



Interactive Enhancements to PowerShell

Steven Bucher – Product Manager for PowerShell Team



Agenda for this session

PSReadLine

- Predictive Intellisense
- Improvements to latest release of PSRL
- ListView Improvements
- History filtering
- Parsing errors

Feedback Providers

- What are they?
- How they are helpful
- How to create your own!

Command-not-found

- Build in Feedback Providers coming soon to PowerShell
- Command-not-found
- WinGet Command-not-found

PowerShell Adapters

- What they are
- Why they are useful
- How you can create your own

Philosophy

The Shell should help you

- Before you hit enter
- After you hit enter



PSReadLine

- Inbox module to help improve the CLI experience of PS
- Predictors
 - History
 - Plugin
 - Completion Predictor
 - Az Predictor
- ListView improvements
 - Scrollable/Adjustable List View
- Get-PSReadLineOptions

Additional PSReadLine Features

- HistoryHandler
 - Prevents certain commands to be added to history
- PromptText parameter
 - Changing your default prompt and with parsing checks

Feedback Providers

Trigger on successes and errors to provide some form of feedback

Extensible so you can create one for your organization



Command-not-Found Feedback Providers




- Native based
 - Checking against commands you already have installed
 - Built into PowerShell
- WinGet based
 - Checks against commands available on WinGet
 - Available via PowerToys, coming to PowerShell soon
- Linux based
 - Check native commands available on apt, sudo etc
 - External module to install/use

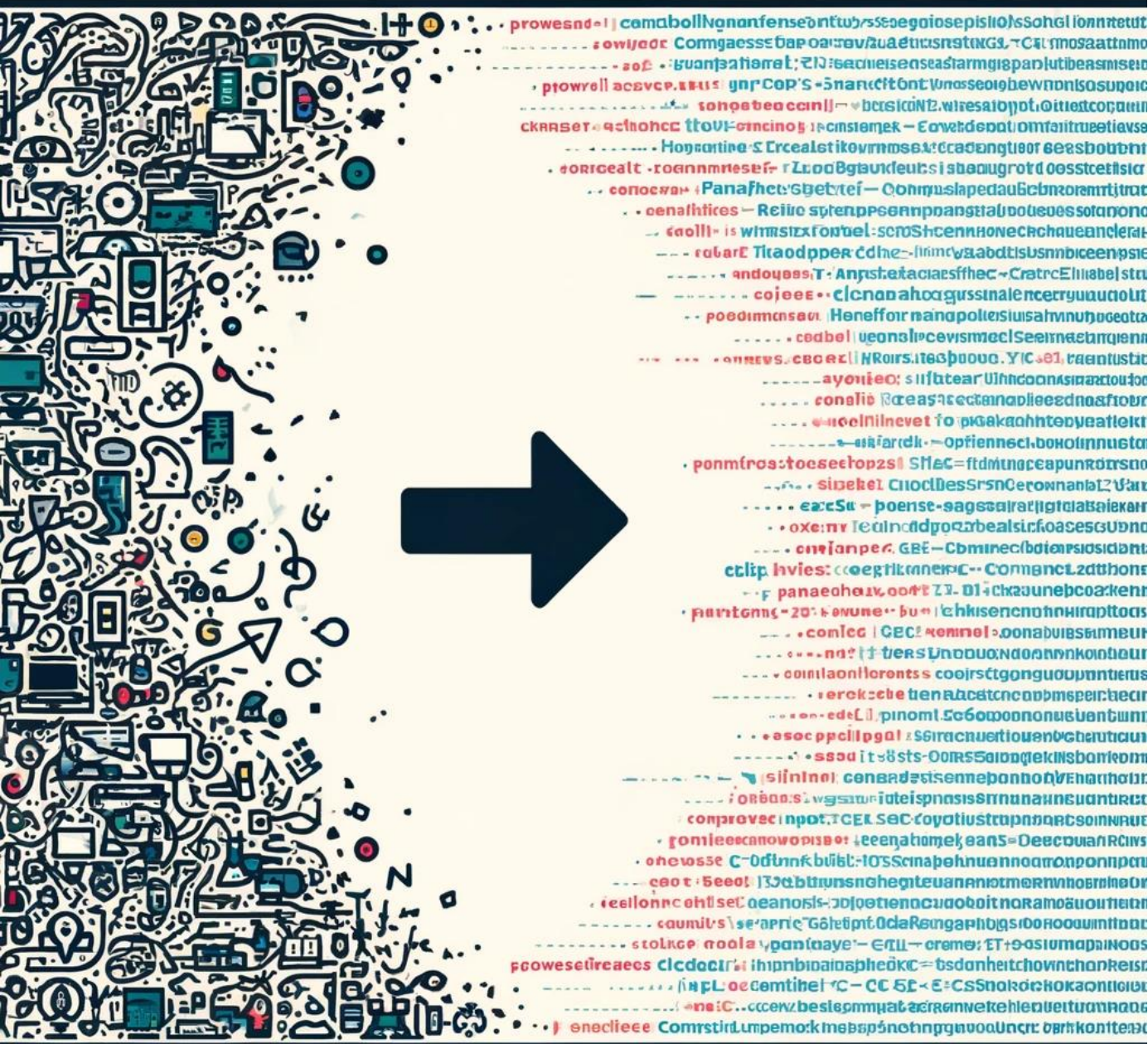
PowerShell



PowerShell 7.4.1

Loading personal and system profiles took 1498ms.

  winget-command-not-found  dev/cazamor/init



PS Adapters Module

- Simplifies converting native command text to PowerShell code
- Feedback provider to trigger when an "adapter" is available to use
- Utilizes Predictors for quick acceptance

Want to learn more? (Part 1/2)

- PSReadLine

- Check out the repo: <https://github.com/PowerShell/PSReadLine>
- Completion Predictor: <https://www.powershellgallery.com/packages/CompletionPredictor/>
- Az Predictor: <https://www.powershellgallery.com/packages/Az.Tools.Predictor/>

- Feedback Providers

- Blog: [What are Feedback Providers? - PowerShell Team \(microsoft.com\)](#)
- Creating a Feedback Provider: [How to create a feedback provider - PowerShell | Microsoft Learn](#)
- Justin Grote's session – ***Creating a PowerShell 7.4 Feedback Provider*** – Tomorrow at 9am Room 405

Want to learn more? (Part 2/2)

- Command-Not-Found Feedback Providers
 - WinGet Command Not Found: <https://learn.microsoft.com/en-us/windows/powertoys/cmd-not-found>
 - Linux Command Not Found: <https://www.powershellgallery.com/packages/command-not-found>
- PS Adapters Feedback Provider
 - Gallery: <https://www.powershellgallery.com/packages/Microsoft.PowerShell.PSAdapter>
 - Repo: <https://github.com/PowerShell/JSONAdapter>



Steven Bucher
stevenbucher@Microsoft.com