



# CXA-204-2 Basic Administration for Citrix XenApp 6

Basic Administration for Citrix XenApp 6 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 Citrix XenApp 6 for Windows Server 2008 R2 and the associated Citrix plug-ins, as well as for using administrative consoles and tools to configure resources, policies, server and server farm settings, printers, virtualized applications and more.

#### Audience

This course is intended for IT professionals, such as server, network and systems administrators familiar with Microsoft Windows environments. Systems engineers, sales engineers, analysts, consultants and architects also are appropriate candidates for this course.

#### **Preparatory Recommendations**

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 Remote Desktop Services (previously called Terminal Services)
- Familiarity with application virtualization technologies, such as Citrix application streaming or Microsoft App-V (previously called SoftGrid)
- 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

# Key Skills

Topics covered in this course include:

- Introduction and Course Overview
- Introducing Basic Administration for XenApp 6
- 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

## **Instructional Method**

This course is offered as an instructor-led or self-paced online training course and can include virtual labs or classroom discussion, as well as demonstrations and the practical application of concepts through hands-on exercises.

# **Course Length**

30 hours or 5 days

### Registration

For more information and to register for this course, please go to www.citrixeducation.com

## **Topic Outline**

Provided is the topic outline for CXA-204-2.

# Module 1: Introduction and Course Overview

- Overview
- Course Outline
- Citrix Education
- o Course Evaluation and Completion Certificate

#### Module 2: Introducing Basic Administration for Citrix XenApp 6

- XenApp 6 Editions
- XenApp 6 Features
- XenApp Architecture
  - XenApp Components
  - Single and Multiple Farm Environments
  - Data Store
  - Data Store Updates and the Local Host Cache
  - Independent Management Architecture
  - Data Collectors
  - Data Collector Election
  - Zones
  - Additional XenApp Components
- Delivery Services Console
- Review

#### Module 3: Licensing XenApp.49

- o Overview
- XenApp Licensing
  - Licensing Communication
  - License Communication Process
  - License Types
  - Citrix License Server 11.6.1
  - Microsoft Remote Desktop Services
  - Additional Licensing Considerations
- License Administration Console
  - Port Configuration
  - Delegated Administrators in the License Administration Console
- Installing Licensing

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- Manual Installation and Configuration
- Uninstalling Licensing
- License Server Considerations
- License File Management
  - Obtaining License Files
  - Importing License Files

- Subscription Advantage
- High Availability Considerations
  - Additional License Server Processes
    - License Server Clustering
- o Review

#### Module 4: Installing XenApp

- Overview
- Installation Decisions
- XenApp Server Role Manager
- Web Interface Installation Decisions
- $\circ \quad \text{Unattended Installation and Configuration}$
- Hardware Requirements
- Software Requirements
- XenApp Configuration Options
  - Which Farm or Zones Will Be Used in the Environment?
  - Which License Server Will Be Used for the Server Farm?
  - Which Database Engine Will Be Used for the Data Store Database?
  - Will Shadowing Be Enabled?
  - On Which Port Will the Citrix XML Service Run?
  - When Will Users Be Added to the Local Remote Desktop Users Group?
  - Which Pass-through Client Will Be Used in the Environment?
  - Will Pass-through Authentication Be Used in the Environment?
  - Will Information in the Data Store and Configuration Logging Databases be Protected with IMA Encryption?
- o Review

## Module 5: Configuring XenApp Administration

- Overview
- Worker Groups
  - Publishing Applications to Worker Groups
  - Prioritizing Worker Groups
  - Filtering Policies to Worker Groups
- Administrator Privilege Levels
  - Creating Administrator Accounts
  - Configuring Administrator Permissions
  - Configuring Folder Permissions
  - Delegating Administration
- Configuration Logging
  - Creating the Configuration Logging Database
  - Configuration Logging Database Settings
  - Enabling Configuration Logging
- o Review

#### Module 6: Installing and Configuring Web Interface

- Overview
- Architecture and Communications
  - Web Interface Communication Process
- Web Interface Installation
  - Installing the Web Interface
- Site Creation
  - Creating a Web Interface Site
  - Site Creation Considerations
  - XenApp Web Site Configuration Options
  - XenApp Services Site Configuration
- Web Interface Site Modification
  - Modifying the Web Interface Configuration File
  - Using the Web Interface Management Console

- Specifying Citrix Plug-in Backup URLs
- Site Appearance
  - Site Customization Options
  - Practice A
  - Session Preferences
  - Session Options
  - User Options
- Workspace Control

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- Workspace Control Functionality
- Workspace Control Configuration Options
- Workspace Control User Customization
- Configuring Workspace Control
- Citrix Plug-ins and the Web Interface
  - Plug-in Deployment Options
  - Automatically Detecting Plug-ins
  - Client Detection
  - Client for Java
- Authentication Configuration
  - Authentication Options
  - Generic RADIUS Support
  - Explicit Authentication
  - Pass-through Authentication
  - Smart Card Authentication
  - Citrix XML Service Trust Relationships
  - Practice B
  - Secure Access Configuration
    - Access Methods
    - Network Address Translation
    - Network Address Translation Access Types
- o Client-side Proxy Settings
  - Configuring Client-side Proxy Settings
- Server Configuration
  - Configuring Multiple Server Farms
  - Adding Farms
  - Configuring Load Balancing
  - Enabling Fault Tolerance
  - Specifying the XML Communication Port
  - Ticket Expiration Settings
  - Web Interface Site Removal
- Troubleshooting Web Interface Issues
- Review

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#### **Module 7: Delivering Applications and Content**

- Overview
- Published Resources
  - Published Resource Types
  - Resource Publishing Phases
  - Resource Name and Location
  - Server Assignment
  - Configured or Anonymous Accounts
  - Users and Groups
  - Resource Publishing Settings
- VM Hosted Apps
  - Components of VM Hosted Apps
- o Organizing Published Resources for Users
- Advanced Published Resource Settings
  - Access Control
  - Content Redirection
  - Implementing Resource Limits and Client Options

- Configuring Resource Appearance
- Published Resource Configuration
  - Managing Connections to Resources
    - Disabling or Hiding a Published Resource
- Troubleshooting Application Delivery Issues
- o Review

## **Module 8: Streaming Applications**

- Overview
- Application Streaming
  - 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
- Citrix Streaming Profiler
  - 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
- Application Delivery Methods
  - The Benefits of Streaming with Dazzle
- The Web Delivery Method
- Streaming to Servers
- Publishing a Streamed Application
  - Specifying an Alternate Profile for a Published Application
  - Enabling the Least-Privileged User Account
- Configuring Sites for Streaming Applications
  - Support for Both Remote and Streaming Applications
- Offline Access Management
  - Indirect Membership to the Offline Access List
  - Providing Offline Access
  - Offline Access Period
  - Renewing Offline Access Period
  - Application Caching
  - Pre-Deployment of Streaming Applications
- Troubleshooting Streaming Issues
- Review

## **Module 9: Configuring Policies**

o Overview

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- Group Policy Integration
  - IMA-based Group Policies
  - Group Policy Extensions
  - Group Policy Architecture
- Policy Evaluation
  - Policy Application Process
  - Policy Processing and Precendence
- Policy Rules

- Policy Filtering
- Policy Modeling and Troubleshooting
- Review

# Module 10: Configuring Load Management

- o Overview
- Load Manager
- Load Balancing
  - Load Balancing Process
- Load Calculation
  - Load Calculations
- Load Evaluator Configuration
  - Creating Custom Load Evaluators
  - Thresholds for Load Management
  - Assigning Load Evaluators to Servers and Applications
- Load Balancing Policies
  - Creating Load Balancing Policies
  - Force Application Streaming
- Preferential Load Balancing
  - Preferential Load Balancing Example
  - Preferential Load Balancing Considerations
- Troubleshooting Load Management Issues
- Review

# Module 11: Optimizing the User Experience

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- o Optimizing Session Performance
  - Enabling Display Settings
- HDX Broadcast Session Reliability
  - Enabling HDX Broadcast Session Reliability
  - HDX Broadcast Session Reliability Considerations
- HDX RealTime
  - Enabling HDX RealTime
  - Understanding HDX RealTime Design Considerations
- HDX Plug-n-Play
  - Enabling HDX Plug-n-Play
  - Understanding HDX Plug-n-Play Design Considerations
  - HDX MediaStream Multimedia Acceleration
    - HDX MediaStream Multimedia Acceleration Benefits
    - Enabling HDX MediaStream Multimedia Acceleration
- HDX MediaStream for Flash
  - Enabling HDX MediaStream for Flash
- SpeedScreen Latency Reduction
  - Enabling SpeedScreen Latency Reduction
- HDX 3D Image Acceleration
  - Enabling HDX 3D Image Acceleration
- HDX 3D Progressive Display
  - Enabling HDX 3D Progressive Display
- Practice: Determing the Session Optimization Technology
- User Profiles
  - Differentiating User Profile Types
  - Redirecting User Data
  - Managing User Profiles
  - Enabling Profile Management
  - Understanding the Profile Management Logon Process
- Troubleshooting User Experience Issues
- o Review

# Module 12: Configuring Self-Service Applications

- Overview
- o Citrix Receiver
  - Citrix Receiver for Windows
  - Citrix Receiver for Macintosh
- o Citrix Merchandising Server
  - Citrix Merchandising Server Architecture
- Citrix Dazzle
  - Citrix Dazzle Communication Process
- Plug-ins
  - Plug-in Delivery
  - Citrix Online Plug-in for Windows
  - Citrix Online Plug-in for Mac
  - Client for Java
  - Citrix Receiver for Linux
- Troubleshooting Self-Service Application Issues
- Review

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## Module 13: Configuring Printing

- $\circ$  Overview
- Printing Concepts
  - Printing Definitions
  - Printer Types
  - Printing Security
  - Default Printing Behavior
    - Altering the Default Printing Behavior
- Printer Provisioning
  - User Self-Provisioning
  - Printer Auto-Creation
  - Practice: Printing Definitions
  - Printing Pathways
    - Network Printing Pathway
    - Client Printing Pathway
    - Printing Pathway Demonstration
- Printer Drivers
  - Printer Driver Types
  - Practice: Printer Drivers
- Citrix Universal Printing
  - Enhanced MetaFile Format
  - Print Preview
  - Citrix Universal Printer
  - Configuring Citrix Universal Printing
- o Administrator-Assigned Network Printers
  - Adding a Network Printer
  - Editing Network Printer Settings
  - Specifying the Default Printer
  - Workspace Control and Proximity Printing
    - Configuring Proximity Printing
- Printing Preferences
  - Printing Properties
  - Printing Preference Hierarchy
  - Configuring Printer Property Retention
- Printing Bandwidth
- Troubleshooting Printing Issues
- Review

## Module 14: Securing XenApp

- Overview
- XenApp Security Solutions

- o SecureICA
- Citrix SSL Relay
  - SSL Relay Communication
  - Configuring SSL Relay
- Access Gateway
  - Access Gateway Deployment Scenarios
  - Access Gateway Communications
  - Digital Certificates
  - 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
- Review

#### Module 15: Monitoring XenApp

- o Overview
- Health Monitoring and Recovery
- EdgeSight Monitoring
  - EdgeSight Components
  - EdgeSight Communication
- License Usage Monitoring
  - Configuring License Alerts
  - Viewing License Usage
    - Viewing Historical License Data
- Workflow Studio Overview
  - Workflow Studio Architecture
  - Workflow Automation Use Cases
- Accessing the Server Farm using PowerShell
- Administering the Server Farm using Commands
- o Review

#### Module 16: Additional Components

- Overview
- SmartAuditor
  - SmartAuditor Components
    - Session Recording Process
- Single Sign-on

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- Single Sign-on Components
- Single Sign-on Process
- EasyCall Voice Services
  - EasyCall Components
  - EasyCall Process
- Branch Optimization
  - Branch Repeater Components
  - Branch Optimization Process for the Plug-in
- Provisioning Services
  - Provisioning Services Components
- Power and Capacity Management
  - Power Management
  - Load Consolidation
  - Power and Capacity Management Components
  - Power Setpoints
- o XenServer
  - XenServer Components
- o Review

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