



Automating Administration with Microsoft Windows PowerShell 2.0

Duration: 5 Days Course Code: M10325 Version: A

Overview:

This five-day instructor-led course provides students with the knowledge and skills to utilize Windows PowerShell for administering and automating administration of Windows based servers.

Target Audience:

This course is intended for IT Professionals already experienced in general Windows Server and Windows Client administration, including Active Directory administration. No prior experience with any version of Windows PowerShell, or any scripting language, is assumed.

Objectives:

- Explain how Windows PowerShell works.
- Use Windows PowerShell as an interactive, command-line shell.
- Use Core Windows PowerShell cmdlets for everyday purpose.
- Customize the output using Windows PowerShell Formatting Subsystem.
- Explain what Windows Management Instrumentation (WMI) is and how it can be used from Windows PowerShell.
- Manage Active Directory objects using Windows PowerShell cmdlets.

- Write basic Windows PowerShell scripts that execute batches of commands.
- Work with Windows PowerShell's background jobs and remote administration functionality.
- Master the scripting language of Windows PowerShell.
- Use advanced techniques related to structured programming within Windows PowerShell.
- Automate Windows Server 2008 R2 Administration using Windows PowerShell.
- Identify the best practices for working with Windows PowerShell.

Prerequisites:

- Experience with Windows networking technologies and implementation.
- Experience with Windows Server administration, maintenance, and troubleshooting.
- Experience with Active Directory technologies and implementation, including Group Policy.
- Experience with Windows Server 2008 Web application server technologies and implementation.

Testing and Certification

There is currently no recommended exam associated to this training course.

Follow-on-Courses:

There is currently no recommended follow on course.

Content:

Module 1: Fundamentals for Using Windows Module 5: Automating Active Directory PowerShell v2

- Windows PowerShell Technology Background and Overview
- Windows PowerShell as an Interactive **Command-Line Shell**
- Using the Windows PowerShell Pipeline

Module 2: Understanding and Using the Formatting System

- Understanding the Formatting System
- Using the Formatting System

Module 3: Core Windows PowerShell **Cmdlets**

- Core Cmdlets for Everyday Use
- Comparison Operators, Pipeline Filtering, and Object Enumeration
- Advanced Pipeline Techniques

Module 4: Windows Management Instrumentation

- Windows Management Instrumentation Overview
- Using Windows Management Instrumentation

Administration

- Active Directory Automation Overview
- Managing Users and Groups
- Managing Computers and Other **Directory Objects**

Module 6: Windows PowerShell Scripts

- Script Security
- Basic Scripts
- Parameterized Scripts

Module 7: Background Jobs and Remote Administration

- Working with Background Jobs
- Using Windows PowerShell Remoting

Module 8: Advanced Windows PowerShell **Tips and Tricks**

- Using Profiles
- Re-Using Scripts and Functions
- Writing Comment-Based Help

Module 9: Automating Windows Server 2008 R2 Administration

- Windows Server 2008 R2Modules Overview
- Server Manager Cmdlets Overview
- Group Policy Cmdlets Overview
- Troubleshooting Pack Overview
- Best Practices Analyzer Cmdlets Overview
- IIS Cmdlets Overview

Module 10: Reviewing and Reusing Windows PowerShell Scripts

- Example Script Overview
- Understanding Scripts

Module 11: Writing Your Own Windows **PowerShell Scripts**

- Variables, Arrays, Escaping, and More Operators
- What isScope?
- Scripting Constructs
- Error Trapping and Handling
- Debugging Techniques
- Modularization

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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