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Learning Style: Virtual Classroom

Technology: Microsoft

Difficulty: Intermediate

Course Duration: 5 Days

Managing Windows Environments with Group Policy



About This Course:

Group Policy remains one of the most powerful tools for centrally controlling how users and devices behave across a Windows domain. This four-day, hands-on course gives IT professionals the skills to plan, deploy, maintain, and troubleshoot a Group Policy environment built on Active Directory Domain Services.

Course Objectives:

- Manage Windows 11 and Windows Server devices locally and remotely using consoles, the command line, and Windows Admin Center
- Configure standalone workstations with Local Group Policy and explain how local policies are processed
- Administer core AD DS components, including domain controllers, sites, subnets, and replication
- Plan and implement an organizational unit structure that supports effective policy targeting
- Design and build a Group Policy infrastructure, including GPO management and administrative templates
- Explain default GPO processing behavior and modify it using linking, inheritance, filtering, and other controls
- Deploy, update, and restrict applications through Group Policy and AppLocker
- Configure the user environment with profiles, folder redirection, offline files, scripts, and UAC settings
- Implement Group Policy preferences and apply them precisely with item-level targeting
- Apply Windows 11 security settings and deploy certificates through Group Policy
- Use Group Policy to manage Windows Update and maintain device configuration
- Identify, troubleshoot, and resolve problems with GPO application on user devices

Audience:

- Windows system administrators responsible for configuring and maintaining domain-joined servers and clients
- Active Directory administrators who manage OUs, users, groups, and computer objects
- Desktop support and endpoint management professionals who standardize workstation configuration

- IT security professionals who enforce security baselines and access restrictions across Windows environments

Prerequisites:

- None

Course Outline:

Module 1: Introduction to Configuration Management

? Explore Default Policy Settings

? Explore Windows 10 and Windows Server 2016 Interface

Module 2: Group Policy Management Tools

? Working with Multiple Local Policies

? Installing the GPMC on Windows Operating Systems

? Basic Group Policy Management

Module 3: Designing a Group Policy Infrastructure

? Creating an Organizational Unit (OU) Structure for Group Policy

? Delegating GPO Management

? Creating Starter GPOs

Module 4: Group Policy Processing Architecture

? Working with Multiple GPO Levels

? Using the Block Inheritance and Enforce Options

? Implementing Security Filtering

? Creating a WMI Filter

? Working with Loopback Processing

Module 5: Troubleshooting and Backing Up GPOs

- Using Tools for Troubleshooting
- Backing Up and Restoring GPOs
- Use Command Line Tools to Perform GPO Maintenance

Module 6: Securing Windows Using Group Policy

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

Module 7: Implementing Application Security Using Group Policy

- Implementing UAC
- Using AppLocker to Restrict Software
- Configure Windows Defender with Group Policy

Module 8: Configuring the Desktop Environment with Group Policy

- Using Logon Scripts
- Configuring Desktop Settings
- Managing Windows Components
- Configuring Printers with Group Policy
- Managing Network Settings

Module 9: Implementing User State Virtualization

- Preparing for Folder Redirection, Offline Files, and UE-V
- Configuring Folder Redirection
- Managing Offline Files
- Implementing User Experience Virtualization

Module 10: Assigning and Publishing Software Packages

- Preparing for Distribution
- Creating Custom Software Packages and Repackaging Applications
- Deploying Software Packages

Module 11: Configuration Management with Windows PowerShell

- Exploring Windows PowerShell

Module 12: Using Windows PowerShell Desired State Configuration

- Writing a PowerShell Desired State Configuration Script
- Creating and Implementing a DSC

Module 13: Configuring Group Policy Preferences

- Implementing Computer Preferences