# **MOC 50255D: Managing Windows Environments** with Group Policy

# **Course Outline:**

## **Module 1: Introduction to Configuration Management**

#### Lessons:

- Configuration Management Overview
- Configuration Management Using Group Policy
- Group Policy Features Introduced with Later Versions of Windows
- Using Windows PowerShell in the Configuration Management Process

#### Lab:

- Introducing Configuration Management
- Define configuration management
- List the ways you can use configuration management in Windows
- Describe the new Group Policy features available in the latest versions of Windows

## **Module 2: Using Group Policy Management Tools**

#### Lessons:

- Local and Domain Policies
- Using Group Policy Management Console
- Understanding Group Policy Refresh

## Lab:

- Using Group Policy Management Tools
- Describe the advantages of using domain policies instead of local policies
- List the capabilities of the Group Policy Management Console
- Describe the requirements for installing the Group Policy Management Console
- Explain how to use the different GPMC features to create and manage policies
- Describe the elements of the *gpupdate* command

## Module 3: Designing a Group Policy Infrastructure

#### Lessons:

- Design Stages for a Group Policy Infrastructure
- Planning your Group Policy Design
- Designing Your Group Policy Solution
- Deploying Your Group Policy Solution
- Managing Your Group Policy Solution

## Lab:

- Designing a Group Policy Infrastructure
- Describe the four stages of implementing Group Policy
- Explain how to plan Group Policy in accordance with a company's requirements
- Describe the guidelines that you should follow when you create new GPOs
- Explain how to manage Group Policy by delegating administration and setting permissions

## Module 4: Understanding the Architecture of Group Policy Processing

## Lessons:

- Group Policy Components in AD DS
- Understanding the Group Policy Deployment Order
- Modifying Group Policy Processing

## Lab:

- Understanding the Group Policy Processing Architecture
- Describe the Active Directory components that you can use to deploy Group Policy
- Explain the order in which Group Policy is deployed in Active Directory
- Describe the methods that are available to modify Group Policy processing

# Module 5: Troubleshooting and Backing Up GPOs

## Lessons:

- Using Group Policy Troubleshooting Tools
- Integration of RSoP Functionality
- Using Logging Options
- Backing Up, Restoring, Importing, and Copying GPOs
- Building Migration Tables

## Lab:

Troubleshooting and Backing Up GPOs

- Describe the Group Policy troubleshooting tools
- Describe the GPMC tools that have RSoP functionality
- Describe the GPO logging tools used to obtain more detail about the GPO processing issues
- Explain how to back up, restore, import, and copy GPOs using the GPMC
- Explain how to build migration tables

# **Module 6: Securing Windows Using Group Policy**

## Lessons:

- Exploring the Windows Security Architecture
- Securing User Accounts
- Exploring Security Policies
- Windows Firewall with Advanced Security
- Implementing Domain Security

## Lab:

- Securing Windows Using Group Policy
- Describe the Windows security architecture
- Explain how to secure user accounts with Group Policy
- Explain how to harden computer accounts
- Explain how to control the domain security policy with a GPO

# **Module 7: Implementing Application Security Using Group Policy**

## Lessons:

- Managing UAC Settings
- Defending Against Malware
- Using AppLocker to Restrict Software
- Implementing Windows 8 App Security Settings

## Lab:

Implementing Application Security Using Group Policy

- Describe UAC
- Describe the AppLocker features
- Explain the features of Windows 8 Apps

# **Module 8: Configuring the Desktop Environment with Group Policy**

## Lessons:

Exploring Script Types and Controlling Script Execution

- Defining the Desktop, Start Menu, and Taskbar Settings
- Defining the Control Panel Settings
- Defining the Windows Components Settings
- Configuring the Printer Management and Pruning Settings
- Defining the Network Settings
- New Settings for Windows 8 Client and Windows Server 2012

## Lab:

- Configuring the Desktop Environment with Group Policy
- Describe the startup, shutdown, logon, and logoff scripts and settings
- Identify the many ways to control the user desktop, Start menu, and taskbar settings
- Explain how to restrict the Control Panel settings
- Explain how to restrict operations that users can perform in Windows Explorer, Windows Internet Explorer, and Remote Desktop Services
- Explain how to configure the printer management and pruning settings
- Describe the network settings

## **Module 9: Implementing User State Virtualization**

## Lessons:

- Configuring Folder Redirection
- Managing Offline Files
- Implementing User Experience Virtualization
- OneDrive for Business

#### Lab:

- Implementing User State Virtualization
- Explain how to redirect user folders to a server
- Describe the Offline Files feature
- Explain the purpose of User Experience Virtualization
- Describe the OneDrive for Business feature

## **Module 10: Assigning and Publishing Software Packages**

## Lessons:

- Using MSI Packages to Distribute Software
- Using Group Policy as a Software Deployment Method
- Deploying Software
- Setting Up Distribution Points
- Using the Systems Center Configuration Manager to Distribute Software

#### Lab:

- Assigning and Publishing Software Packages
- Describe the basic elements of an MSI package
- Determine when to build or repackage your own
- Define the requirements for distributing software via Group Policy
- Describe when you might want to assign and publish software
- Explain how to upgrade and remove packages
- Explain how to set up distribution points for software deployment
- List the advantages of using SCCM to distribute software instead of Group Policy

# Module 11: Configuration Management with Windows PowerShell

#### Lessons:

- Using Windows PowerShell
- Writing PowerShell Scripts
- Windows PowerShell Library for Group Policy
- Windows PowerShell-Based Logon Scripts
- Using PowerShell Desired State Configuration

## Lab:

- Configuration Management with Windows PowerShell
- Describe the Windows PowerShell features
- Explain how to perform the basic Windows PowerShell operations
- Explain how to access the Windows PowerShell library for Group Policy
- Manage systems using Windows PowerShell Desired State Configuration

# **Module 12: Creating and Deploying Administrative Templates**

#### Lessons:

- Introducing Administrative Templates
- Legacy ADM Templates
- Managing ADMX Templates
- Converting and Creating Custom ADMX Templates
- Using the ADMX Central Store

## Lab:

- Creating and Deploying Administrative Templates
- Describe the benefits of using Administrative Templates
- List some of the ADM templates that are included with each version of Windows
- List tips that you can use to write your own customer Administrative templates

- Describe the advantages of using the new ADMX file format
- Identify which tool converts the ADM templates to ADMX templates and also creates new ADMX templates
- Define ADMX Central Store

# **Module 13: Configuring Group Policy Preferences**

## Lessons:

- Introducing Group Policy Preferences
- Comparing Preferences and Policy Settings
- Configuring Preferences Settings

## Lab:

# Configuring Group Policy Preferences

- Describe the purpose of Group Policy Preferences
- Describe the differences between Preferences and Policy Settings
- Identify the settings that you can configure in the Computer Configuration and User Configuration sections of the Group Policy Management Console
- Describe the Windows and Control Panel settings