

Important PowerShell Cmdlets

Core Cmdlets & Information Retrieval

- **Get-Command:** Lists all available PowerShell commands.
 - *Example:* Get-Command -Noun Process
- **Get-Help:** Provides detailed documentation for a specific cmdlet.
 - *Example:* Get-Help Get-Process -Full
- **Get-Process:** Retrieves information about running processes.
 - *Example:* Get-Process | Select-Object Name, CPU, WorkingSet

Action-Oriented Cmdlets

- **Start-Service:** Starts a specified service.
 - *Example:* Start-Service -Name "Spooler"
- **Stop-Service:** Stops a specified service.
 - *Example:* Stop-Service -Name "Spooler"
- **New-Item:** Creates new files, directories, or registry keys.
 - *Example:* New-Item -Path "C:\Temp\NewFolder" -ItemType Directory

Input and Output Cmdlets

- **Read-Host:** Prompts the user for input.
 - *Example:* \$name = Read-Host "Enter your name"
- **Write-Host:** Displays output directly to the console.
 - *Example:* Write-Host "Hello, PowerShell!" -ForegroundColor Green
- **Out-File:** Writes output to a file.
 - *Example:* Get-Process | Out-File -FilePath "C:\Temp\processes.txt"

Formatting Cmdlets

- **Format-Table:** Displays output in a table format.
 - *Example:* Get-Service | Format-Table Name, Status, StartType
- **Format-List:** Displays output as a list of properties.
 - *Example:* Get-Process -Name "explorer" | Format-List *
- **Format-Wide:** Displays output in a wide format.
 - *Example:* Get-ChildItem | Format-Wide -Column 3

Utility & Network Cmdlets

- **Test-Connection:** Tests network connectivity.
 - *Example:* Test-Connection -ComputerName "google.com"
- **Test-Path:** Checks if a specified path exists.
 - *Example:* Test-Path -Path "C:\NonExistentFolder"
- **Invoke-WebRequest:** Sends a web request.
 - *Example:* Invoke-WebRequest -Uri "https://www.google.com"

Pipeline & Filtering Cmdlets

- **Where-Object:** Filters objects based on specified criteria.
 - *Example:* Get-Process | Where-Object { \$_.CPU -gt 100 }
- **Sort-Object:** Sorts objects based on specified criteria.
 - *Example:* Get-Process | Sort-Object -Property CPU -Descending
- **Select-Object:** Selects specific properties of objects.
 - *Example:* Get-Service | Select-Object Name, Status