



Microsoft









Tweets @ jaap_brasser

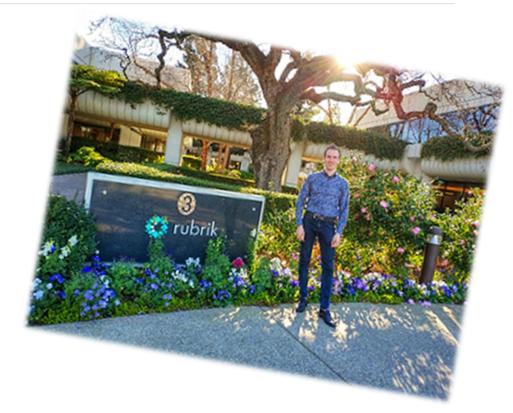
Blogs @ jaapbrasser.com

Works Tech Marketing @ Rubrik.com

Does Blogger, Speaker, Tech Enthusiast

Likes Cloud Automation, Scripting &

Security











What is PowerShell



- Development started in 2001
- First released in 2006
- Was initially codenamed Monad
- **PowerShell**
- Open sourced August 2016
- Current version 6.1.2 (Preview 6.2.0-4)

State of PowerShell

- Windows PowerShell
- Powershell.exe
- .Net 4.5
- Secret Sauce
- Windows Only

- PowerShell Core
- pwsh(.exe)
- .Net Core 2.1
- Open Source
- Everywhere

PowerShell on Linux and Open Source!

August 18, 2016 by PowerShell Team // 32 Comments

A Share 570 **y** 0 **in** 0

Since its inception in 2002 PowerShell has been deeply influenced and improved by the passion ar 80 contributors filed bugs and issues on the "alpha" release. Since that time we, together, have bui supports each other, provides Summits and Conferences and gives great feedback to the product

Satya's new leadership and customer-focused mindset has encouraged and empowered us to do ϵ started a number of successful community initiatives, such as the PowerShell Home Page, the Pow projects.

Announcing PowerShell Core 6.1

September 13, 2018 by Joey Aiello MSFT] // 4 Comments

f Share 38 **y** 0





We're proud to announce that the latest version of PowerShell has been released! This marks our sec of PowerShell Core, the open-source edition of PowerShell that works on Linux, macOS, and Window

By far, the biggest feature of this release is compatibility of built-in Windows modules with PowerShell you can natively run those modules/cmdlets with PowerShell Core and easily transition from Windows

Thanks to everyone that made this release possible, including our contributors, users, and anyone wh submitted feedback.

PowerShell Core 6.0: Generally Available (GA) and Supported!

January 10, 2018 by Joey Aiello [MAFT] // 5 Comments

f Share 534





PowerShell Core 6.0 is a new edition of PowerShell that is cross-platform (Windows, macOS, and Linux built for heterogeneous environments and the hybrid cloud.

First and foremost, thank you to all of our amazing community, especially our open-source contributors which you can find on our community dashboard at https://aka.ms/PSGitHubBI) for donating your time (PowerShell Core. Whether you contributed code, tests, documentation, issues, or even just your feedba are extremely grateful for the sweat and tears that you've invested in PowerShell. (For those interested and over to our Contribution Guide on GitHub. You don't have to be a guru to help out!)

v6.2.0-preview.4 Release of PowerShell Core

TravisEz13 released this 16 days ago · 85 commits to master since this release

Changelog

v6.2.0-preview.4 - 2019-01-28

Breaking Changes

- Add -Stable to Sort-Object and related tests (#7862) (Thanks @KirkMunro!)
- Improve Start-Sleep cmdlet to accept fractional seconds (#8537) (Thanks @Prototyyppi!)
- Change hashtable to use OrdinalIgnoreCase to be case-insensitive in all Cultures (#8566)
- Fix LiteralPath in Import-Csv to bind to Get-ChildItem output (#8277) (Thanks @iSazonov!)



PowerShell Licensing



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<....>

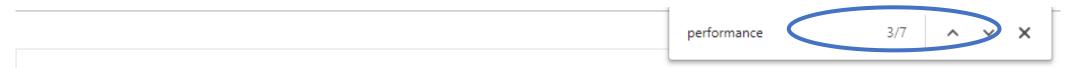
Windows PowerShell

```
➢ Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
PS C:\Users\jcjbr>
>> Measure-Command { 1..5 | ForEach-Object { Start-Job {Get-Process} } ; Get-Job | Wait-Job }
>> Measure-Command { 1..5\, | ForEach-Object { Start-ThreadJob {Get-Process} } ; Get-Job | Wait-Job }
Days
Hours
Minutes
Seconds
Milliseconds
Ticks
                        896381427
TotalDays
                                3747850347222
TotalHours
TotalMinutes
TotalSeconds
                        89.6381427
TotalMilliseconds : 89638.1427
  tart-ThreadJob : The term 'Start-ThreadJob' is not recognized as the name of a cmdlet, function, perable program. Check the spelling of the name, or if a path was included, verify that the path
```

PowerShell 6

```
PowerShell 6 (x64)
PS C:\Users\jcjbr>
>> Measure-Command { 1..5 | ForEach-Object { Start-Job {Get-Process} } ; Get-Job | Wait-Job }
>> Measure-Command { 1..5 | ForEach-Object { Start-ThreadJob {Get-Process} } ; Get-Job | Wait-Job }
Days
                  : 0
                  : 0
Hours
Minaces
Seconds
                  : 42
Milliseconds
                  . 635
Ticks
                  : 426355728
TotalDays
                  : 0.00049346727777778
TotalHours
                  : 0.0118432146666667
TotalMinutes
                  : 0.71059288
TotalSeconds
                  : 42.6355728
TotalMilliseconds : 42635.5728
Days
                  : 0
                  : 0
Hours
Minutes
                  . 0
seconds
                  : 0
Milliseconds
                  : 294
Ticks
                  : 2945921
TotalDays
                  : 3.40963078703704E-06
TotalHours
                  : 8.18311388888889E-05
TotalMinutes
                  : 0.004909868333333333
TotalSeconds
                  : 0.2945921
TotalMilliseconds : 294.5921
```

Performance in Changelog

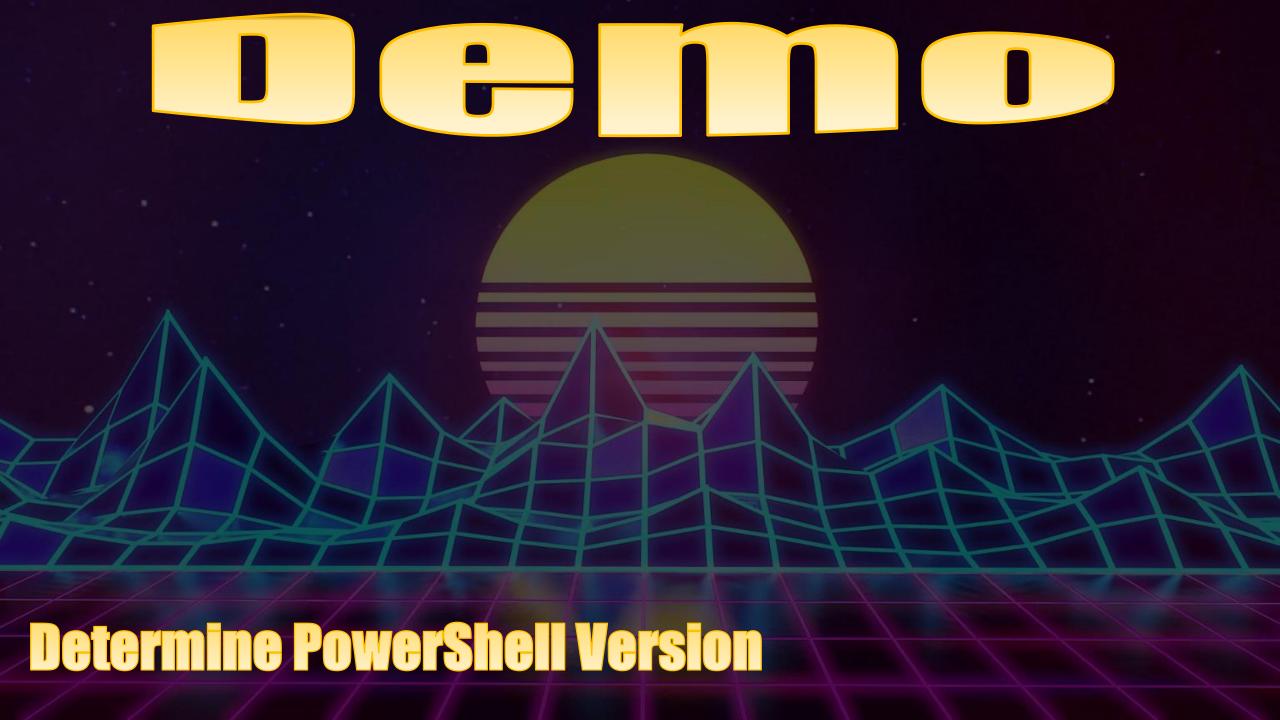


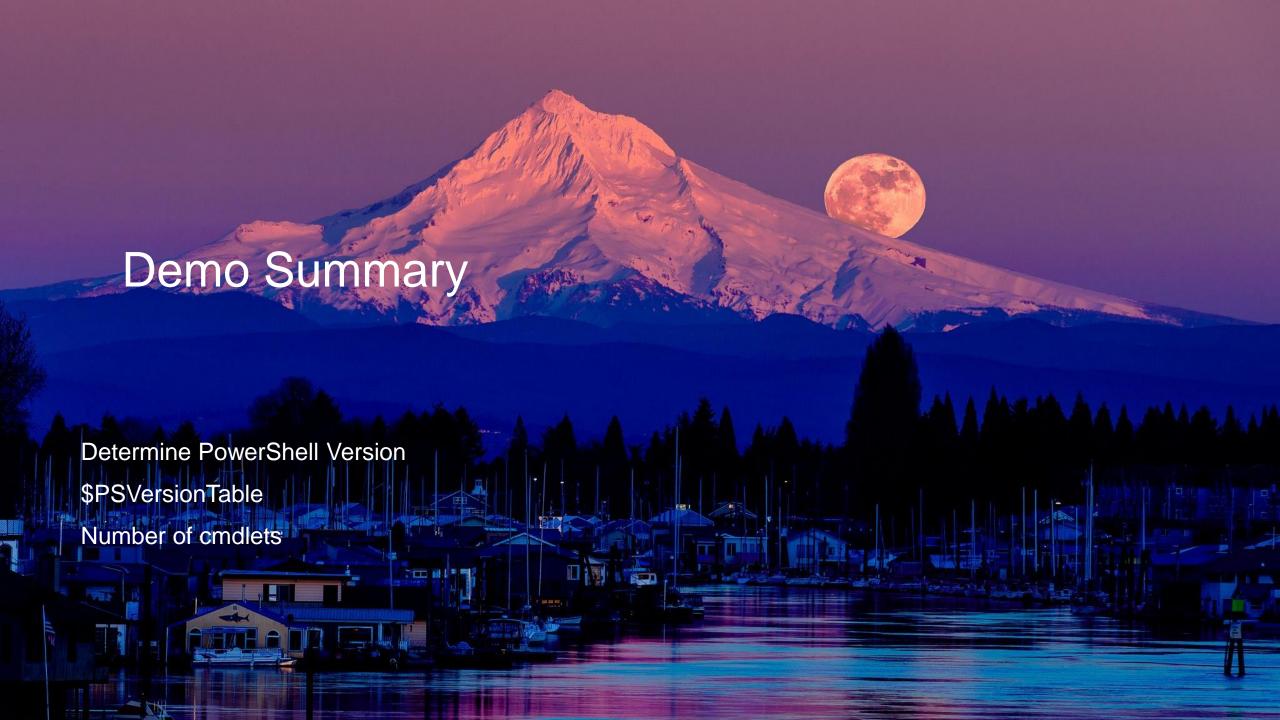
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Changelog

v6.2.0-preview.4 - 2019-01-28





Azure PowerShell Module

- Released in September
 - 0.0.1
- Rapid development cycle
 - 1.3.0
- Backwards compatible with AzureRm

Backwards compatible

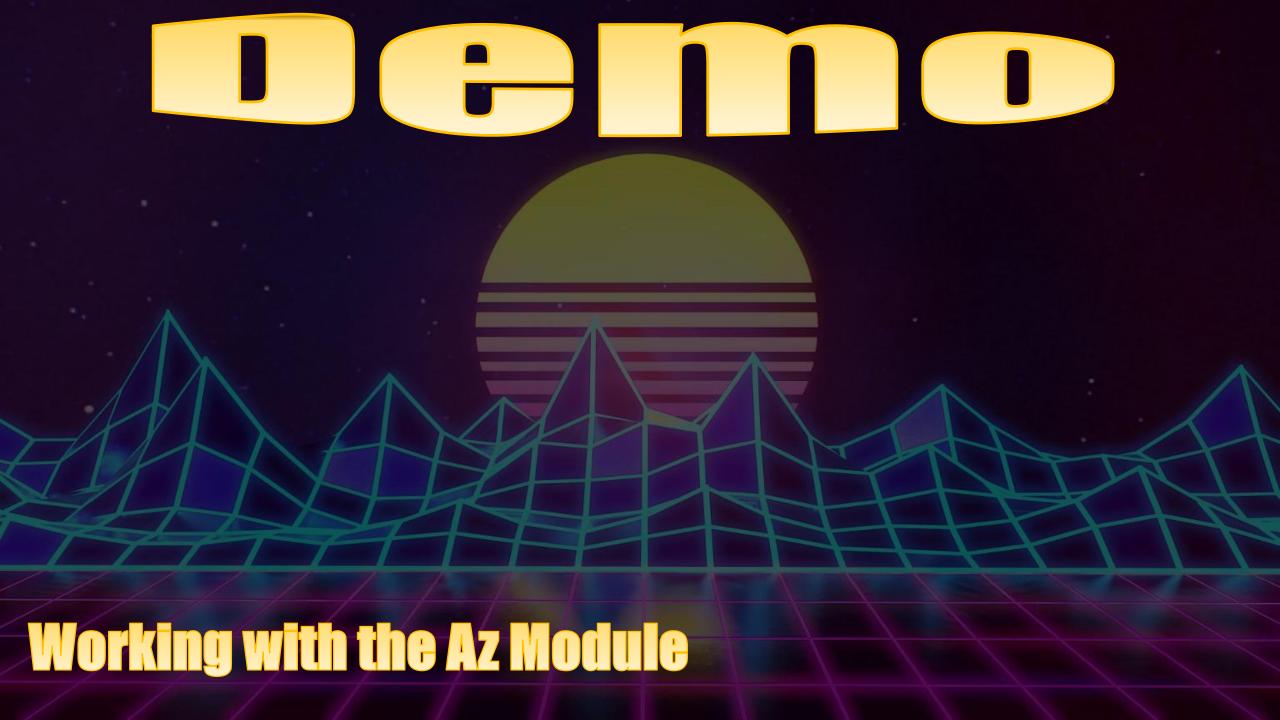
Enable-AzureRmAlias

Module: Az.Accounts

Enables AzureRm prefix aliases for Az modules.

```
PowerShell

Enable-AzureRmAlias
    [-Scope <String>]
    [-Module <String[]>]
    [-PassThru]
    [-DefaultProfile <IAzureContextContainer>]
    [-WhatIf]
    [-Confirm]
    [<CommonParameters>]
```





Cloud Shell timed out

Cloud Shell timed out

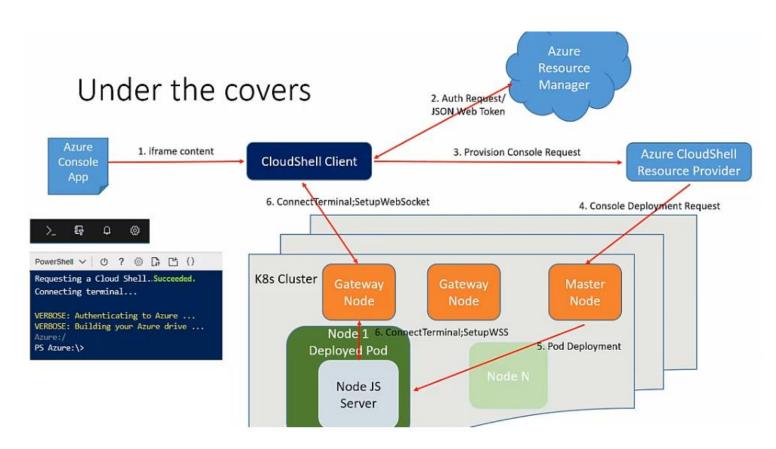
Cloud Shell has been idle for 20 minutes or you have manually exited.

Would you like to reconnect?

Reconnect

Quit







Cloud Shell pricing

✓ No upfront cost

✓ No termination fees

✓ Pay only for what you need

Language Support

Language	Version
.NET Core	2.0.0
Go	1.9
Java	1.8
Node.js	8.9.4
PowerShell	6.1.0
Python	2.7 and 3.5 (default)

Available tools

Containers	Docker Machine
	Kubectl
	Helm
	DC/OS CLI
Databases	MySQL client
	PostgreSql client
	sqlcmd Utility
	mssql-scripter
Other	iPython Client
	Cloud Foundry CLI
	Terraform
	Ansible
	Chef InSpec

Linux tools	bash
	zsh
	sh
	tmux
	dig
Azure tools	Azure CLI and Azure classic CLI
	AzCopy
	Service Fabric CLI
	Batch Shipyard
	blobxfer
Text editors	vim
	nano
	emacs
	code
Source control	git
Build tools	make
	maven
	npm
	pip

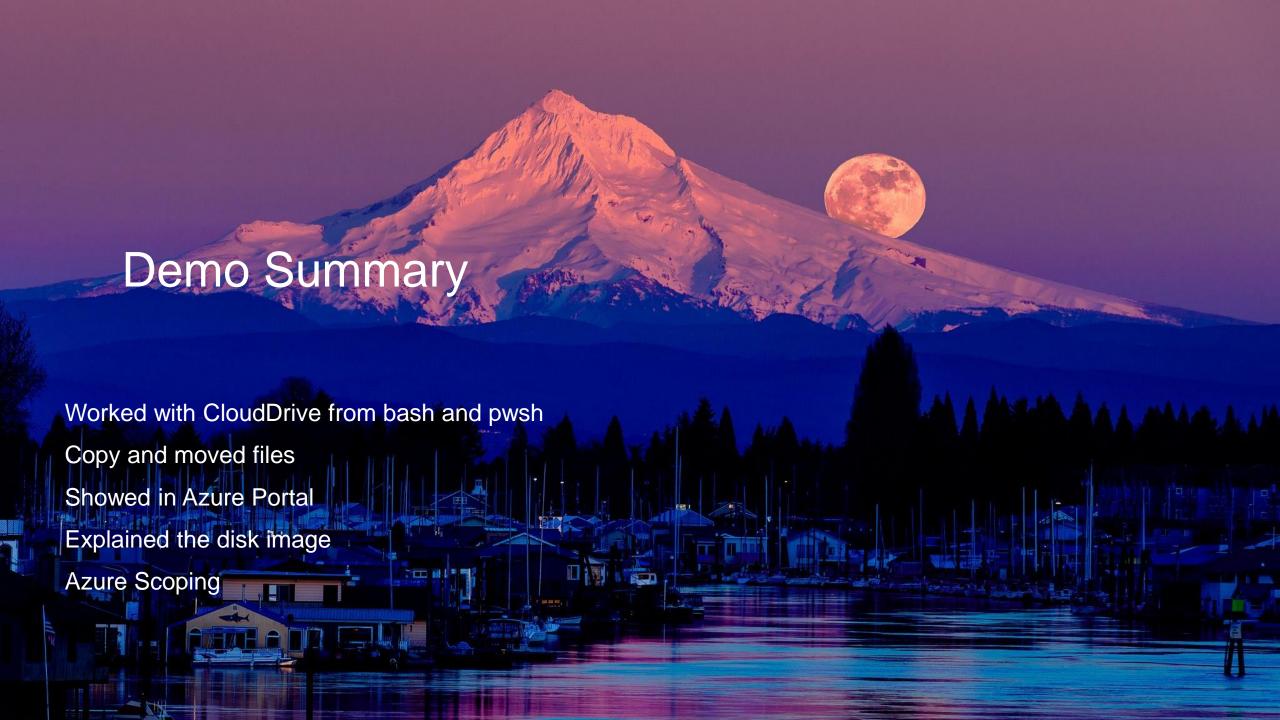
CloudDrive in Cloud Shell

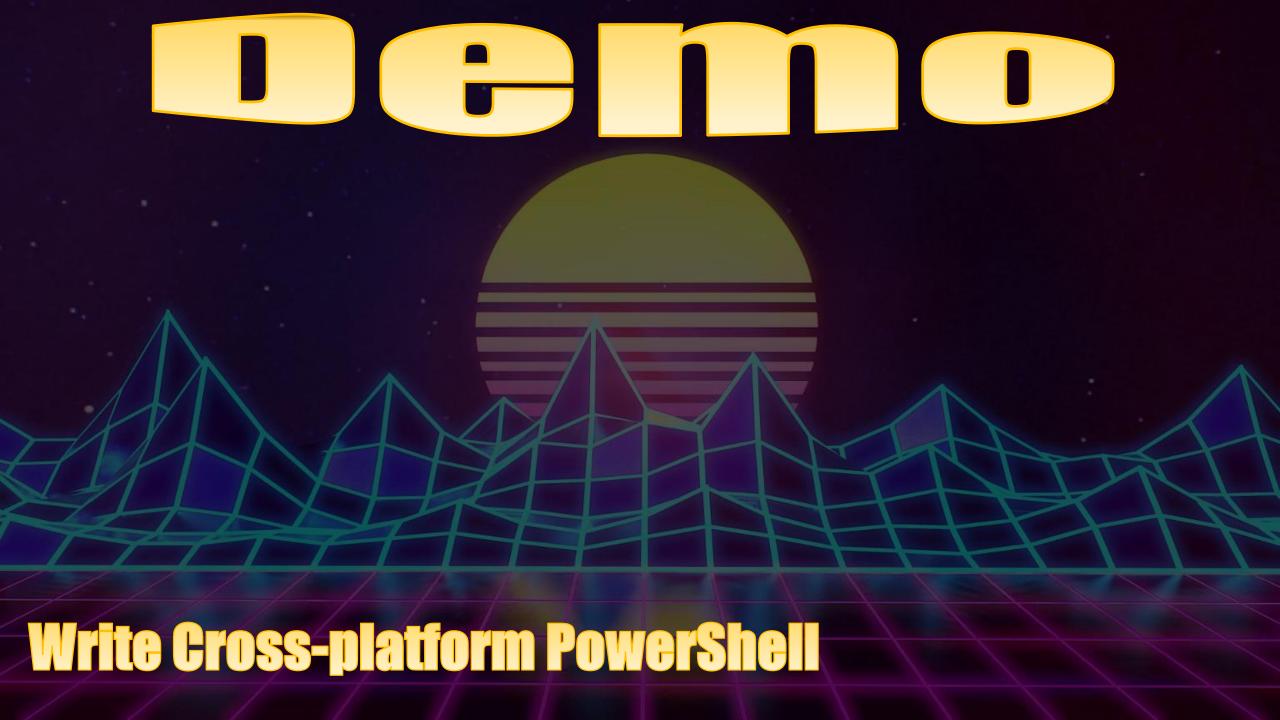
```
Command
                              :Mount an Azure file share to Cloud Shell.
  clouddrive mount
   Mount enables mounting and associating an Azure file share to Cloud Sh
   Cloud Shell will automatically attach this file share on each session
   Cloud Shell persists files with both methods below:
   1. Create a disk image of your $HOME directory to persist files within
   This disk image is saved in your specified file share as 'acc jcjbrass
    '//<storageaccount>.file.storage.windows.net/<fileshare>/.cloudconsole
   2. Mount specified file share as 'clouddrive' in $HOME for file sharin
    '/home/jcjbrasser/clouddrive' maps to '//<storageaccount>.file.storage
Arguments
      --subscription id
                                  [Required]:Subscription ID or name.
      --resource-group group
                                  [Required]:Resource group name.
      --storage-account name
                                  [Required]:Storage account name.
      --file-share name
                                  [Required]: File share name.
      --disk-size size
                                            :Disk size in GB. (default 5)
                                            :Skip warning prompts.
       --force
           --help
                                            :Shows this usage text.
```

Cloud Shell machines exist in the following regions:

Area	Region
Americas	East US, South Central US, West US
Europe	North Europe, West Europe
Asia Pacific	India Central, Southeast Asia







Key Takeaways

Available as optional download

Az Module

Rapid Release Cycle

Windows Compatibility

All Platforms – All PowerShell (!!!)



