

## CWS-313

### Citrix Virtual Apps and Desktops 7 Advanced Deployment, Troubleshooting, Security and Administration

#### Overview

Designed for experienced IT professionals this course builds on the foundational implementation and management skills introducing scalability, redundancy and security configurations.

You will learn techniques to investigate many of the common issues that can affect environment health and how to solve issues more effectively in the advanced troubleshooting section. You will leave this course with a good understanding of how to manage more complex solutions such as multi-location environments with configurations around StoreFront, the Delivery Controllers, Cloud Connectors and HDX.

#### What you'll learn

- How to implement advanced administration concepts such as backups, disaster recovery, scalability and redundancy for a Citrix Virtual Apps and Desktop 7 Site
- Advanced troubleshooting techniques to troubleshoot Citrix Virtual Apps and Desktop 7
- Security considerations and configurations for Citrix Apps and Desktop 7 site including multi-site management using zones.

#### Prereq. Knowledge

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

CMB-318 - Citrix Virtual Apps and Desktops 7, App Layering, and WEM Administration (Fast-Track) OR CWS-215 - Citrix Virtual Apps and Desktops 7 Administration On-Premises and in Citrix Cloud.

### Is this course for me?

Built for experienced IT Professionals familiar with Citrix Virtual Apps and Desktops 7 in an on-premises environment or Citrix Cloud looking to expand their Citrix Virtual Apps and Desktops skills to an advanced level. Potential students include administrators or engineers responsible for the Citrix Apps and Desktop 7 Site.

### Instructional Method

Classroom or Virtual w/ hands-on labs

### Course Length

3 Days

**Certification:** Partial Preparation or the CCP-V

### Topic Outline

#### Module 1: Implementing Redundancy and Scalability

- StoreFront and Citrix Gateway
- Site Infrastructure
- Machines Running the Virtual Delivery Agent

#### Module 2: Managing a Virtual Apps and Desktops Environment with Multiple Locations

- Zones
- VDA Registration in a Multi-Zone Environment
- Zone Preference
- Optimal Gateway Routing and Zones
- Managing StoreFront Store Subscriptions in a Multi-Location Environment
- StoreFront and Citrix ADC Branding

### Module 3: Implementing Backups and Disaster Recovery

- Backups
- Disaster Recovery Considerations
- Disaster Recovery Process

### Module 4: Implementing Advanced Authentication Methods

- Multi-factor Authentication - RADIUS & OTP
- Multi-factor Authentication - Smart Card Authentication
- Federated Authentication - ADFS, SAML, and FAS

### Module 5: Improving App and Data Security

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

### Module 6: Securing Machines Running the Virtual Delivery Agent

- TLS to VDA Encryption
- GPOs and Citrix Policies
- Image Management

### Module 7: Introduction to Troubleshooting

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

## Module 8: Troubleshooting Access Issues

- Troubleshooting StoreFront
- Troubleshooting Citrix Gateway

## Module 9: Troubleshooting Delivery Controller Issues

- Validating FMA Services

## Module 10: Troubleshooting VDA Registration Issues

- Troubleshooting VDA Registration

## Module 11: Troubleshooting HDX Connection Issues

- Troubleshooting HDX Connections