

MCTS Windows 7 Configuring Certification



Course Outline

Chapter 01 - Basic Windows 7 Installation

Lesson: Installation Options
 New Features of Windows 7
 Minimum Hardware Requirements
 Why Use 64-bit Windows 7
 Installation Options
 Windows 7 Offerings
 Lesson: Choosing To Do the Clean Install
 Discussion: Considerations for a Clean Installation
 Discussion: Common Installation Errors
 Ways To Do A Clean Installation
 Demo - Configuring the Computer Name and Domain/Workgroup Settings
 Chapter 01 Review

Chapter 02 - Advanced Windows 7 Installation

Lesson: Performing an Image Installation
 What is Windows Imaging File Format?
 Which Tools You Can Use
 The Process for Image-Based Installation
 Using SysPrep
 Capturing and Applying the Installation Image by Using ImageX
 Migrating User Data and Settings by Using USMT 4.0
 Configuring VHDs
 Lesson: Doing an Upgrade or Migration to Windows 7
 How to Choose Migration or Upgrade
 Upgrade Paths
 Determining the Feasibility of an Upgrade Using Windows Upgrade Advisor
 Steps to Upgrade to Windows 7
 Ways to Migrate User Data and Settings
 Steps to Migrate to Windows 7
 Migrating User Settings and Data by Using WET
 Lesson: Planning for Application Compatibility
 Common Compatibility Problems
 Common Mitigation Methods
 Updating Shims
 Chapter 02 Review

Chapter 03 - Understanding Disk Types and File Systems

Lesson: Windows 7 Disk Types and Formats
 The MBR Disk
 The GPT Disk
 Tools for Disk Management
 Demo - Converting an MBR Partition to a GPT Partition
 Lesson: Managing Hard Drives with Volumes
 A Simple Volume
 Demo - Creating a Simple Volume
 What are Spanned and Striped Volumes?
 Demo - Creating Spanned Volumes
 Demo - Creating Striped Volumes
 Why Would you Resize a Volume?
 Demo - Resizing a Volume
 Lesson: Hard Drive Maintenance
 Disk Fragmentation
 How to Defragment a Disk
 Disk Quotas
 Demo - Configuring Disk Quotas
 Chapter 03 Review

Chapter 04 - Network Configuration

Lesson: IP Addressing
 Understanding the IPv4 Address
 Understanding the Subnet Mask
 Public and Private Address Space
 Why the Default Gateway
 Demo - Configuring an IPv4 Address
 Types of Computer Names
 Methods for Resolving Computer Names
 Why IPv6
 Windows 7 Support for IPv6
 Understanding the IPv6 Address Space
 Types of IPv6 Address Scopes
 Demo - Configuring an IPv6 Address
 Lesson: Auto IP Configuration
 Auto Configuration of IPv4 Settings
 Auto Configuration of IPv6 Settings
 Demo - Configuring a Computer to Obtain an IPv4 Address Dynamically
 Troubleshooting Client-Side DHCP Issues
 Lesson: Troubleshooting Networking
 Troubleshooting Tools
 Troubleshooting Methodology

Demo - How to Troubleshoot Network-Related Problems

Lesson: Introducing Wireless Networks

Describing a Wireless Network

Technologies Used in WiFi

How Do You Secure WiFi?

Lesson: Connecting Windows 7 to the Wireless Network

Configuring the Hardware

Wireless Network Settings

How to Improve WiFi Signal Strength

Troubleshooting WiFi Connections

Chapter 04 Review

Chapter 05 - Sharing Files, Folders, and Printers

Lesson: Planning for Authentication and Authorization

Understanding Authentication and Authorization

The Process of Authentication and Authorization

New Authentication Features

Lesson: Securing File Access

NTFS Permission

Permission Inheritance

Demo - Configuring NTFS Permissions for Files and Folders

How Permissions May Change with File Copy or Moving

What are Effective Permissions?

Discussion: Determining Effective Permissions

Lesson: Compressing Files

What is NTFS File Compression?

How Compression Settings are Affected with File Move or Copy

Zipped Folders

Demo - Compressing Files and Folders

Lesson: Sharing Folders and Printers

What are Shared Folders?

Ways to Share Folders

Discussion: Combining NTFS and Share Permissions

Using the Network and Sharing Center

Managing Printing

Printing Components in Windows 7

Demo - Installing and Sharing a Printer

Location-Aware Printing

Client-Side Printing

Chapter 05 Review

Chapter 06 - Working with Windows 7 Client Performance

Lesson: Installing and Configuring Device Drivers

Overview of Device Drivers

How to Install Devices and Drivers

Tools for Device Driver Management

Methods for Updating Drivers

Managing Signed Drivers

Discussion: Options for Recovering from a Driver Problem

Demo - Managing Drivers by Using Device Manager

Lesson: Windows 7 Performance Monitoring Tools

Discussion: What Are Performance and Reliability Problems?

Tools to Gather Performance Information

Monitoring Performance and Using Data Collector Sets

Demo - Using the Resource Monitor

Demo - Analyzing System Performance by Using Data Collector Sets and Performance Monitor

How Performance Monitor Can Help You

Lesson: Monitoring Reliability of Windows 7

How WDT Can Help You Solve Problems

Windows Network Diagnostics Tools

Windows Startup and Recovery

Introducing the Windows Memory Diagnostics Tool

Looking at the Reliability Monitor and Problems

Reports and Solutions Tool

Chapter 06 Review

Chapter 07 - Basic Desktop Security

Lesson: Discussion of Security Management in Windows 7

New Security Features in Windows 7

Introducing the New Action Center

Demo - Configuring Action Center Settings

Lesson: Using Windows Defender

Watch Out for Malware

What is Windows Defender?

How Windows Defender Can Help You

Demo - Configuring Windows Defender Settings

Lesson: How does UAC Work?

Revisiting UAC

Improvements to How UAC Works

Demo - Configuring Group Policy

Getting Your Notifications

Lesson: Using Windows Firewall

Discussion: What is a Firewall?

Basic Firewall Settings

Advanced Security Options

Know Your "Well-Known" Ports

Demo - Configuring Inbound, Outbound, and Connection Security Rules

Chapter 07 Review

Chapter 08 - Advanced Desktop Security

Lesson: Using Local Policies to Secure Windows 7

Introducing Group Policies

How GPOs are Applied

Order of Operations for Multiple Policies

Demo - Creating Multiple Local Group Policies

Demo - Configuring Local Security Policy Settings

Lesson: How EFS and BitLocker Secure Your Data

EFS

Demo - Encrypting and Decrypting Files and Folders by Using EFS

Introducing BitLocker

BitLocker Requirements

BitLocker Modes

Setting BitLocker Options with Group Policies

Configuring BitLocker

Configuring BitLocker To Go

Recovering BitLocker Encrypted Drives

Lesson: Security With Application Restrictions

Introducing AppLocker

AppLocker Rules

Demo - Configuring AppLocker

What are Software Restriction Policies?

Lesson: IE Version 8 Privacy Features

Discussion: Compatibility Features in Internet

Explorer 8
Internet Explorer 8's Enhanced Privacy Features
Using the SmartScreen Feature in Internet Explorer 8
Other Security Features in Internet Explorer 8
Demo - Configuring Security in Internet Explorer 8
Chapter 08 Review

Chapter 09 - Disaster Recovery & Prevention

Lesson: Backing Up and Restore Options with Windows 7
Discussion: Why Do Backups?
Introducing the Backup and Restore Tool
Demo - Perform a Backup
Lesson: How System Restore Works
Using Previous File Versions
Configuring System Protection Settings
Demo - Restore a System
Lesson: Using the Windows Update
What is Windows Update?
Using Windows Update Settings
Windows Updates with GPOs
Chapter 09 Review

Chapter 10 - Remote Access Options

Lesson: Configuring Windows 7 for Mobility
Discussion: What Devices Would be Considered Mobile?
Settings to Configure on Mobile Computers
What is a Sync Partnerships?
Managing Power Options in Windows 7
Demo - How to Configure a Power Plan
Lesson: Remote Access Solutions
Introducing Remote Desktop and Remote Assistance
Setting Up Remote Desktop

Understanding VPN Connections
How to Make a VPN
What is DirectAccess?
How DirectAccess Works
Requirements for Setting Up DirectAccess
What is BranchCache?
How BranchCache Works
Requirements for Setting Up BranchCache
Demo - Configuring BranchCache on a Windows 7 Client Computer
Chapter 10 Review

Chapter 11 - Introducing Windows PowerShell 2.0

Lesson: What is Windows PowerShell 2.0?
Overview of Windows PowerShell
Improvements in Windows PowerShell 2.0
Using cmdlets in Windows PowerShell 2.0
Understanding Windows PowerShell Eventing
Introducing the Windows PowerShell 2.0 Integrated Scripting Environment (ISE)
Operating the Windows PowerShell ISE Editor
Lesson: Remoting With Windows PowerShell 2.0
Overview of Windows PowerShell Remoting
How to Connect to a Remote Computer
Processing of Remote Commands
Issuing Remote Commands
Lesson: Configuring Group Policy with PowerShell 2.0
PowerShell 2.0 Has New cmdlets for Group Policy Administration
Requirements for Group Policy
Chapter 11 Review
Course Closure