Boston PowerShell User Group

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> Get-Date
  Monday, September 12, 2016 6:00:00 PM

> Set-Topic "On an Open Source PowerShell"
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PowerShell Gallery and Community Projects

- Thanks to SAPIEN Technologies for the food
- Google Hangout
- Materials: https://github.com/BosPSUG

whoami

Warren Frame

- Perpetual student
- Occasionally uses and writes about PowerShell
- Feel free to connect!
  - twitter.com/pscookiemonster
  - ramblingcookiemonster.github.io
  - github.com/ramblingcookiemonster

whoami

Nicholas M. Getchell

- Systems Analyst @ Massasoit Community College
- TechSession Coordinator @ PowerShell.org (kind of)
- Contact Me:
  - Twitter: @Getch3028
  - GitHub: https://github.com/ngetchell
  - PowerShell Blog: https://powershell.getchell.org
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Agenda

- Housekeeping
- Open source PowerShell news highlights
- Cross platform PowerShell demo and discussion

Housekeeping

- GitHub Organization

  github.com/BosPSUG

- Twitter

  twitter.com/BosPSUG

- Google Hangouts (?)

  bit.ly/BPSUGGoogle

- User Group Invite-athon

  bit.ly/BostonPSUG

- PowerShell Slack Team

  Slack.PoshCode.org (Invite)

- Want to present?

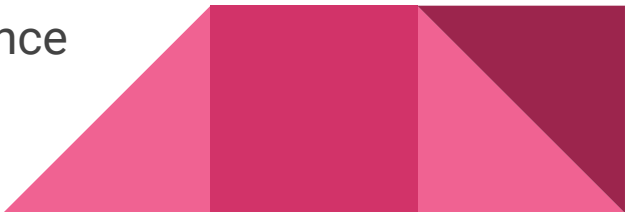 boston.powershell.user.group@gmail.com

What happened?

- PowerShell open sourced
- PowerShell ported to macOS, Linux
- Details on PowerShell team direction:
  - Additional Linux Distros – parity with .NET Core
  - Cmdlets in Python and other languages
  - Run PowerShell-based DSC resources on Linux
  - _PowerShell remoting to offer transport over SSH_
  - _PowerShell remoting on Linux to support WSMan_
  - Editor Services and auto-generated GUI
  - Unix-style wildcard expansion
  - Continue increasing cmdlet coverage for Linux and Windows

FAQs

- What's not open sourced?
  - ISE, WMI (OMI is), WinRM
  - Cmdlets from other teams. Active Directory, Exchange, etc.
- Will <MyFavoriteMicrosoftModule> be ported?
  - Business decision
  - Workaround: Implicit remoting
- When will the ISE come to macOS or Linux?
  - Never. It's based on Windows-specific components
  - Start playing with VS Code. Integrated terminal will improve over time
- How do I know if my script will work in PowerShell Core or across platforms?
  - PSScriptAnalyzer rules coming soon

Why does this matter?

- Know PowerShell? Now you know / have a tool that works across platforms
- Heterogeneous environment? Ditto
- Write management tools that rely on, or are based on PowerShell? Ditto

- Source code is out there, including comments
- PowerShell team discussion is out in the open
- Better transparency for feedback - Open discussion vs. UserVoice
- Cross platform languages may attract a larger audience

Community Contributions

- The PowerShell team will now accept Issues, Pull Requests, and comments regarding PowerShell.
- PowerShell Request for Comment (https://github.com/PowerShell/PowerShell-RFC/)
- Import-JSON and Export-JSON RFC (https://github.com/dfinke/PowerShell-RFC/blob/4ce2a8daaf607486f202502 23728e636db271f61/1-Draft/RFC0007-Export-Import-Json.md)

PowerShell on Linux and OSX

- Considerations
  - Completely different file structures and namespaces.
    - Forward Slash/Back Slash
  - Aliases you use daily may not work like you expect
    - Ls, mv, cp, cat, ps
    - Some aliases now point to the Linux binaries instead of cmdlets
  - Sudo not like in Bash
    - Sudo stop-process vs sudo powershell "stop-process"
  - No package management
    - Ie: Find-Module -Name PSSlack | Install-Module -Force

PowerShell Editor Services

- Supported Editors
  - PowerShell ISE
    - Will not be ported to Linux or Mac
  - Visual Studio Code
  - SublimeText
  - Atom (In Process)
  - Vim (In Process)
  - Emacs (In Process)

Working being completed by David Wilson at Microsoft and Keith Hill an open source collaborator.

Remoting

- As of PowerShell v6 Alpha PSRemoting is not working on OSX or Linux. Jeffrey Snover mentioned on the PowerScripting Podcast that there is a build that supports it.
- There is talks of using SSH has an alternative protocol for PowerShell remoting.
- The PowerShell team is also working on a native SSH Client and SSH Server for Windows (https://github.com/PowerShell/Win32-OpenSSH).

Demos!

https://github.com/ngetchell/BPSUGDemoRepo

References and Deeper Dives

- Announcement ([link 1](#), [link 2](#))
  - [Powerscripting Podcast](#)
  - Channel 9 videos ([link 1](#), [link 2](#))
  - [PowerShell team reddit AMA](#)

- [PowerShell Repo](#)
  - [Known issues on non-Windows platforms](#)
  - [PowerShell Repo FAQ](#)
  - [PowerShell Repo Issues](#)
  - [(nix*) Paths](#)
  - [Using VS Code](#)
  - [Contributing](#)
  - [Governance](#)

- [PowerShell Request For Comments Repo](#)

See [BPSUG GitHub repo](#) for a more comprehensive list of references from this presentation

- Community posts
  - [PowerShell Magazine](#)
  - [PowerShell Decompiled: Ho do loops work](#)
  - [VMware PowerCLI for Mac OS X, Linux & More? Yes, please!](#)
- Example issues
  - [PowerShell Scripts require .ps1 extension](#)
  - [PSVersionTable should have entry for OS](#)
  - [Including open source libraries to support YAML cmdlets](#)