Powershell Core

PS C:\> Get-Presenter

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About_Agenda

- Why PSCore?
- PowerShell 6.x vs. PowerShell 5.1
- Installing PSv6
- Changes worth mentioning
- Existing Modules compatibility
- Remoting over SSH
- The future

About_Why_PSCore

- 'cause .NET core
- Open Source
- Cross Platform (Mac also)
- Object-oriented shell <u>for Linux admins</u> It Gives them options.
- <u>Windows admins</u> can leverage what they already learned, on Linux with Powershell Core 6.
- PowerShell 5.1 is "finished"



About_Editions_Difference

PowerShell.exe / pwsh.exe

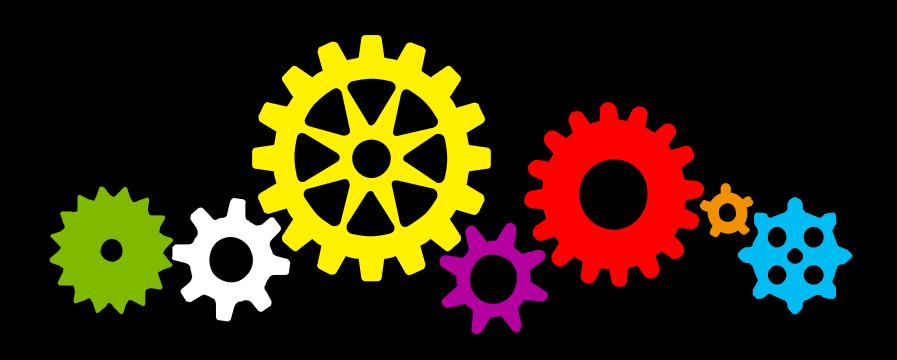




- \$PSHome
- \$env:PSModulePath
- \$PSVersion.PSEdition # Desktop / Core

▶ PowerShell-6.0.0

About_Demo

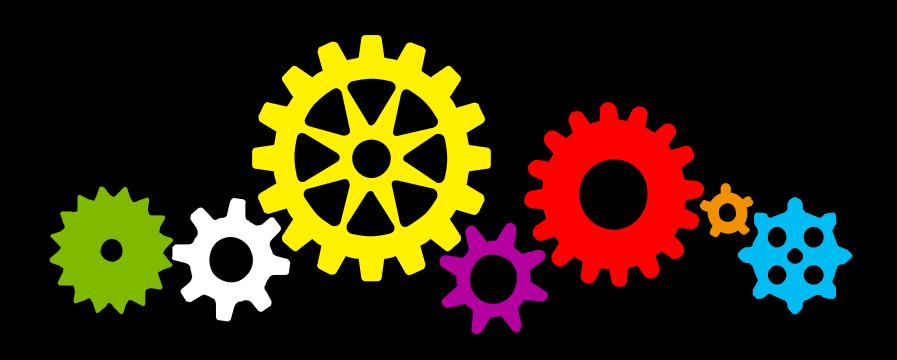


About_Installation_Ubuntu

```
From: https://github.com/PowerShell/PowerShell
# Import the public repository GPG keys
curl https://packages.microsoft.com/keys/microsoft.asc | sudo apt-key add -
# Register the Microsoft Ubuntu repository
curl https://packages.microsoft.com/config/ubuntu/17.04/prod.list
        sudo tee /etc/apt/sources.list.d/microsoft.list
# Update the list of products
sudo apt-get update
# Install PowerShell
sudo apt-get install -y powershell
# Start PowerShell
pwsh
```

▶ PowerShell-6.0.0

About_Demo



About_Changes_Worth_Mentioning

- & at the end of a pipeline to run as a PowerShell job
- Range operator for characters ('a'..'z')
- -NoTypeInformation is on by default on Export-CSV
- Installation is standalone can run multiple versions separate of each other.

About_Changes_Worth_Mentioning

- No support for PowerShell snap-ins (VMware PowerCLI, Exchange)
- No support for WMI (but includes CIM cmdlets)
- No support for ActiveDirectory cmdlets (yet)
- No support for WPF and Windows Forms
- No support for Workflows
- No PowerShell ISE (you should be using VSCode anyway)

About_Backwards_Compatibility

- Planned: Windows PowerShell Compatibility pack
 - Adding more .Net classes
 - Adding Windows PSModulePath
 - Adding WMI
 - Adding Eventlog cmdlets
 - Adding *Counter cmdlets
- Existing Windows PowerShell modules might just work

About_Backwards_Compatibility

 Add Windows PowerShell module path to PowerShell Core module path

Install-Module WindowsPSModulePath -Force

 Add this line to your profile if you always want Windows PowerShell PSModulePath

Add-WindowsPSModulePath

About_PSRemoting_over_SSH

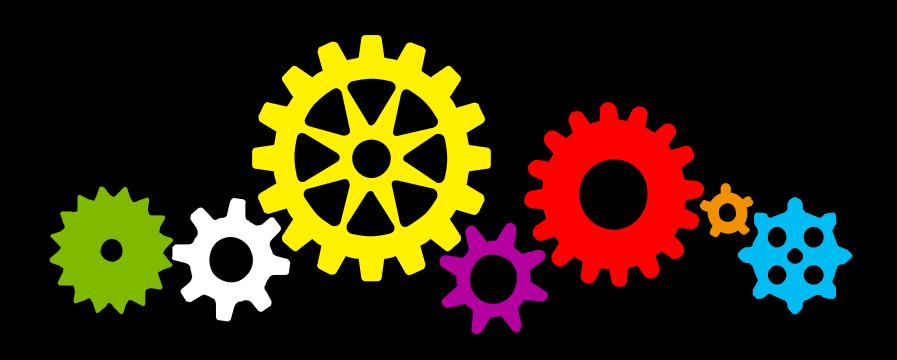
 PowerShell remoting over SSH (built in to *-PSSession cmdlets)

- Using the -HostName parameter
- SSH server service should be configured on the remote machine.

ssh.exe should exist on the client machine

▶ PowerShell-6.0.0

About_Demo



PowerShell-6.0.0

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About_PSv6_Future

- New service cycle
- Roadmap
- Open Issues
- Modules for PowerShell Core in PSGallery
 - Search Tag: <u>PSEdition_Core</u>

About_PSv6_Resources

PowerShell core Changelog
 https://github.com/PowerShell/PowerShell/blob/master/CHANGELOG.md

• Breaking Changes for PowerShell 6.0

https://github.com/PowerShell/PowerShell/blob/master/docs/BREAKINGC

HANGES.md

 Home repository for .NET Core https://github.com/dotnet/core



Microsoft