

50255: Managing Windows Environments with Group Policy

Course Details

Course Outline

1. Introduction to Configuration Management

- 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**
 1. Boot and join the lab virtual machines to the domain
 2. Explore the default Policy Settings
 3. Explore Windows 10 and Windows Server 2016 interface

2. Using Group Policy Management Tools

- Local and Domain Policies
- Using Group Policy Management Console
- Understanding Group Policy Refresh
- **Lab: Using Group Policy Management Tools**
 1. Working with Multiple Local Policies
 2. Installing the GPMC on various Windows operating systems
 3. Basic Group Policy Management techniques

3. Designing a Group Policy Infrastructure

- 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**
 1. Creating an OU Structure for Group Policy
 2. Delegating GPO Management
 3. Creating Starter GPOs
 4. Using the AGPM to manage policies

4. Understanding the Architecture of Group Policy Processing

- Group Policy Components in AD DS
- Understanding the Group Policy Deployment Order
- Modifying Group Policy Processing
- **Lab: Understanding the Group Policy Processing Architecture**
 1. Working with Multiple GPO Levels
 2. Using the Block Inheritance and Enforce Options
 3. Implementing Security Filtering
 4. Creating a WMI Filter
 5. Working with Loopback Processing

5. Troubleshooting and Backing Up GPOs

- Using Group Policy Troubleshooting Tools
- Integration of RSoP Functionality
- Group Policy Logging Options
- Backing Up, Restoring, Importing, and Copying GPOs
- Building Migration Tables
- **Lab: Troubleshooting and Backing Up GPOs**
 1. Using Tools for Troubleshooting
 2. Backing Up and Restoring GPOs
 3. Use Command Line Tools to Perform GPO Maintenance

6. Securing Windows Using Group Policy

- Exploring the Windows Security Architecture
- Securing User Accounts
- Exploring Security Policies
- Windows Firewall with Advanced Security
- Implementing Domain Security
- Security Policy Options for Window Client and Windows Server
- **Lab: Securing Windows Using Group Policy**
 1. Using the Security Compliance Manager
 2. Managing Auditing with a GOP
 3. Create and Test Restricted Groups
 4. Implement Security Templates
 5. Creating a Windows Firewall Policy

7. Implementing Application Security Using Group Policy

- Managing UAC Settings
- Defending Against Malware
- Using AppLocker to Restrict Software
- Implementing Windows App Security Settings
- **Lab: Implementing Application Security Using Group Policy**
 1. Implementing UAC
 2. Using AppLocker to Restrict Software
 3. Configure Windows Defender with Group Policy
 4. Windows 8.1 Client Lock Screen and App Policies

8. Configuring the Desktop Environment with Group Policy

- 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
- Discovering the new Group Policy Settings
- **Lab: Configuring the Desktop Environment with Group Policy**
 1. Using Logon Scripts
 2. Configuring Desktop Settings
 3. Managing Windows Components
 4. Configuring Printers with Group Policy
 5. Managing Network Settings

9. Module: Implementing User State Virtualization

- Configuring Folder Redirection
- Managing Offline Files
- Implementing User Experience Virtualization
- OneDrive for Business
- **Lab: Implementing User State Virtualization**
 1. Preparing for Folder Redirection, Offline Files, and UE-V
 2. Configuring Folder Redirection
 3. Managing Offline Files

4. Implementing User Experience Virtualization

10. Assigning and Publishing Software Packages

- 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**
 1. Creating a Shared Directory Structure on a Server
 2. Creating a Custom MSI package
 3. Repackaging an Existing Install Package
 4. Deploying Software Packages with a GPO

11. Configuration Management with Windows PowerShell

- Introducing Windows PowerShell
- Using Windows PowerShell
- Writing PowerShell Scripts
- Windows PowerShell Library for Group Policy
- Windows PowerShell-Based Logon Scripts
- **Lab: Configuration Management with Windows PowerShell**
 1. Exploring the Windows PowerShell
 2. Using Windows PowerShell to Manage GPOs

12. Implementing PowerShell Desired State Configuration

- Introducing Group Policy Preferences
- Comparing Preferences and Policy Settings
- Options for Applying Preferences
- Configure Preference Settings
- **Lab: Using PowerShell Desired State Configuration**
 1. Write a PowerShell Desired State Configuration Script
 2. Create a DSC
 3. Implement DSC

13. Configuring Group Policy Preferences

- Introducing Group Policy Preferences
- Comparing Preferences and Policy Settings

- Options for Applying Preferences
- Configuring Preferences Settings
- **Lab: Configuring Group Policy Preferences**
 1. Implementing Computer Preferences
 2. Implementing User Preferences