, and NetScaler Management. At the end of the course, students will be able to configure their NetScaler environments to address traffic delivery and management requirements including Load Balancing, Availability, and NetScaler Operation Management.

Recommended pre-requisite courses:

- CNS-102 NetScaler Overview

This course is based on the Citrix NetScaler 11 product, but the skills and fundamental concepts learned are common to earlier product versions.

Key Skills

Upon successful completion of this course, students will be able to:

- Understand the functionality and capabilities of the NetScaler
- Comprehend basic NetScaler network architecture
- Identify the distinguishing use cases for each NetScaler platform
- Complete the initial setup and configuration of the NetScaler appliance
- Explain how SSL is used to secure the NetScaler
- Understand NetScaler Load Balancing and High Availability configuration options and management
- Employ recommended tools and techniques to troubleshoot common NetScaler network and connectivity issues

Audience

Students interested in learning how to implement and manage NetScaler features using leading practices. Specifically:

- Administrators
- Implementers / Engineers
- Architects

Instructional Method

This course is offered in instructor-led training (ILT)/virtual instructor-led training (vILT) formats with application of concepts through hands-on exercises in a live lab environment.

Course Materials

- As part of this course, students will receive the following materials:
- Access to a lab environment for the duration of the course
- Lab exercise guide
- Access to final course deliverables once the course is available in general availability including copies of all official materials presented by the instructor with additional notes and references as well as videos with experts throughout Citrix around course topics and lab exercises.

Preparatory Recommendations

Citrix recommends students prepare for this course by taking the following courses:

- CNS-102 NetScaler Overview

Citrix also recommends an understanding of the following concepts and technologies:

- Basic Networking
- Windows and Linux Server administration
- TCP/IP, HTTP protocols and the OSI model
- Web Services
- Basic understanding of VPN concepts, including SSL encryption and certificates

Certification Preparation

- There are no associated exams/certifications currently available. [Click here](#) to learn more about Citrix Certifications.

Topic Outline

Getting Started

- Explain NetScaler capabilities and functionality.
- Introduce NetScaler architecture.
- Discuss NetScaler hardware and components.
- Explore deployment and licensing options.

- Perform NetScaler setup and configuration.

Basic Networking

- Understand the purpose of NetScaler-Owned IP Addresses.
- Recognize the networking topologies used with NetScaler.
- Explain the use of interfaces and VLANs during configuration.
- Discuss the available NetScaler routing and traffic-handling modes.
- Define Access Control Lists and how to configure them.
- Describe the Network Address Translation feature of NetScaler.

NetScaler Platforms

- Distinguish the hardware and use cases for the NetScaler MPX, VPX, and SDX.
- Discuss the multi-tenant structure of the NetScaler SDX.
- Illustrate the function and benefits of various SDX interface allocation scenarios.
- Identify the NetScaler SDX administrative components and their use.

High Availability

- Explain NetScaler capabilities and functionality.
- Introduce NetScaler architecture.
- Discuss NetScaler hardware and components.
- Explore deployment and licensing options.
- Perform NetScaler setup and configuration.

Load Balancing

- Describe the NetScaler load-balancing process and the role of entities.
- Identify the different load-balancing and monitoring options available on the NetScaler.
- Define the different traffic types that can be load balanced.
- Explain how monitoring and service options can be customized.
- Understand third-party load-balancing services on NetScaler.
- Distinguish the methods used to protect and troubleshoot a NetScaler load-balancing configuration.

SSL Offload

- Define SSL and how SSL Offload works.
- Explain the process of creating and uploading SSL Certificates.

- Demonstrate the creation of SSL virtual servers.
- Identify common SSL deployments.
- Describe some SSL Exploits and some of the NetScaler configuration settings that can prevent them.

Securing the NetScaler

- Define authentication, authorization, and auditing.
- Describe how to configure authentication and authorization on NetScaler.
- Identify the components and steps required to secure a NetScaler configuration.
- Summarize the use and benefits of Admin Partitions.

Monitoring, Management, and Troubleshooting

- Identify NetScaler Log issues.
- Monitor the NetScaler environment with Simple Network Management Protocol data.
- Leverage AppFlow, Command Center, and Insight features within the NetScaler environment.
- Utilize NetScaler troubleshooting tools.