

Deploying and Managing Windows® 7: Hands-On - 4 Days

Course 2401 Overview

- You Will Learn How To**
- Effectively implement and administer Windows 7 in an enterprise environment
 - Create and deploy custom Windows 7 installation and Windows PE boot images
 - Streamline deployments with Windows Deployment Services (WDS)
 - Develop a plan for managing initial and ongoing client activation
 - Centralise administration through the GUI, shell commands, WinRS and PowerShell
 - Locate and remediate issues with Microsoft monitoring, analysis and recovery tools
- Course Benefits** Centralised administration and streamlined deployment have become attainable goals with Windows 7. New and improved Windows technologies, when properly implemented and managed, can help offset implementation costs and optimise daily administrative tasks. This course provides the knowledge and skills to leverage these technologies to deploy, maintain and administer client operating systems.
- Who Should Attend** Helpdesk technicians, desktop administrators and anyone responsible for deploying and managing Windows 7. Knowledge of Windows client administration is assumed. Experience with Windows 7 at the level of Course 2400, "Windows 7®: A Comprehensive Hands-On Introduction ", is helpful but not required.
- Hands-On Training** Throughout this course, extensive hands-on exercises provide practical experience deploying and managing Windows 7. Exercises include:
- Building custom Windows PE boot media
 - Creating and rolling out custom WIM files
 - Installing Windows across the network with WDS
 - Centralising management with scheduled tasks and group policies
 - Administering systems from the command line and with PowerShell
 - Recovering modified and deleted files
 - Analysing and monitoring system performance

Deploying and Managing Windows® 7: Hands-On - 4 Days

Course 2401 Outline

Introduction to Windows 7 Management

Planning an enterprise implementation

- Contrasting editions and features
- Justifying roll-out costs

Building Windows PE

- Evaluating use cases for deployment and administration
- Exploring the filesystem and memory architecture
- Creating basic Windows PE boot media
- Customising PE with DISM

Creating and Managing Custom Images

Configuring reference computers

- Selecting an imaging technology
- Automating installation with answer files

Authoring Windows Image (WIM) format files

- Generalising the OS with Sysprep
- Capturing and deploying images with ImageX
- Preparing the filesystem with DiskPart

Maintaining image files

- Supplementing the driver cache via answer files
- Injecting updates and language packs with DISM

Automating Deployment Tasks

Migrating data to new workstations

- Relocating settings and files with Windows Easy Transfer
- Scripting user state transfers with USMT

Implementing BitLocker

- Partitioning the drives
- Recovering from lost and damaged encryption keys

Optimising deployments of other Windows editions

- Coping with Windows XP and Windows Server 2003 imaging limitations
- Scripting Windows Server 2008 roles

Customising the Windows Imaging Process

Performing network installations with Windows Deployment Services (WDS)

- Adding custom boot and install images
- Optimising roll-outs through multicasting

Exploiting the Microsoft Deployment Toolkit

- Configuring images with drivers and applications
- Building Lite Touch deployments

Managing Windows Activation

Controlling volume license activation

- Maintaining Multiple Activation Keys (MAK)
- Implementing a Key Management Services (KMS) infrastructure

Dealing with activation issues

- Rearming Windows
- Assessing activation status with the Volume Activation Management Tool (VAMT)

Streamlining Windows 7

Administration

Unifying system configuration with group policies

- Contrasting user and computer-based settings
- Targeting GPO application with Scopes of Management (SOM)

Automating maintenance with Task Scheduler

- Creating tasks manually and via export/import
- Scheduling remote tasks

Controlling client desktops remotely

- Shadowing users through Remote Assistance
- Connecting to systems for administration with Remote Desktop

Working with command line tools

- Identifying the scope of shell commands
- Executing remote commands with WinRM/WinRS
- Extending command line functionality through PowerShell

MS Desktop Optimization Pack (MDOP)

- Application virtualisation

- Desktop virtualisation
- AGPM
- Asset Inventory Services

Optimisation and Troubleshooting

Establishing effective recovery strategies

- Protecting data with Windows backup
- Simplifying recovery with previous versions and restore points

Improving system functionality

- Analysing issues with the event viewer
- Monitoring performance trends
- Configuring Virtual Hard Disk (VHD) Native Boot

Resolving network problems

- Isolating problematic traffic
- Invoking GUI and command line troubleshooting tools

Extending troubleshooting techniques

- Documenting application failures with Problem Recorder
- Diagnosing system errors with the MDOP toolset