

## Citrix

### **CNS-320: Citrix (NetScaler) ADC 12.x Advanced Concepts – Security, Management, and Optimization**

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 in this 5-day course.

\$5,000.00

- 5 Days

## **Upcoming Dates**

## **Course Description**

Learn how to configure your Citrix networking environment to address application services security requirements with Citrix Web App Firewall; automate and manage network services for scale-out of application architectures with Citrix Application Delivery Management; and optimize Citrix ADC-managed application delivery traffic. This five-day course for experienced Citrix networking architects, engineers and administrators will teach you to deploy and manage Web App Firewall to protect web applications against different types of attacks. It will also give you a practical understanding of Citrix Application Delivery Management capabilities for centralized management of multiple Citrix ADC platforms, orchestration of changes, transaction reporting, infrastructure visualization and planning.

## **Course Outline**

### **Module 1: Citrix Web App Firewall Overview**

- The Business Problem
- Industry Standards
- Protection Methodologies
- Introducing Citrix Web App Firewall

### **Module 2: Citrix Web App Firewall Profiles and Policies**

- Citrix Web App Firewall Policies
- Citrix Web App Firewall Profiles
- Citrix Web App Firewall Learning
- Citrix Web App Firewall Engine Settings

### **Module 3: Implementing Citrix Web App Firewall Protections**

- Security Checks and Data Flow
- Rules and Adaptive Learning
- Signatures and Comment Stripping
- Top-Level Protections

#### **Module 4: Additional Citrix Web App Firewall Protections**

- Cookie Consistency
- Advanced Form Protection Checks
- URL Protections
- Protecting Sensitive Data

#### **Module 5: Monitoring and Troubleshooting Citrix Web App Firewall**

- Web App Firewall and Web Applications
- Logging and Reporting
- Customizing Errors
- Troubleshooting

#### **Module 6: Security and Filtering**

- Application level Quality of Experience (AppQoE)
- IP Reputation
- Rate Limiting
- HTTP Callout

#### **Module 7: Authentication with Security Assertion Markup Language (SAML)**

- What is SAML?
- Configuring SAML on Citrix ADC

#### **Module 8: Authentication with OAuth, OpenID, and nFactor**

- OAuth and OpenID
- Configuring OAuth on Citrix ADC
- Multi-Factor Authentication with nFactor
- Configuring nFactor

#### **Module 9: Application Delivery Management Introduction**

- An introduction to Application Delivery Management
- Application Delivery Management Deployment and Configuration
- Deploying Citrix Application Delivery Management in High Availability
- Citrix Application Delivery Management Instance Management

## **Module 10: Managing and Monitoring Application Delivery Management**

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

## **Module 11: Managing Citrix ADC Configuration**

- Application Management
- StyleBooks
- Configuration Management

## **Module 12: Citrix ADC Web Logging**

- Understanding Web Traffic
- Installing and configuring ADC 12.x Web Logging
- Troubleshooting ADC 12.x Web Logging

## **Module 13: Integrated Caching**

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

## **Module 14: Front End Optimization**

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

## **Module 15: Tuning and Optimization**

- Connections on the Citrix ADC
- Connection Profiles
- Queuing on the Citrix ADC
- Connection Tuning Practices

## **Audience**

Built for IT Professionals with extensive App Delivery and Security and Citrix ADC experience. This course is built for IT Professionals who are responsible for defining the overall structure or architecture of a Citrix App Delivery and Security environment.

This course encompasses advanced Citrix App Delivery and Security configurations and leading Citrix design principles.

## Prerequisites

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

CNS-225: Deploy and Manage Citrix ADC 13.x with Traffic Management

or

CNS-227: Deploy and Manage Citrix ADC 13.x with Citrix Gateway

## What You Will Learn

- Identify common web attacks and vulnerabilities
- Write PERL compatible regular expressions
- Understand how to operate the adaptive learning engine
- Configure Citrix Web App Firewall to protect web applications
- Utilize ADC 12.x Secure Insight to monitor, manage, and report on Application Services security