

PowerShell Core

Cross Platform Remoting

about_Author



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Warum PowerShell Core?

- Plattformunabhängige Version
- Keine Weiterentwicklung der Windows PowerShell
- In Zukunft wird es heißen

PowerShell Core = PowerShell

Warum PowerShell Core?



Jeffrey Snover 

@jsnover

Follow



"Manage anything from anywhere" is becoming a reality (for PowerShell users)

Matt McNabb @mcnabbmh

We can connect to Exchange Online from Linux in the latest PowerShell Alpha. Here's the deets [mattmcnabb.github.io/O365-PowerShel...](https://mattmcnabb.github.io/O365-PowerShell...)

2:13 PM - 12 Mar 2017

Unterstützte Plattformen

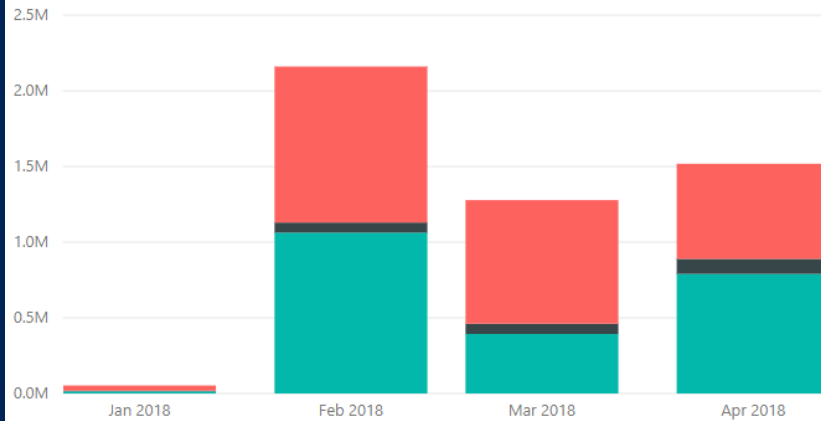
- Windows 7, 8.1 und 10
- Windows Server 2008 R2, 2012 R2 und 2016
- Windows Server Semi-Annual Channel
- Ubuntu 14.04, 16.04 und 17.04
- Debian 8.7+, and 9
- CentOS 7
- RHEL 7
- OpenSUSE 42.2
- Fedora 25, 26
- macOS 10.12+

<http://aka.ms/pslifecycle#supported-platforms>

Verbreitung von PowerShell Core

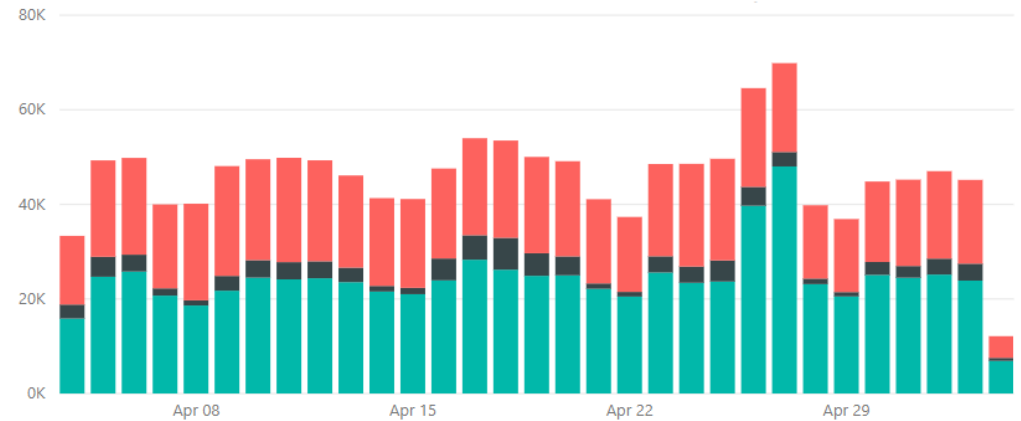
Monthly Usage by OS (90 Day)

userAgent Linux Mac Windows



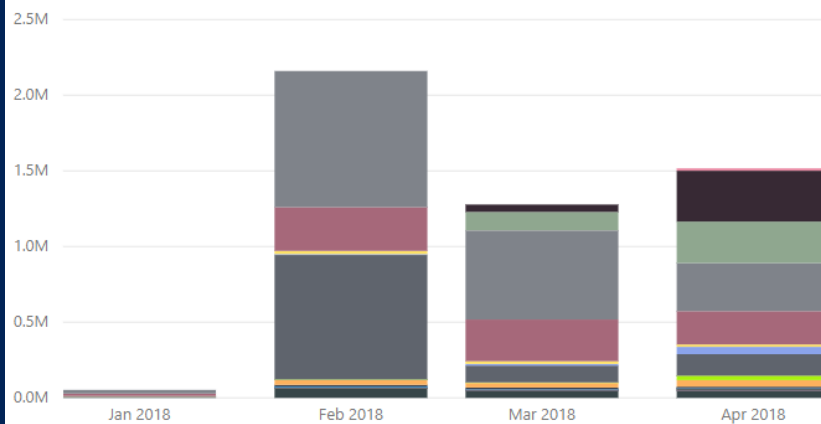
Daily Usage by OS (30 Day)

userAgent Linux Mac Windows



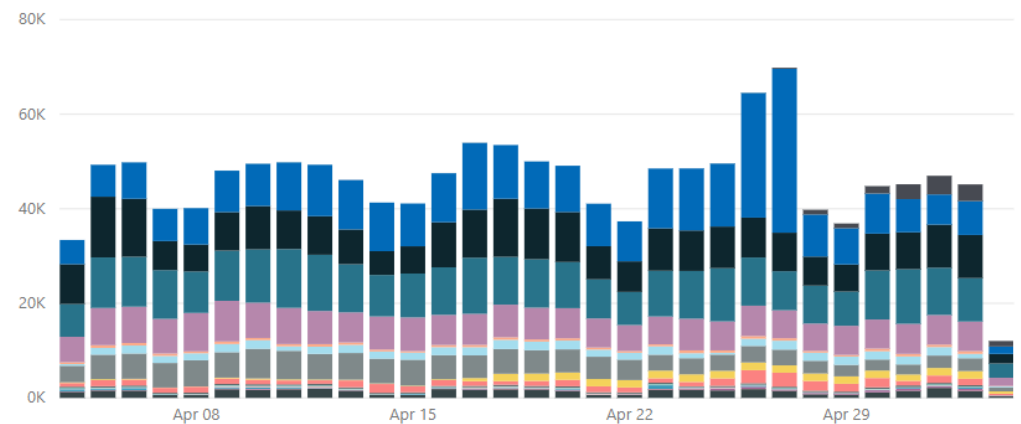
Monthly Usage by Version (90 Day)

version Unknown v6.0.0 v6.0.0-115- v6.0.0-118- v6.0.0-127- v6.0.0-130- v6.0.0-133-




Daily Usage by Version (30 Day)

version Unknown v6.0.0 v6.0.0-130- v6.0.0-146- v6.0.0-alph... v6.0.0-alph... v6.0.0-alph... v6.0.0-beta.1 v6.0.0-beta.2





PowerShell Core WinRM vs. SSH

- PowerShell Remoting over WSMAN/WinRM
- PowerShell Remoting over SSH 
- Plaintext SSH remoting

PowerShell Core WinRM vs. SSH

Objekte

Objekte

PowerShell
(Enter/New-
PSSession)

PowerShell
(Enter/New-
PSSession)

Strings

PowerShell
Remoting Protocol
(PSRP)

PowerShell
Remoting Protocol
(PSRP)

SSH Client
(ssh.exe, PuTTY)

WSMan/WinRM

OpenSSH



Demo



Einschränkungen

- Bei Nutzung von WSMAN/WinRM
 - Keine Kerberos Authentifizierung
 - Linux: Nur Basic und NTLM Authentifizierung
 - MacOS: Nur NTLM Authentifizierung
- Keine JEA Endpoints auf Linux und MacOS
- Eingeschränkter sudo Support
- Eingeschränkter cmdlet Support

OpenSSH als Windows Feature

- Ab Windows 1709 vorhanden (Beta)
- Ab Windows 1803
 - OpenSSH nicht mehr in Beta
 - OpenSSH Client im Standard installiert
- Feature manuell aktivieren
 - `Add-WindowsCapability -Online -Name OpenSSH.Client~~~~0.0.1.0`
 - `Add-WindowsCapability -Online -Name OpenSSH.Server~~~~0.0.1.0`
- Anleitung auf [CloudBrothers.info](https://cloudbrothers.info)

Quellen und weiterführende Informationen

- [PowerShell Core by Joey Aiello](#)
- [Manage hybrid cloud and transform your workplace with PowerShell and Azure Automation](#)
ab Minute 37:16
- [PowerShell Core Support Lifecycle](#)