

# CVAD-301: Citrix Virtual Apps and Desktops Advanced Administration (2402 LTSR)

#### **Duration: 5 Days**

#### **Course Description:**

This course expands foundational administrative skills by introducing scalability, redundancy, and security configurations as well as troubleshooting techniques for common issues. You will learn to build and combine App Layers to optimize management of your application and desktop images. You will learn how to implement Workspace Environment Management to improve logon times, centralize user settings management, and optimize the performance of machines. You will leave this course with a good understanding of how to manage more complex solutions such as multilocation environments with configurations around StoreFront, the Delivery Controllers, App Layering, and Workspace Environment Management.

#### **Target Audience:**

Candidates will have a strong foundational knowledge of Windows Server and Desktop operating systems as well as Active Directory, Policies, Profiles, Networking, and Hypervisors. Prior attendance in CVAD-201 is recommended

#### **Prerequisites:**

- Strong foundational knowledge of:
- Windows Server and Desktop operating systems.
- Active Directory, Policies, Profiles, Networking and Hypervisors.

#### **Course Objectives:**

When you complete this course, you will be able to:

- How to implement advanced administration concepts such as troubleshooting, backups, disaster recovery, scalability and redundancy for a Citrix Virtual Apps and Desktop Site
- Security considerations and configurations including multi-site management using zones.
- Create, administer, and manage App Layering OS, platform, application, elastic, and user layers.
- Integrate Citrix App Layering into a Citrix Virtual Apps and Desktop deployment.
- Install and initialize WEM and integrate into Citrix Virtual Apps and Desktops and Citrix DaaS.
- Configure WEM features to improve the end user environment and virtual resource consumption.
- Migrate an on-premises WEM deployment to WEM service.

#### **Course Outlines:**

## Module 1: Introduction to Citrix Virtual Apps and Desktops Advanced Config, Redundancy, and Scalability

- Site Infrastructure Redundancy and Scalability
- StoreFront and NetScaler Gateway
- Machines Running the Virtual Delivery Agent
- Citrix Virtual Apps and Desktops Redundancy and Scalability

#### **Module 2: Manage CVAD Multiple Locations**

- Zones
- VDA Registration in a Multi-Zone Environment
- Zone Preference
- Optimal Gateway Routing and Zones
- StoreFront Resource Aggregation
- Managing StoreFront Store Subscriptions in a Multi-Location Environment

#### Module 3: Backups and Disaster Recovery

- Backups
- Disaster Recovery Considerations
- Disaster Recovery Process

#### **Module 4: Advanced Authentication Methods**

- Multi-factor Authentication RADIUS and One Time Passwords (OTP)
- Multi-factor Authentication Smart Card Authentication
- Federated Authentication

#### Module 5: App and Data Security

- Introduction to Application Security
- Preventing Jailbreak Attacks
- Minimizing the Impact of Attacks

#### Module 6: Secure VDAs

- Transport Layer Security (TLS) Virtual Delivery Agent (VDA) Encryption
- Microsoft Group Policy Objects (GPOs) and Citrix Policies
- Image Management

#### **Module 7: Introduction to Troubleshooting**

- Troubleshooting Methodology
- Resource Tools and Utilities
- Introduction to PowerShell

#### **Module 8: Troubleshoot Access Issues**

- Troubleshooting StoreFront
- Troubleshooting NetScaler Gateway
- Troubleshooting Access and Authentication
- Troubleshooting App/Desktop Launch

#### **Module 9: Troubleshoot Delivery Controller Issues**

Validating FlexCast Management Architecture (FMA) Services

#### Module 10: Troubleshoot Virtual Delivery Agent (VDA) Registration Issues

Troubleshooting Virtual Delivery Agent (VDA) Registration

#### **Module 11: Troubleshoot HDX Connection Issues**

Troubleshooting HDX Connections

#### Module 12: Intro to App Layering and Architecture Overview

- Citrix App Layering Introduction
- Architecture

#### Module 13: OS Layers

OS Layers

#### Module 14: Platform Layers

Platform Layers

#### Module 15: App Layers

App Layers

#### Module 16: Elastic App Layers and User Layers

- Elastic App Layers
- User Layers

### Module 17: Deploy a Layered Image

Using Layered Images with CVAD