

# € TRAINING

Managing Windows Environments with  
Group Policy (MS-50255)





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## Introduction

Here you are going to learn how to reduce costs and increase efficiencies in your network. The student will discover how to integrate the administration of an enterprise's IT infrastructure with group policy, and the control and management of computer systems and domain users operating Windows Clients and Windows Server. Additionally, developing group policies, executing administrative and security templates, and examining the most appropriate practices for software packages deployment. In short, students acquire the learning and experience on how to optimize the networks and systems, uncover suitable practices for software deployment, and execute security and administrative templates at the enterprise level.

## Course Objectives:

At the end of this course the participants will be able to:

- Features and functions of Group Policy
- Use Group Policy management tools to manage security policies
- Design a Group Policy infrastructure
- Group Policy processing architecture
- Back up, restore, import, and copy Group Policy Objects through the Group Policy Management Console
- Use Windows PowerShell to manage Group Policy
- Implement security using Group Policy
- Configure the desktop environment with Group Policy
- Configure roaming profiles and Folder Redirection
- Assign and publish software packages
- Implement AppLocker and software restriction policies
- Create and deploy Administrative Templates
- Configure Group Policy preferences

## Targeted Audience:

This course is primarily intended for employees catering enterprise networking for help desk assistance, network design, and system administrative procedures.

Prerequisite:

Sound knowledge and experience related to Microsoft Windows Server 2008/2012 environments and a basic knowhow of Active Directory.

## Course Outlines:

### UNIT 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
- Viewing the Policies of a Domain Joined Server

- Preparing Windows 8.1 Client for Domain Policies
- Preparing Windows 7 for Domain Policies
- 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

## UNIT 2: Using Group Policy Management Tools

- Local and Domain Policies
- Using Group Policy Management Console
- Understanding Group Policy Refresh
- Working with Multiple Local Policies
- Installing RSAT on a Member Server
- Installing the GPMC on Windows 8.1 Client
- Basic Group Policy Management
- Installing the GPMC on Windows 7
- 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

## Unit 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
- Creating an OU Structure for Group Policy
- Delegating GPO Management
- Creating Starter GPOs
- Installing and Configuring the AGPM
- 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

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

- Group Policy Components in AD DS
- Understanding the Group Policy Deployment Order
- Modifying Group Policy Processing
- Working with Multiple GPO Levels
- Using the Block Inheritance and Enforce Options
- Implementing Security Filtering
- Creating a WMI Filter
- Working with Loopback Processing
- 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

## UNIT 5: Troubleshooting and Backing Up GPOs

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

## UNIT 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
  - Using the Security Compliance Manager
  - Configuring Enterprise Auditing through Group Policy
  - Configuring Restricted Groups
  - Using Security Templates
  - Creating a Windows Firewall 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

## UNIT 7: Implementing Application Security Using Group Policy

- **Managing UAC Settings**
  - Defending Against Malware
  - Using AppLocker to Restrict Software
  - Implementing Windows 8 App Security Settings
  - Implementing UAC
  - Using Windows Defender
  - Using AppLocker to Restrict Software
  - Windows 8.1 Client Lock Screen and App Policies
  - Describe UAC
  - Describe the AppLocker features
  - Explain the features of Windows 8 Apps

## UNIT 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
- New Settings for Windows 8 Client and Windows Server 2012
- Using Logon Scripts
- Configuring Desktop Settings
- Managing Windows Components
- Configuring Printers with Group Policy
- Managing Network Settings
- 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

## UNIT 9: Implementing User State Virtualization

- Configuring Folder Redirection
- Managing Offline Files
- Implementing User Experience Virtualization
- OneDrive for Business
- Preparing for Folder Redirection, Offline Files, and UE-V
- Configuring Folder Redirection
- Managing Offline Files
- Implementing User Experience Virtualization
- Explain how to redirect user folders to a server
- Describe the Offline Files feature
- Explain the purpose of User Ex