Citrix ADC 12.x Advanced Concepts - Security, Management and Optimization

Duration: 5 Days   **Course Code: CNS-320**   **Delivery Method: Virtual Learning**

Overview:

This course is designed for individuals with NetScaler experience who will be deploying or managing Citrix NetScaler Application Firewall (AppFirewall) to secure application access in a Citrix NetScaler environment, as well as NetScaler Management and Analytics System (MAS) to administer a Citrix NetScaler environment or optimize NetScaler-managed application delivery traffic.
You will learn the skills required to deploy and manage AppFirewall including types of web attacks, protections and signatures, the adaptive learning engine, AppFirewall policies and profiles, troubleshooting and additional pertinent NetScaler security features. As well as the skills required for deploying and utilizing the NetScaler Management and Analytics System including the ability to manage multiple NetScaler platforms centrally, orchestrate configuration changes, report on transactions passing through the NetScaler environment, visualize infrastructure, and plan expansions. Implementing features such as Caching, Frontend Optimization, NetScaler Web logging, and TCP/HTTP optimization to optimize traffic managed by a NetScaler environment are also incorporated.

At the end of the course, you will be able to configure NetScaler environments to address application services security requirements with AppFirewall, as well as automate and manage network services for scale-out application architectures with Citrix NetScaler Management and Analytics System and optimize NetScaler managed application delivery traffic.

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.
This course combines CNS-318 (3 days) and CNS - 319 (2 days) and are delivered consecutively.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

This course includes an exam.

Target Audience:

Individuals interested in learning the skills required to deploy and manage AppFirewall to secure application access in their Citrix NetScaler environment and NetScaler MAS to administer a Citrix NetScaler environment, or optimize NetScaler-managed application delivery traffic.

Objectives:

- **After completing this course you should be able to:**

- Identify common web attacks and vulnerabilities

- Write PERL compatible regular expressions

- Understand how to utilize the adaptive learning engine

- Configure AppFirewall to protect web applications

- Utilize NetScaler Secure Insight to Monitor, Manage and report on Application Services security

- Troubleshoot AppFirewall

- Manage multiple NetScaler platforms centrally

- Orchestrate configuration changes

- Report on transactions passing through the NetScaler environment

- Visualize infrastructure and plan expansion

Prerequisites:

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

Testing and Certification

Recommended as preparation for the following exams:

1Y0-340 - Citrix NetScaler Advanced Topics – Security, Management,

- **CNS-102** - NetScaler Overview
+

- **CNS-220 -** Citrix NetScaler Essentials and Traffic Management
OR

- **CNS-222 -** Citrix NetScaler Essentials and Unified Gateway
- CNS-225 - Deploy and Manage Citrix ADC 13.x with Traffic Management
- CNS-227 - Deploy and Manage Citrix ADC 13.x with Citrix Gateway

and Optimization

Content:

Days 1-3

Application Firewall Overview

- AppFirewall solution Security Model
- Common Attacks Overview
- PC I- DSS Compliance

App Firewall Policies and Profiles

- Profiles
- Policies
- Engine Settings
- AppFirewall Learning

Regular Expressions

- Forms of Regular Expressions
- Using Regular Expressions
- Meta/Literal Characters
- PCRE
- RegEx Tools
- Regular Expression Scope

Attacks and Protections

- Data Flow with AppFirewall
- Security Checks
- AppFirewall Actions
- Adaptive Learning
- Signatures
- Cookie Protection
- Advanced Form Protection Checks
- URL Protections

AppFirewall Monitoring and Troubleshooting

- AppFirewall and Web Applications
- Logging and Reporting
- Customizing Errors
- Troubleshooting
- Netscaler Insight

Security and Filtering

- IP Reputation
- Rate Limiting
- AppQoE
- HTTP Callout

Days 4-5

NetScaler MAS Introduction

- CAn Introdutction to MAS
- MAS Deployment and Configuration
- Deploying MAS in High Availability
- MAS Instance Management

Managing and Monitoring MAS

- Inventory Management
- User Management
- Analytics and Automation
- SSL Certificate Management

Managing NetScaler Configuration

- Application Management
- StyleBooks
- Configuration Management

NetScaler Web Logging

- Understanding Web Traffic
- Installing and configuring NetScaler Web Logging
- Troubleshooting NetScaler Web Logging

NetScaler Integrated Caching

- Introduction to Integrated Caching
- Static and Dynamic Content
- Request and Response Process Flow
- Understanding Cache Policies
- Identifying Content Group Settings

Front-End Optimization

- Improving Content Delivery
- Front-End Optimization Use Cases
- Understanding Minification
- CSS Optimizations

Tuning and Optimizations

- Connections on the NetScaler
- Connection Profiles
- Queuing on the NetScaler
- Connection Tuning Practices

Additional Information:

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 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.

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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