

# Citrix

# CXA-206-1: Citrix XenApp 6.5 Basic Administration

Learn to install, configure & manage Citrix XenApp applications for Windows Server 2008 R2. This 5-day course is frequently available online with Remote Live™

\$5,000.00

• 5 Days

# **Upcoming Dates**

## **Course Description**

Citrix XenApp 6.5 Basic Administration training course provides the foundation necessary for administrators to effectively centralize and manage applications in the datacenter and instantly deliver them as a service to users anywhere. Learners will receive training for installing and configuring Citrix XenApp 6.5 for Windows Server 2008 R2, Citrix Receiver and plug-ins, as well as for using administrative consoles and tools to configure resources, policies, server and farm settings, printers, virtualized applications and more.

# **Course Outline**

### 1. Introducing Basic Administration for Citrix XenApp 6

- XenApp Editions
- XenApp Features
- XenApp Architecture
- ° XenApp Components
- ° Single and Multiple Farm Environments
- $^\circ\,$  XenApp Servers: Session host-only and Controllers
- ° Data Store
- $^\circ\,$  Data Store Updates and the Local Host Cache
- ° Independent Management Architecture
- $^{\circ}\,$  Data Collectors
- $^{\circ}\,$  Data Collector Election
- $^{\circ}$  Zones
- Additonal XenApp Components
- AppCenter
- Test Your Knowledge

#### 2. Licensing XenApp

- Overview
- To License XenApp
- ° Licensing Communication
- ° License Communication Process
- ° License Types

- ° Citrix License Server
- ° Microsoft Remote Desktop Services
- ° Remote Desktop Licensing
- ° Additional Licensing Considerations
- License Administration Console
- Port Configuration
- Delegated Administrators in the License Administration Console
- Manual Installation and Configuration
- Removing Licensing
- License Server Considerations
- Obtaining License Files
- To Add License Files
- Subscription Advantage
- Additional License Server Processes
- License Server Clustering
- Installing Licensing
- License File Management
- High Availability Considerations
- Test Your Knowledge

## 3. Installing XenApp

- Overview
- XenApp Server Role Manager
- Hardware Requirements
- Software Requirements
- Installation Decisions
- Server Configuration Tool
- Dyamic Data Center Provisioning
- Role-based Uninstall
- XenApp Configuration Options
- $^{\circ}\,$  Which Farm or Zones Will Be Used in the Environment?
- ° Which Server Will Be Used as the License Server?
- $^\circ\,$  Which Database Engine Will Be Used for the Data Store Database?
- $^\circ~$  Will Shadowing Be Enabled?
- $^{\circ}~$  On Which Port Will the Citrix XML Service Run?
- $^{\circ}\,$  When Will Users Be Added to the Local Remote Desktop Users Group?
- ° Will Pass-through Authentication Be Used in the Environment?
- $^{\circ}\,$  Will Information in the Data Store and Configuration Logging Databases be Protected with IMA Encryption?
- Web Interface Installation Decisions
- Test Your Knowledge

### 4. Configuring XenApp Administration

- Overview
- Worker Groups
- Managing Worker Groups
- Administrator Privilege Levels
- Creating Administrator Accounts
- Configuring Administrator Permissions
- Configuring Folder Permissions
- Delegating Administration
- Creating the Configuration Logging Database
- Configuration Logging Database Settings
- Enabling Configuration Logging

- Configuration Logging
- Test Your Knowledge

## 5. Installing and Configuring Web Interface

- Overview
- Web Interface Ports
- ° Web Interface Communication Process
- Web Interface Installation
- Installing the Web Interface
- Creating a Web Interface Site
- Site Creation Considerations
- XenApp Web Site Configuration Options
- XenApp Services Site Configuration
- Site Creation
- Web Interface Site Modification
- Modifying the Web Interface Configuration File
- Using the Web Interface Management Console
- Site Customization Options
- Session Preferences
- Session Options
- User Options
- Workspace Control Functionality
- Workspace Control Configuration Options
- Workspace Control User Customization
- Configuring Workspace Control
- Session Termination
- Plug-in Deployment Options
- Automatically Detecting Plug-ins
- Client Detection
- Authentication Options
- Generic RADIUS Support
- Explicit Authentication
- Pass-through Authentication
- Smart Card Authentication
- Citrix XML Service Trust Relationships
- Access Methods
- Network Address Translation
- Network Address Translation Access Types
- Configuring Multiple Farms
- Adding Farms
- Configuring Load Balancing
- Enabling Fault Tolerance
- Specifying the XML Communication Port
- Ticket Expiration Settings
- Specifying Citrix Plug-in Backup URLs
- Site Appearance
- Workspace Control
- Citrix Plug-ins and Web Interface
- Authentication Configuration
- Secure Access Configuration
- Server Configuration
- Web Interface Site Removal
- Troubleshooting Web Interface Issues
- Test Your Knowledge

### 6. Delivering Applications and Content

- Overview
- Published Resources

- ° Published Resource Types
- ° Resource Publishing Phases
- $^\circ\,$  Resource Name and Location
- ° Server Assignment
- ° Configured or Anonymous Accounts
- $^{\circ}~$  Users and Groups
- ° Resource Publishing Settings
- VM Hosted Apps
- Components of VM Hosted Apps
- Organizing Published Resources for Users
- Access Control
- Content Redirection
- Implementing Resource Limits and Client Options
- Configuring Resource Appearance
- Session Pre-Launch
- Managing Connections to Resources
- Disabling or Hiding a Published Resource
- Advanced Published Resource Settings
- Published Resource Configuration
- Troubleshooting Application Delivery Issues
- Test Your Knowledge

#### 7. Streaming Applications

- Overview
- ° Application Streaming
- ° Application Streaming Benefits
- ° Application Streaming Components
- ° Application Streaming Communication Process
- ° Streaming App-V Packages
- Citrix Offline Plug-in
- Citrix Offline Plug-in Cache
- Citrix Offline Plug-in Installation
- Profiling Process
- Installing the Citrix Streaming Profiler
- Creating a Profile
- Profile Security Setting
- Targets
- Inter-Isolation Communication
- Profile Preference Settings
- Profile System Requirements
- Profile Installation Types
- Profile Properties
- Known Limits for Profiling Applications
- Target Properties
- Upgrading an Application in a Target
- Citrix Streaming Profiler
- Application Delivery Methods
- The Use Web Delivery Method
- Specifying an Alternate Profile for a Published Application
- Enabling the Least-Privileged User Account
- To Stream to Servers
- Publishing a Streamed Application
- Indirect Membership to the Offline Access List
- Providing Offline Access

- Offline Access Period
- Renewing Offline Access Period
- Application Caching
- Pre-Deployment of Streaming Applications
- Configuring Sites for Streaming Applications
- Support for Both Remote and Streaming Applications
- Offline Access Management
- Troubleshooting Streaming Issues
- Test Your Knowledge

## 8. Configuring Policies

- Overview
- Group Policy Integration
- ° IMA-based Group Policies
- $^{\circ}\,$  Group Policy Extensions
- $^{\circ}\,$  Group Policy Architecture
- Policy Evaluation
- Policy Application Process
- Policy Processing and Precedence
- Policy Changes Example
- Policy Precedence Exceptions
- Policy Rules
- Support for Policy Templates
- Policy Filtering
- Policy Modeling
- Test Your Knowledge

## 9. Configuring Load Management

- Overview
- Load Manager
- Load Balancing
- <sup>o</sup> Load Balancing Process
- Load Calculation
- Load Calculations
- Creating Custom Load Evaluators
- Thresholds for Load Management
- Assigning Load Evaluators to Servers and Applications
- Creating Load Balancing Policies
- Force Application Streaming
- Preferential Load Balancing Example
- Preferential Load Balancing Considerations
- Load Evaluator Configuration
- Load Balancing Policies
- Preferential Load Balancing
- Troubleshooting Load Management Issues
- Test Your Knowledge

### 10. Optimizing the User Experience

- Overview
- Optimizing Session Performance
- $^{\circ}\,$  Enabling Display Settings
- HDX Broadcast Session Reliability

- Enabling HDX Broadcast Session Reliability
- HDX Broadcast Session Reliability Considerations
- Enabling HDX RealTime
- Understanding HDX RealTime Design Considerations
- Enabling HDX Plug-n-Play
- Understanding HDX Plug-n-Play Design Considerations
- HDX RealTime
- HDX Plug-n-Play
- Enabling HDX 3D Image Acceleration
- Enabling HDX 3D Progressive Display
- Differentiating User Profile Types
- Redirecting User Data
- Managing User Profiles
- Enabling Profile Management
- Understanding the Profile Management Logon Process
- HDX MediaStream Windows Media Redirection
- HDX MediaStream Flash Redirection
- HDX 3D Image Acceleration
- HDX 3D Progressive Display
- User Profiles
- Troubleshooting User Experience Issues
- Test Your Knowledge

## 11. Configuring Self-Service Applications

- Overview
- Self-Service Applications Technologies
- $^{\circ}~$  Citrix Receiver Citrix Receiver for Windows
- $^{\circ}\,$  Citrix Receiver for Macintosh
- Citrix Merchandising Server
- Citrix Merchandising Server Architecture
- Supported Plug-ins, Clients and Receivers
- Plug-in Delivery
- Client for Java
- Installation Considerations
- Plug-ins
- Troubleshooting Self-Service Application Issues
- Test Your Knowledge

### 12. Configuring Printing

- Overview
- Printing Concepts
- $^{\circ}~$  Printing Definitions
- ° Printer Types
- ° Printing Security
- Default Printing Behavior
- Altering the Default Printing Behavior
- Printer Provisioning
- Printer Auto-Creation
- Network Printing Pathway
- Client Printing Pathway
- Printing Pathway Demonstration
- Printer Driver Types
- Enhanced MetaFile Format

- Print Preview
- Citrix Universal Printer
- Configuring Citrix Universal Printing
- Adding a Network Printer
- Editing Network Printer Settings
- Specifying the Default Printer
- Configuring Proximity Printing
- Printing Properties
- Printing Preference Hierarchy
- Configuring Printer Property Retention
- User Self-Provisioning
- Printing Pathways
- Printer Drivers
- Citrix Universal Printing
- Administrator-Assigned Network Printers
- Workspace Control and Proximity Printing
- Printing Preferences
- Printing Bandwidth
- Troubleshooting Printing Issues
- Test Your Knowledge

#### 13. Securing XenApp

- Overview
- XenApp Security Solutions
- SecurelCA
- Citrix SSL Relay
- SSL Relay Communication
- Configuring SSL Relay
- Access Gateway
- <sup>°</sup> Access Gateway Deployment Scenarios
- ° Access Gateway Communications
- ° Digital Certificates
- $^{\circ}\,$  Securing Access to Hosted Applications
- ° SmartAccess
- ° Web Interface Configuration
- Access Methods
- Access Gateway Settings
- Configuring Web Interface for Access Gateway Connections
- Security Configuration Best Practices
- Troubleshooting Access Gateway with XenApp
- Test Your Knowledge

#### 14. Monitoring XenApp

- Overview
- Health Monitoring and Recovery
- Service Monitoring for XenApp
- <sup>o</sup> Service Monitoring Components
- $^{\circ}\,$  Service Monitoring Communication
- License Usage Monitoring
- Configuring License Alerts
- Viewing License Usage
- Viewing Historical License Data
- Workflow Studio Architecture

- Workflow Automation Use Cases
- Workflow Studio Overview
- Accessing the Farm using PowerShell
- Administering the Farm using Commands
- Test Your Knowledge

#### **15. Additional Components**

- Overview
- SmartAuditor
- ° SmartAuditor Components
- $^\circ\,$  Session Recording Process
- Single Sign-on
- Single Sign-on Components
- Single Sign-on Process
- Branch Repeater Components
- Branch Optimization Process for the Plug-in
- Provisioning Services Components
- Branch Optimization
- XenServer Components
- Provisioning Services
- Power and Capacity Management
- XenServer
- Test Your Knowledge

# Audience

This course is intended for IT professionals, such as server, network and systems administrators familiar with Microsoft Windows environments, including Windows 2008 R2 administrators interested in becoming a XenApp administrator. Existing XenApp administrators or systems engineers interested in updating their XenApp skills, receiving Citrix authorized training on XenApp 6.5, or achieving certification for XenApp 6.5 are ideal candidates. Systems engineers, sales engineers, analysts, consultants and architects also are also appropriate candidates for this course.

# Prerequisites

Before taking this course, Citrix recommends that learners have the following:

- Familiarity with Microsoft Windows Server 2008 R2
- Experience with Microsoft SQL Server or enterprise database servers
- Experience with Active Directory and Group Policy
- Basic understanding of Microsoft Remote Desktop Services
- Familiarity with application virtualization technologies, such as Citrix application streaming or Microsoft App-V
- Basic understanding of Windows Server networking concepts, such as DNS, IIS®, load balancing, and file and printing services
- Exposure to basic system administration concepts, including logging, software upgrade procedures and high availability operations
- Familiarity with server monitoring tools
- Basic understanding of VPN concepts, including SSL encryption and certificates

## What You Will Learn

Topics covered in this course include:

- Introducing XenApp
- Licensing XenApp
- Installing XenApp
- Administrative Configuration

- Installing and Configuring Web Interface
- Delivering Applications and Content
- Streaming Applications
- Configuring Policies
- Configuring Load Management
- Optimizing the User Experience
- Configuring Self Service Applications
- Configuring Printing
- XenApp Security
- Monitoring XenApp
- Additional Components