Windows Server 2012

20415: Deploying Windows 7 and Windows 8 Desktops Using Windows Server 2012 Deployment Tools

Get the knowledge and skills necessary to create and maintain desktop images, design and deploy desktops, and configure desktop settings in Windows Server 2012. This live class is available virtually with RemoteLive™ or locally at our Phoenix, AZ location.

$2,995.00

• 5 Days
• Prepares for Certification Exam 70-415
• Replay™ Class Recordings included with this course

Upcoming Dates

Course Description

This super-advanced 5-day instructor-led course will teach you how to plan and implement an enterprise-scale Windows 7 and 8 desktop infrastructure. The emphasis of this course is on the planning, deployment, and operation of the backend data center server infrastructure that provides desktop services including Windows Server 2012 and Microsoft System Center 2012. You learn how to plan and deploy desktops using several technologies such as User State Migration Tool (USMT), Microsoft Deployment Toolkit (MDT), Virtual Desktop Infrastructure (VDI), and more. Additionally, the course describes how to protect Windows 7 and 8 desktops and monitor their health and performance.

Course Outline

1. Assessing and Determining Desktop Deployment Options

This module describes the enterprise desktop lifecycle and explains how you can assess hardware and infrastructure readiness. The module then describes how to identify and select the most appropriate deployment option based upon organizational requirements.

• Overview of the Enterprise Desktop Life Cycle
• Assessing Hardware and Infrastructure Readiness for a Desktop Deployment
• Overview of Enterprise Desktop Deployment Methods
• Volume Activation Technologies for Enterprise Desktops

Lab: Assessing and Determining Desktop Deployment Options

• Planning a Desktop Deployment Strategy
• Collecting Infrastructure Data
• Implementing a Volume Activation Solution

2. Planning An Image Management Strategy

This modules describes Windows image formats and helps you to define an efficient image management strategy based upon business requirements.

• Overview of Windows Image Formats
• Overview of Image Management

Lab: Planning an Image Management Strategy

• Assessing Business Requirements to Support an Image Management Strategy

3. Implementing Desktop Security

This module describes how to deploy and manage a secure desktop by implementing centralized policies, BitLocker settings, and Encrypted File System (EFS) settings.

• Implementing a Centralized Desktop Security Solution
• Planning and Implementing BitLocker
• Planning and Implementing Encrypted File System

Lab: Configuring Desktop Security

• Configuring Desktop Security using Group Policy
• Configuring Drive Encryption Using BitLocker

Lab: Configuring File Encryption Using EFS

• Implementing a Centrally Managed EFS Solution
• Implementing an EFS Recovery Solution

4. Capturing and Managing a Desktop Operating System Image

This module describes how to use the Windows Assessment and Deployment Kit (ADK) and Windows Deployment Services (WDS) to create, capture, and manage a desktop operating system image. Lessons

• Overview of Windows ADK
• Managing the Windows Preinstallation Environment
• Building a Reference Image Using Windows SIM and Sysprep
• Capturing and Servicing a Reference Image
• Configuring and Managing Windows Deployment Services

Lab: Preparing the Imaging and Preinstallation Environment

• Installing Windows ADK
• Configuring a Custom Windows PE Environment

Lab: Building a Reference Image Using Windows SIM and Sysprep

• Building a Custom Answer File Using Windows SIM
• Installing a Reference Computer Using a Custom Answer File
• Generalizing a Reference Computer Using Sysprep

Lab: Capturing and Servicing a Reference Image

• Capturing a Reference System Image
• Servicing a Reference System Image

Lab: Configuring and Managing Windows Deployment Services

• Planning the Windows Deployment Services Environment
5. Planning and Implementing User State Migration

This module describes how to use the User State Migration Tool (USMT) to migrate appropriate user data and settings to a new desktop operating system.

- Overview of User State Migration
- Planning User State Migration by Using USMT
- Migrating User State by Using USMT

Lab: Planning and Implementing User State Migration

- Planning for User State Migration
- Creating and Customizing the USMT XML Files
- Capturing and Restoring User State by Using USMT

Lab: Migrating User State Using Hard-Link Migration

- Performing a Hard-Link Migration

6. Planning and Deploying Desktops Using the Microsoft Deployment Toolkit

This module describes how to use the Microsoft Deployment Toolkit (MDT) 2012 to deploy Windows operating systems in lite touch installation scenarios.

- Planning for the Lite Touch Installation Environment
- Implementing MDT 2012 for Lite Touch Installation
- Integrating Windows Deployment Services with MDT

Lab: Planning and Deploying Desktops Using the Microsoft Deployment Toolkit

- Planning for the MDT Lite Touch Installation Environment
- Installing MDT 2012 and the Prerequisite Components
- Creating and Configuring the MDT 2012 Deployment Share
- Deploying and Capturing a Reference Operating System Image
- Integrating WDS with MDT 2012 To Provide PXE Boot Capabilities

7. Planning and Deploying Desktops by Using System Center 2012 Configuration Manager

This describes how to use System Center 2012 Configuration Manager to implement a zero touch installation for deploying enterprise desktops.

- Planning the Zero Touch Installation Environment
- Preparing the Site for Operating System Deployment
- Building a Reference Image Using a Configuration Manager Task Sequence
- Using MDT Task Sequences to Deploy Client Images

Lab: Preparing the Environment for Operating System Deployment

- Planning the Operating System Deployment Infrastructure
- Preparing the Zero Touch Installation Environment
- Configuring the Deployment Packages and System Images
Lab: Using MDT and Configuration Manager to Perform a Zero-Touch Installation

- Performing a Zero Touch Installation

8. Planning and Implementing a Remote Desktop Services Infrastructure

This module describes how to plan and implement session virtualization deployment and a virtual desktop infrastructure (VDI) based upon Windows Server 2012 Remote Desktop Services.

- Overview of Remote Desktop Services
- Planning the Remote Desktop Services Environment
- Configuring a Virtual Desktop Infrastructure Deployment
- Configuring a Session-Based Desktop Deployment
- Extending the Remote Desktop Services Environment to the Internet

Lab: Planning and Implementing a Remote Desktop Services Infrastructure

- Planning the Remote Desktop Services Environment
- Configuring a Virtual Desktop Infrastructure Scenario
- Configuring a Session-Based Desktop Scenario

Lab: Extending Internet Access to the RDS Infrastructure

- Planning the RD Gateway Policies
- Configuring the RD Gateway

9. Managing User State Virtualization For Enterprise Desktops

This module describes how to plan and configure user state virtualization to provide a consistent desktop client experience.

- Overview of User State Virtualization
- Planning User State Virtualization
- Configuring Roaming Profiles, Folder Redirection, and Offline Files
- Implementing Microsoft User Experience Virtualization

Lab: Deploying and Managing User State Virtualization

- Planning User State Virtualization
- Implementing User State Virtualization

10. Planning and Implementing an Updates Infrastructure to Support Enterprise Desktops

Students will be able to plan and implement an updates infrastructure to support both physical and virtual enterprise desktops.

- Planning an Updates Infrastructure for the Enterprise
- Implementing Configuration Manager 2012 to Support Software Updates
- Managing Updates for Virtual Machines and Images
- Using Windows Intune for Managing Software Updates

Lab: Planning and Implementing an Updates Infrastructure

- Planning an Updates Infrastructure
- Implementing Software Updates Using Configuration Manager 2012
- Implementing Software Updates for Virtual Machine Libraries
11. Protecting Enterprise Desktops from Malware and Data Loss

This module describes how to use System Center technologies such as Endpoint protection and Data Protection Manager (DPM) to protect enterprise desktops from malware and data loss.

- Overview of System Center 2012 Endpoint Protection
- Configuring Endpoint Protection Client Settings and Monitoring Status
- Using Windows Intune Endpoint Protection
- Protecting Desktops by Using System Center 2012 Data Protection Manager

Lab: Implementing Client Endpoint Protection

- Configuring the Endpoint Protection Point
- Configuring and Deploying Endpoint Protection Policies
- Configuring Client Settings to Support Endpoint Protection
- Monitoring Endpoint Protection

Lab: Configuring Data Protection for Client Computer Data

- Configuring and Verifying Client Data Protection

12. Monitoring the Performance and Health of the Desktop Infrastructure

This module describes how to identify and monitor relevant services and components to ensure the health and performance of the enterprise desktop infrastructure.

- Performance and Health Monitoring for the Desktop Infrastructure
- Monitoring the Virtual Desktop Infrastructure

Lab: Monitoring the Performance and Health of the Desktop Infrastructure

- Configuring Performance and Reliability Monitoring for Desktops
- Configuring Operations Manager for Monitoring Virtual Environment

Audience

The course is primarily intended for IT Professionals who upgrade, deploy, and manage the Windows 7 and Windows 8 desktop environments. These IT professionals typically work in complex computing environments of large to enterprise-sized organizations and may work with virtualized desktop environments, remote applications, and desktop automation. In addition, the secondary audience for this course includes IT professionals who want to take the 70-415: Implementing an Enterprise Desktop and Device Infrastructure exam as a stand-alone, or as part of the requirement for the MCSE: Desktop Infrastructure certification.

Prerequisites

Before attending this course, students must meet the following prerequisites:

At least two years of experience deploying and managing Windows server and client operating systems in an enterprise data center environment is required. Required, not suggested or optional.

Successful completion of the following course is required:

20410: Installing and Configuring Windows Server 2012

In addition, successful completion of one or more of the following courses is also required:
What You Will Learn

After completing this course, students will be able to:

- Assess and determine desktop deployment options.
- Plan an image management strategy.
- Implement desktop security.
- Capture and manage a desktop operating system image.
- Plan and implement User State Migration.
- Plan and deploy desktops by using the Microsoft Deployment Toolkit.
- Plan and deploying desktops by using System Center 2012 Configuration Manager.
- Plan and implement a Remote Desktop Services infrastructure.
- Manage user state virtualization for enterprise desktops.
- Plan and implement an updates infrastructure to support enterprise desktops.
- Protect enterprise desktops from malware and data loss.
- Monitoring the performance and health of the desktop infrastructure.