

10961 Automating Administration with Windows PowerShell

Overview

This course provides students with the fundamental knowledge and skills to use Windows PowerShell for administering and automating administration of Windows based servers.

Prerequisite Comments

Experience with Windows networking technologies and implementation.
 Experience with Windows Server administration, maintenance, and troubleshooting.
 Experience with Windows Client administration, maintenance, and troubleshooting
 Students who attend this training can meet the prerequisites by obtaining equivalent knowledge and skills through practical experience as a Windows system administrator. No prerequisite courses are required.

Target Audience

This course is intended for IT Professionals who are already experienced in general Windows Server and Windows Client administration, and who want to learn more about using Windows PowerShell for administration. No prior experience with any version of Windows PowerShell, or any scripting language, is assumed. This course is also suitable for IT Professionals already experienced in server administration, including Exchange Server, SharePoint Server, SQL Server, System Center, and others.

Course Objectives

After completing this course, students will be able to:
 Describe the functionality of Windows PowerShell and use it to run and find basic commands.
 Identify and run cmdlets for server administration.
 Work with Windows PowerShell pipeline.
 Describe the techniques Windows PowerShell pipeline uses.
 Use PSProviders and PSDrives to work with other forms of storage.
 Query system information by using WMI and CIM.
 Work with variables, arrays, and hash tables.
 Write basic scripts in Windows PowerShell.
 Write advanced scripts in Windows PowerShell.
 Administer remote computers.
 Use background jobs and scheduled jobs.

[Register Online](#)

Schedule

Class Length: 5 Days

G2R = "Guaranteed to Run" | OLL = "Online LIVE"
 ILT = "Instructor-Led-Training" | HDL = "Hosted Distance Learning"

11/02/20	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
11/02/20	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
11/16/20	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
11/16/20	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
11/30/20	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
11/30/20	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
12/07/20	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
12/07/20	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
12/14/20	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
12/14/20	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
01/11/21	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
01/11/21	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
01/25/21	G2R	8:00AM - 4:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
01/25/21	G2R	8:00AM - 4:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00

Use advanced Windows PowerShell techniques.

Course Outline

1 - Getting Started with Windows PowerShell

Overview and Background
 Understanding command syntax
 Finding commands
 Lab : Configuring Windows PowerShell
 Lab : Finding and Running Basic Commands

2 - Cmdlets for administration

Active Directory administration cmdlets
 Network configuration cmdlets
 Other server administration cmdlets
 Lab : Windows Administration

3 - Working with the Windows PowerShell pipeline

Understanding the Pipeline
 Selecting, Sorting, and Measuring Objects
 Filtering Objects Out of the Pipeline
 Enumerating Objects in the Pipeline
 Sending pipeline data as output
 Lab : Using the Pipeline
 Lab : Filtering Objects
 Lab : Enumerating Objects
 Lab : Sending output to a file

4 - Understanding How the Pipeline Works

Passing the pipeline data
 Advanced considerations for pipeline data
 Lab : Working with Pipeline Parameter Binding

02/08/21	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
02/08/21	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
02/22/21	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
02/22/21	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
03/01/21	G2R	8:00AM - 4:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
03/01/21	G2R	8:00AM - 4:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
03/08/21	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
03/08/21	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
03/22/21	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
03/22/21	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
04/05/21	G2R	8:00AM - 4:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
04/05/21	G2R	8:00AM - 4:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
04/12/21	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00

5 - Using PSProviders and PSDrives

Using PSProviders
 Using PSDrives
 Lab : Using PSProviders and PSDrives

6 - Querying Management Information by Using WMI and CIM

Understanding WMI and CIM
 Querying Data with WMI and CIM
 Making changes with WMI/CIM
 Lab : Working with WMI and CIM

7 - Working with variables, arrays, and hash tables

Using variables
 Manipulating variables
 Manipulating arrays and hash tables
 Lab : Working with variables

8 - Basic scripting

Introduction to scripting
 Scripting constructs
 Importing data from files
 Lab : Basic scripting

9 - Advanced scripting

Accepting user input
 Overview of script documentation
 Troubleshooting and error handling
 Functions and modules
 Lab : Accepting data from users
 Lab : Implementing functions and modules

10 - Administering Remote Computers

Using basic Windows PowerShell remoting
 Using advanced Windows PowerShell remoting techniques
 Using PSSessions
 Lab : Using basic remoting
 Lab : Using PSSessions

04/12/21	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
04/19/21	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
04/19/21	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
05/03/21	G2R	8:00AM - 4:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
05/03/21	G2R	8:00AM - 4:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
05/10/21	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
05/10/21	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
05/17/21	G2R	6:00AM - 2:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
05/17/21	G2R	6:00AM - 2:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
06/07/21	G2R	8:00AM - 4:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00
06/07/21	G2R	8:00AM - 4:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
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06/21/21	G2R	8:00AM - 4:00PM	Online LIVE - Remote Learning (Pacific Time)	OLL	\$2,975.00
06/21/21	G2R	8:00AM - 4:00PM	HDL - All Locations (Pacific Time)	HDL	\$2,975.00

11 - Using Background Jobs and Scheduled Jobs

Using Background Jobs

Using Scheduled Jobs

Lab : Using Background Jobs and Scheduled Jobs

12 - Using advanced Windows PowerShell techniques

Creating profile scripts

Using advanced techniques

Lab : Practicing advanced techniques

Lab : Practicing script development (optional)

Related Courses, Certifications, Exams ---

- 10962 Advanced Automated Administration with Windows PowerShell®
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