Automating Administration with PowerShell

CODICE	AZ-040T00
DURATA	5 gg
PREZZO	1.790,00 €
EXAM	

DESCRIZIONE

This course provides students with the fundamental knowledge and skills to use PowerShell for administering and automating administration of Windows servers. This course provides students the skills to identify and build the command they require to perform a specific task. In addition, students learn how to build scripts to accomplish advanced tasks such as automating repetitive tasks and generating reports.

This course provides prerequisite skills supporting a broad range of Microsoft products, including Windows Server, Windows Client, Microsoft Azure, and Microsoft 365. In keeping with that goal, this course will not focus on any one of those products, although Windows Server, which is the common platform for all of those products, will serve as the example for the techniques this course teaches.

TARGET

This course is intended for IT Professionals who are already experienced in general Windows Server, Windows client, Azure, and Microsoft 365 administration, and who want to learn more about using Windows PowerShell for administration. No prior experience with any version of PowerShell or any scripting language is assumed. This course is also suitable for IT Professionals already experienced in server administration, including Microsoft Exchange Server, Microsoft SharePoint Server, and Microsoft SQL Server.

PREREQUISTI

Before attending this course, students must have:

- Experience with Windows networking technologies and implementation.
- Experience with Windows Server administration, maintenance, and troubleshooting.

CONTENUTI

Get started with Windows PowerShell

- Review Windows PowerShell

- Understand the command syntax in Windows PowerShell
- Find commands and Get-Help in Windows PowerShell

Maintain system administration tasks in Windows PowerShell

- Manage Active Directory Domain Services using PowerShell cmdlets
- Manage network service settings for Windows devices using PowerShell cmdlets
- Manage Windows Server settings using PowerShell cmdlets
- Manage settings for a local Windows machine using PowerShell cmdlets

Work with the Windows PowerShell pipeline

- Understand the Windows PowerShell pipeline
- Select, sort, and measure objects using the pipeline
- Filter objects out of the pipeline
- Enumerate objects in the pipeline
- Send and pass data as output from the pipeline
- Pass pipeline objects

Work with PowerShell providers and PowerShell drives in Windows PowerShell

- Connect with data stores using PowerShell providers
- Use PowerShell drives in PowerShell

Query management information by using Common Information Model and Windows Management Instrumentation

- Review CIM and WMI
- Query configuration information by using CIM and WMI
- Query and manipulate repository objects by using CIM and WMI methods

Use variables, arrays, and hash tables in Windows PowerShell scripts

- Manage variables in Windows PowerShell scripts
- Work with arrays and hash tables in Windows PowerShell scripts

Create and modify scripts by using Windows PowerShell

- Create and run scripts by using Windows PowerShell
- Work with scripting constructs in Windows PowerShell

- Import data in different formats for use in scripts by using Windows PowerShell cmdlets
- Use methods to accept user inputs in Windows PowerShell scripts
- Troubleshoot scripts and handle errors in Windows PowerShell
- Use functions and modules in Windows PowerShell scripts

Administer remote computers by using Windows PowerShell

- Manage single and multiple computers by using Windows PowerShell remoting
- Use advanced Windows PowerShell remoting techniques
- Manage persistent connections to remote computers by using Windows PowerShell sessions

Manage cloud resources by using Windows PowerShell

- Review Azure PowerShell module
- Review the features and tools for Azure Cloud Shell
- Manage Azure resources with Windows PowerShell

Manage Microsoft 365 services by using Windows PowerShell

- Manage users, groups, and licenses in Microsoft Entra ID by using Windows PowerShell
- Manage Exchange Online by using Windows PowerShell
- Manage SharePoint Online by using Windows PowerShell
- Manage Microsoft Teams by using Windows PowerShell

Create and manage background jobs and scheduled jobs in Windows PowerShell

- Create and manage background jobs using Windows PowerShell
- Create and manage scheduled jobs using Windows PowerShell