Citrix XenDesktop 5 Administration

Course Summary

Description

This course provides the foundation necessary for administrators to effectively centralize and manage desktops in the datacenter and deliver them as a service to users anywhere. Students will learn how to select a desktop delivery model for each user group based on their needs, build proof-of-concept and production XenDesktop environments, assign virtual desktops to users and customize the user experience through policies. This course also provides instruction on how to build a Provisioning services farm to enable single-image desktop management, and how to host virtual machines on the client device using Citrix XenClient.

Objectives

At the end of this course, students will be able to:

- Determine the best Flexcast delivery model for each user group.
- Build a XenDesktop proof-of-concept environment.
- Configure a XenServer host for desktop delivery.
- Build and configure a production XenDesktop site.
- Manage virtual desktops as a single entity by creating a desktop catalog.
- Modify a desktop image without impacting user productivity.
- Restrict or allow certain XenDesktop features using policies.
- Monitor site activity and troubleshoot issues in Desktop Director.
- Install and configure Provisioning services.
- Copy a desktop image to a virtual disk that can be streamed to virtual and physical target devices.
- Identify the XenClient infrastructure.
- Install and configure Synchronizer for XenClient.

Topics

- Introducing XenDesktop
- Configuring the Hypervisor for Desktop Delivery
- Installing and Configuring XenDesktop
- Managing Desktop Catalogs and Groups
- Customizing the User Experience
- Monitoring XenDesktop Sites
- Streaming Desktops to Virtual and Physical Machines
- Creating a Shared vDisk
- Administering Provisioning Services Components
- Delivering Local VM Desktops

Audience

This course is designed for IT professionals, such as server, network and system administrators, system engineers, analysts, consultants, architects Citrix Partner Network members.

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Course Summary (cont'd)

Prerequisites

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

- A basic knowledge of the purpose and goals of virtualization technology
- An understanding of computing architecture, including network and storage devices, device drivers and operating systems
- Basic experience installing and administering Windows Server 2008 R2
- Basic understanding of server, desktop and application virtualization concepts

Duration

Five days

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Course Outline

I. Introducing XenDesktop

A. Five Core Strengths of XenDesktop
B. Desktop Virtualization
C. XenDesktop Product Family
D. Test Your Knowledge: XenDesktop Product Family
E. FlexCast
F. Use Cases
G. Virtual Desktop Models
H. Test Your Knowledge: Virtual Desktop Models
I. HDX Technologies
J. Hosted Desktop Delivery
K. Quick Deploy
L. Quick Deploy System Requirements
M. To Run Quick Deploy

II. Configuring the Hypervisor for Desktop Delivery

A. Virtualization
B. Virtualization Components
C. Hypervisors
D. Hypervisor Role in Desktop Delivery
E. Test Your Knowledge: The Hypervisor Role in Desktop Delivery
F. Windows Virtual Machine Architecture
G. Installation from an ISO
H. To Create an ISO Library
I. Windows Virtual Machine Device Support
J. Windows Virtual Machine Creation
K. XenServer Tools
L. Test Your Knowledge: To Create an ISO Library
M. Test Your Knowledge: Windows Virtual Machine Creation
N. Templates and Life-Cycle Operations
O. Virtual Machine Templates
P. To Provision a New Virtual Machine Using a Template
Q. Virtual Machine Export and Import
R. Virtual Machine Duplication
S. Test Your Knowledge: Export, Import, and Copy Virtual Machines
T. Snapshots
U. Virtual Machine Operations
V. XenConvert
W. To Convert a Server or Desktop to a Virtual Machine
X. Virtual Machine Resource Management
Y. Events and Alerts
Z. Resource Pools
AA. Virtual Machine Movement
BB. Network Components and Architecture
CC. External Networks
DD. Internal-only Network
EE. NIC Bonds
FF. To Create a NIC Bond in XenCenter
GG. VLANs
HH. Storage
II. Storage Repositories
JJ. Remote Storage
KK. Storage Capability Comparison
LL. Test Your Knowledge: Storage Components
MM. Troubleshooting Hypervisor Issues

III. Installing and Configuring XenDesktop

A. XenDesktop Architecture
B. Production Site Configuration
C. License File Management
D. Obtaining License Files
E. Security Considerations
F. Active Directory Considerations
G. Supported Active Directory Environments
H. Active Directory-Based Controller Discovery
I. Active Directory Objects
J. Test Your Knowledge: Active Directory Considerations
K. Configuring a XenDesktop Site
L. To Configure a XenDesktop Site
M. Web Interface
N. Web Interface Considerations
O. Desktop Delivery Communication Process
P. Access Gateway
Q. ICA Proxy Mode
R. Access Gateway Deployment Scenarios
S. Access Gateway Communications
T. Access Gateway Authentication

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Course Outline (cont'd)

U. Single Sign-on to Web Interface
V. SmartAccess

IV. Managing Desktop Catalogs and Groups

A. Administration Roles
B. To Add an Administrator Account
C. Preparing a Virtual Desktop for Delivery
D. Virtual Desktop Agent Installation
E. Virtual Desktop Agent Wizard Settings
F. Manual Firewall Configuration
G. Machine Creation Services
H. Machine Creation Services Host and Storage Requirements
I. Desktop Catalogs
J. Machine Types
K. Pooled Machine Type
L. Dedicated Machine Type
M. Existing Machine Type
N. Physical Machine Type
O. Streamed Machine Type
P. Virtual Desktop Updates
Q. To Modify the Master Virtual Machine
R. To Revert to the Previous Master Virtual Machine
S. Desktop Groups
T. Desktop Group Types
U. Desktop Group Examples
V. To Create a Desktop Group
W. Power Management
X. Pools and Buffers
Y. To Configure Power Management
Z. Troubleshooting Desktop Catalog and Group Issues

V. Customizing the User Experience

A. User Device Types
B. Display Modes
C. Citrix Receiver
D. Citrix Receiver for Windows
E. Citrix Receiver for Windows System Requirements
F. Citrix Receiver for Macintosh
G. Citrix Merchandising Server
H. Citrix Merchandising Server Architecture
I. Profile Management
J. User Profiles
K. User Profile Types
L. Redirecting User Data
M. Managing User Profiles
N. Profile Management Logon Process
O. To Enable Profile Management
P. FlexCast for Apps
Q. Application Delivery Method
R. Test Your Knowledge: Application Delivery Method
S. XenDesktop Policies
T. Policy Creation
U. To Create a Policy
V. Policy Settings
W. Policy Setting Best Practices
X. Policy Prioritization
Y. Test Your Knowledge: Policies, Printers, and Client Drive Mapping
Z. Troubleshooting Customization Issues

VI. Monitoring XenDesktop Sites

A. Desktop Director
B. Installing Desktop Director
C. Accessing Desktop Director
D. Desktop Director Pages
E. Filters
F. Searching for a User or Machine
G. User and Machine Management
H. Managing Machines
I. Managing End Users
J. User Shadowing
K. To Shadow a User
L. Troubleshooting Site Monitoring Issues

VII. Streaming Desktops to Virtual and Physical Machines

A. Streamed VHDs and Catalogs
B. Provisioning Services
C. Citrix Provisioning Services Infrastructure
D. Citrix Provisioning Services Components
E. Key Services
F. Provisioning Services Administration
G. Installation Planning
H. Network Boot Services
I. Boot Process

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Course Outline (cont'd)

J. DHCP Deployment Options
K. DHCP Configuration
L. Provisioning Services Farm Design
M. Farms
N. SQL Database Server
O. Service Account Permissions
P. Sites
Q. Stores
R. Write Caches
S. Storage Requirements
T. Sample vDisk Storage Requirements
U. Provisioning Services Installation
V. To Install Provisioning Services
W. Provisioning Services Configuration
X. To Configure a Provisioning Services Farm
Y. Store Configuration
Z. Troubleshooting Provisioning Services Installation and Configuration

VIII. Creating a Shared vDisk

A. vDisk Image Modes
B. Standard Image Mode
C. Difference Disk Image Mode
D. Private Image Mode
E. Write-Cache Types
F. Cache on Server Disk
G. Cache on Server Disk: Local Storage
H. Cache on Server Disk: Shared Storage
I. Cache on Device's Hard Drive
J. Cache on Device's Hard Drive: Local Storage
K. Cache on Device's Hard Drive: Shared Storage
L. Target Device-based RAM Cache
M. Target Device RAM
N. To Create a vDisk
O. Imaging Wizard
P. vDisk File Creation
Q. VHD Format
R. vDisk Mounting
S. Formatting a vDisk
T. Master Target Device
U. Boot Order
V. Master Target Device Software
W. To Create a Windows Master Target Device using the Imaging Wizard
X. XenConvert Overview
Y. To Image Windows Target Devices with XenConvert
Z. Troubleshooting vDisk Creation Issues

IX. Administering Provisioning Services Components

A. Provisioning Services Hosts in the Console
B. Target Device Connections
C. Provisioning Services Host Properties
D. Target Device Management
E. Target Device Collection
F. Target Device Views
G. Target Device Properties
H. Active Directory Integration
I. Domain Password Management Process
J. Automatic Password Renegotiation
K. To Integrate Active Directory
L. Test Your Knowledge: Active Directory Login Issue
M. vDisk Management
N. vDisk Properties
O. To Create a vDisk File
P. To Unassign vDisks from Target Devices
Q. To Delete a vDisk
R. vDisk Locks
S. vDisk Backup
T. Streamed Desktop Catalogs
U. To Create a Streamed Desktop Catalog
V. vDisk Updates
W. Automatic Update
X. Incremental Update
Y. Autoupdate Tool
Z. Incremental Update Rollback
AA. Scheduled vDisk Updates
BB. vDisk Update Strategies
CC. Troubleshooting Provisioning Services Issues

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Course Outline (cont'd)

X. Delivering Local VM Desktops

A. Local VM Desktops with XenClient
B. XenClient Architecture
C. 6
D. Synchronizer for XenClient
E. Test Your Knowledge: XenClient Components
F. XenClient Installation
G. To Install XenClient
H. XenClient Configuration
I. Receiver for XenClient
J. To Create a Virtual Machine
K. XenClient Tools
L. Synchronizer Installation and Configuration
M. Image Management
N. To Upload a Virtual Machine to the Synchronizer
O. To Assign Desktops to End Users
P. User Management
Q. To Create a Local User or Group
R. To Link an Existing AD User or Group
S. Device Management
T. XenClient User Experience
U. Secure Application Sharing
V. Troubleshooting Local VM Desktop Issues

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