TechyEdz Solutions

Training | Consulting | Developement | Outsourcing
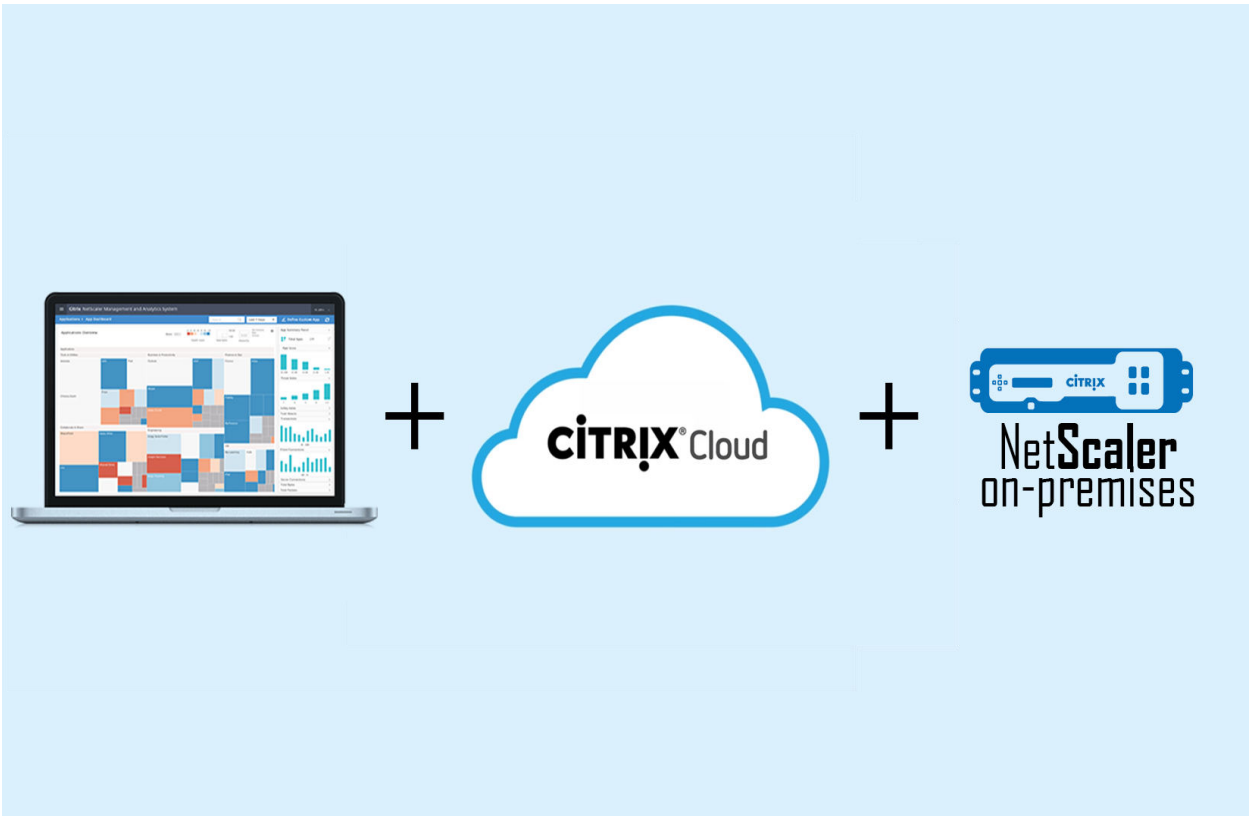
Citrix + NetScaler

📞 9032803832

✉ contact@techyedz.com

💬 9032803832

🌐 www.techyedz.com

Citrix Virtual Apps and Desktops 7 Administration + NetScalar Combo Course

✚ Course Overview:

This course will teach you how to deploy, install, configure, setup profile management, configure policies, printing and basic security features for on-premises Virtual Apps and Desktop solution building, and then migrating to Citrix Cloud. Learn the skills required to implement Citrix ADC Essential components including secure Load Balancing, High Availability, and Citrix ADC Management. At the end of the course, students will be able to configure their Citrix ADC environments to address traffic delivery and management requirements including Load Balancing, Availability, and ADC Operation Management.

✚ Course Outline:

Citrix Virtual Apps and Desktops 7 Administration

1. Architecture Overview

- ➢ Introduction to Citrix Virtual Apps and Desktops
- ➢ Architecture Overview
- ➢ Features
- ➢ Hosting Platform Considerations
- ➢ Citrix Virtual Apps and Desktops Service
- ➢ Connection Flow Process Introduction

2: Deploy the Site

- ➢ Pre-Deployment Considerations
- ➢ Citrix Licensing Setup
- ➢ Delivery Controller Setup
- ➢ Site Setup And Management
- ➢ Redundancy Considerations

3: The Apps and Desktops Images

- ➢ Consider Master Image Creation Methods
- ➢ Master Image Requirements

4: Provision and Deliver App and Desktop Resources

- ➢ Machine Catalogs and Delivery Groups
- ➢ Provisioning Methods and Considerations
- ➢ Machine Creation Services (MCS) Deep Dive
- ➢ MCS Environment Considerations
- ➢ Resource Locations

5: Provide Access to App and Desktop Resources

- ➢ Consider Workspace Experience versus StoreFront
- ➢ Workspace Experience User Authentication
- ➢ Workspace App
- ➢ Communication Flow

6: Manage the User Experience

- ➢ Methods to Manage the User Experience
- ➢ Common User Experience Settings

7: Published App and Desktop Presentation and Management

- ➢ Published App Properties
- ➢ Server OS Published App Optimizations
- ➢ Published App Presentation
- ➢ Application Groups
- ➢ Apps and Desktops Presentation
- ➢ 8: Manage Printing for User Sessions
- ➢ Map Printers to the User Session
- ➢ Printer Drivers
- ➢ Print Environment Considerations

9: Citrix Profile Management

- ➢ Introduction and Considerations
- ➢ Configure Citrix Profile Management

10: Manage the Site

- ➢ Delegated Administration
- ➢ Use PowerShell with Citrix Virtual Apps and Desktops
- ➢ Power Management Considerations

11: Citrix Virtual Apps and Desktops Basic Security Considerations

- ➢ Citrix Admin Security Considerations
- ➢ XML Service Security Considerations
- ➢ Secure HDX External Traffic

12: Monitor the Site

- ➢ Citrix Director Introduction
- ➢ Monitor and Interact with User Sessions
- ➢ Published Apps Analysis
- ➢ Monitor the Machines Running the VDA
- ➢ Site Specific Common Monitoring
- ➢ Alerts and Notifications
- ➢ Optimize Citrix Director Monitoring with Citrix ADM

13: Introduction to Supporting and Troubleshooting Citrix Virtual Apps and Desktops

- ➢ Introduction to Supporting a Citrix Virtual Apps and Desktops Site
- ➢ Tools
- ➢ Proactive Administration Common Tasks

14: Migrate To Citrix Cloud

- ➢ Migration Considerations
- ➢ Citrix Cloud Connector Deployment
- ➢ Citrix Virtual Apps and Desktops with an On-Premises Resource Location
- ➢ The Migration Process

15: Citrix Analytics

- ➢ Citrix Analytics Introduction
- ➢ Prepare to Use Citrix Analytics
- ➢ Types of Analytics

Citrix ADC (Citrix NetScaler)

✚ **Course Outline:**

1. Getting Started

- ➢ Introduction to the NetScaler System
- ➢ TriScale
- ➢ NetScaler Use Cases

- NetScaler Functionality
- NetScaler Overview
- Product Features
- NetScaler Operating System Overview
- nCore Configuration Architecture
- NetScaler File system
- Deployment Scenarios
- Logging in to the NetScaler System
- NetScaler Licenses

2. Basic Networking

- OSI Networking Model
- NetScaler Architecture Overview
- NetScaler-Owned IP Addresses
- Network Topology
- NetScaler Network Interfaces
- Virtual Local Area Networks (VLANs)
- IP Routing
- Determining the Source IP Address
- Packet Forwarding
- Use Source IP Mode
- Client-IP HTTP Header Insertion
- Path MTU Discovery
- Link Aggregation
- Access Control Lists
- Network Address Translation (NAT)

3. NetScaler Platforms

- Architecture and General Concepts
- Hardware Platforms
- Hardware Components
- MPX Overview
- VPX Overview

- CPX Overview
- SDX Overview
- Identify the unique capabilities and functionality of the NetScaler SDX platform
- Identify the networking characteristics of the NetScaler SDX platform

- Explain the process of provisioning and administration of NetScaler VPX instances on a NetScaler SDX appliance

4. High Availability

- High Availability Functionality
- High Availability Node Configuration
- Propagation and Synchronization
- Failover, Route Monitors, Fail Safe
- Propagation, Synchronization
- High Availability Management
- Performing an Upgrade
- Troubleshooting
- Upgrading HA pair

5. Load Balancing

- Local Load Balancing concepts
- Naming conventions
- Persistence
- Service Types
- LB Methods
- Disabling Entities
- Diagnostics/Troubleshooting
- L4 vs L7 for TCP services
- UDP ping vs L7
- Monitor attributes
- Built in L7 monitors
- Monitors from Scripts

- ➢ EAV Monitors
- ➢ ECV Monitors
- ➢ DataStream

6. SSL Offload

- ➢ SSL and TLS
- ➢ SSL Session Process
- ➢ SSL Administration
- ➢ SSL Offload Overview
- ➢ SSL Attacks Overview
- ➢ SSL Troubleshooting
- ➢ Cipher Suites
- ➢ Certificate Management
- ➢ Feature and Benefits
- ➢ Offload Performance

- ➢ Deployment Scenarios
- ➢ Citrix Recommendations for SSL

7. Securing the NetScaler

- ➢ NetScaler Communication Ports
- ➢ Overview of AAA
- ➢ Authentication on the NetScaler
- ➢ NetScaler Users
- ➢ Command Policies
- ➢ Admin Partitions

8. Monitoring, Management, and Troubleshooting

- ➢ Monitoring Needs
- ➢ NetScaler Log Management
- ➢ Simple Network Management Protocol
- ➢ AppFlow on the NetScaler System

- ➢ NetScaler Insight Overview
- ➢ NetScaler Command Center Overview
- ➢ Network Traffic Capture using NSTRACE
- ➢ Troubleshooting with Filter Expressions
- ➢ Decoding SSL Traffic with Wireshark
- ➢ Display NetScaler System Information
- ➢ NetScaler Command Line Tools

9. AppExpert Classic Policy Engine

- ➢ Policies Overview

- ➢ Expression Structures
- ➢ Content Filtering
- ➢ Content Filtering Actions
- ➢ Content Filtering Rules

10. AppExpert Default Policy Engine

- ➢ Understanding Packet-Processing Flow
- ➢ Understanding Policies
- ➢ Policy Process Evaluation Flow
- ➢ Identifying Default Policy Expressions
- ➢ Actions
- ➢ Understanding Bind Points
- ➢ Understanding Policy Labels
- ➢ Pattern Sets
- ➢ Typecasting

11. Rewrite, Responder, and URL Transform

- ➢ Configuring Rewrite Policies and Actions
- ➢ Responder Actions
- ➢ Respond with
- ➢ Responder Action for Timeouts

- ➢ Responder Policies
- ➢ Responder HTML Page Imports
- ➢ Binding Policies
- ➢ URL Transformation
- ➢ URL Transformation Actions
- ➢ Binding of URL Transformations

12. Content Switching

- ➢ Introduction to Content Switching
- ➢ Content Switching Based on Network Characteristics
- ➢ Content-Switching Virtual Servers and Load-Balancing Virtual Servers
- ➢ Configuring Content-Switching Virtual Servers
- ➢ Configure a Load-Balancing Setup for Content Switching
- ➢ Content-Switching Policies
- ➢ Content-Switching Rule Precedence With Priority Specified

13. Global Server Load Balancing

- ➢ DNS overview and records
- ➢ GSLB Deployment Methods
- ➢ GSLB Concepts
- ➢ GSLB Entities
- ➢ GSLB DNS Methods
- ➢ Metric Exchange Protocol
- ➢ Viewing and Configuring GSLB with the Visualizer
- ➢ GSLB Persistence

14. Optimizing Traffic

- ➢ Introduction to Compression
- ➢ Frontend Optimization
- ➢ Surge Queue
- ➢ TCP Optimization

> ➤ HTTP Optimization

15. Clustering (Optional)

> ➤ How Clustering Works
>
> ➤ Cluster Synchronization
>
> ➤ Cluster Communication Interfaces
>
> ➤ Striped and Spotted IP Addresses
>
> ➤ Traffic Distribution

✚ Prerequisites:
> ➤ This course requires basic knowledge of AD, Windows, Storage, Networking and little to no previous experience with the Citrix Virtual Apps and Desktops 7 version
> ➤ VMware vSphere
> ➤ Basic Networking

✚ Who Should Attend:
> ➤ IT Professionals who want to be familiar with Citrix Virtual Apps and Desktops 7 in an on-premises environment and Citrix Cloud.
> ➤ Potential students include administrators or engineers responsible for the end user workspace and overall health and performance of the solution.

✚ Number of Hours: 70hrs

✚ Certification: CCA-V / CC-VAD-CC (CWS-215)

✚ Key Features:
> ➤ One to One Training
> ➤ Online Training
> ➤ Fastrack & Normal Track
> ➤ Resume Modification
> ➤ Mock Interviews
> ➤ Video Tutorials
> ➤ Materials
> ➤ Real Time Projects
> ➤ Virtual Live Experience
> ➤ Preparing for Certification