Learning the PowerShell Language

Discovering PowerShell commands and help



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Course introduction

Getting started with PowerShell

- Commands and cmdlets
- Locating cmdlets
- Objects and properties

Variables, data types and operators

Adding logic and flow control

Automating tasks

The tale of two PowerShells

Window's PowerShell

The original PowerShell first shipped with Windows 2000. Based on .NET framework it is available only on Windows. The default in Windows 11.

PowerShell

Dropping the Windows element from the name, PowerShell is available on Windows, MacOS and Linux being built on .NET core. PowerShell 6 launched in 2018 and in March 2020 version 7.

Demo

Access the PowerShell CLI

Run PowerShell and check the version



What is PowerShell?

So, you are going to want to know what PowerShell is and what you can do with it!

Windows PowerShell

Command line shell and scripting language

Working with objects with properties and methods

System administration and automation

Cmdlets

Verb-Noun: Get-Service

Demo

Cmdlets, functions, and aliases



Everything is an object

Using either .NET or .NET Core, everything is an object. Which means we have properties to read and methods the execute!

Object, properties, and methods

```
Get-Service
Get-Service WinRM
Get-Service WinRM | Get-Member
Get-Service WinRM | Select-Object Name, Status, StartType
Get-Service | Where-Object Status -EQ "running"
Get-Service | Where-Object Status -EQ "running" | Select-Object Name, StartType
```

Much of PowerShell's strength comes from everyting being an object and joing cmdlets with pipelines.



Demo

The power of objects