



Document Generated: 10/28/2025

Learning Style: Virtual Classroom

Technology: Citrix

Difficulty: Intermediate

Course Duration: 5 Days

Citrix Virtual Apps and Desktops Advanced Administration (LTSR 2402)



About this Course:

The Citrix Virtual Apps and Desktops Advanced Administration (LTSR 2402) course is designed for experienced IT professionals. It focuses on advanced administration techniques, including scalability, redundancy, security configurations, and

troubleshooting for Citrix Virtual Apps and Desktops environments.

Course Objectives:

- Implement advanced administration concepts such as troubleshooting, backups, disaster recovery, scalability, and redundancy.
- Configure security settings, including multi-site management using zones.
- Create and manage App Layering OS, platform, application, elastic, and user layers.
- Integrate Citrix App Layering and Workspace Environment Management (WEM) into Citrix Virtual Apps and Desktops deployments.
- Optimize the performance of virtual resources and improve user logon times.

Audience:

- IT professionals responsible for managing Citrix Virtual Apps and Desktops environments.
- System administrators, engineers, and architects looking to enhance their skills in advanced Citrix administration.

Prerequisites:

- Windows Server and Desktop operating systems.
- Active Directory, Policies, and Profiles.
- Networking concepts and Hypervisors.

Course Outline:

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

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

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 Layer

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

Module 18: Layer Priority and Maintaining an App Layering Environment

Layer Priority
Updating Layers
Maintaining and Updating the App Layering Environment
Common Citrix App Layering Considerations and Additional Resources

Module 19: Intro to WEM and Architecture Components

WEM Features and Benefits
WEM On-Premises Components and Deployments
WEM Service Components and Deployments
WEM Component Communication Workflows
WEM Service Component Communication Workflows

Module 20: WEM Deployment Install

On-premises WEM: Leading Practice Installation Prerequisites and Steps
Creating the WEM Database
Running the WEM Infrastructure Service Configuration Utility
WEM On-Premises vs WEM Service
WEM Service: Leading Practice Installation Prerequisites and Steps
ADMX Template Configuration
WEM Agent Installation

Module 21: WEM Consoles and Initial Setup

On-Premises WEM and WEM Service Consoles
WEM Web Console

WEM Initial Setup
Migrating GPO settings to WEM

Module 22: WEM System and Log On Optimization

WEM System Optimization Overview
WEM CPU Management
WEM Memory Management
Additional System Optimization Features
WEM Log On Optimization Overview
WEM Assigned Actions
WEM Environmental Settings
Citrix Profile Management In WEM

Module 23: WEM Security and Lockdown Features

WEM Security Management Features
Privilege Elevation and Process Hierarchy Control
WEM Transformer

Module 24: Planning - The WEM Agent

WEM Settings Processing and WEM Agent Caches
WEM Agent Integration with Citrix Virtual Apps and Desktops and Citrix DaaS

Module 25: WEM Monitoring, Reporting, and Troubleshooting

WEM Monitoring and Reporting
WEM On-Premises Troubleshooting
WEM Service Troubleshooting
WEM Agent Troubleshooting

Module 26: Upgrading WEM and Migration to WEM Service

Upgrading Workspace Environment Management
WEM On-Premises Migration to WEM Service