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PowerShell Conference Europe

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# Shell Enhancements

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*Steven Bucher*

**PRAGUE23**  
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# Many thanks to our sponsors:





# Steven Bucher

- Product Manager for the PowerShell Team
- California Native
- Wine enthusiast
- PSReadLine
- Interactive experience
- PowerShell Telemetry

# Interactive Design

- Natural feeling design
  - Non-intrusive and low disruptive design
- Shell being as assistive as possible
- Bringing more intelligence to the interactive experience

# Shell Assistive Scenarios

Subtle	Ask	Suggest	Recover
<p>Should never feel disruptive</p> <p>Simple and small</p> <ul style="list-style-type: none"><li>- IntelliSense</li><li>- Spell Check</li><li>- History Predictor</li></ul>	<p>To avoid disruption, should only happen on <i>user request</i></p> <ul style="list-style-type: none"><li>- Tab Completion</li><li>- PSSA</li></ul>	<p>Must be opt-in because impact is dictated by user preference</p> <p>Usually a “guess” or “gamble” that may or may not help the user</p> <ul style="list-style-type: none"><li>- Plugin Predictors</li></ul>	<p>Once you hit ENTER, you can’t go back</p> <p>The best we can do at this point is to help you understand what went wrong and how to make a correction</p> <p>Feedback providers</p>

# PowerShell Predictive IntelliSense

- Implemented in order to accelerate and enhance your interactive CLI experience
- Two type of predictors
  - History
  - Plugin
- History for acceleration
- Plugins for enhancement

# Demos

We love Demos!



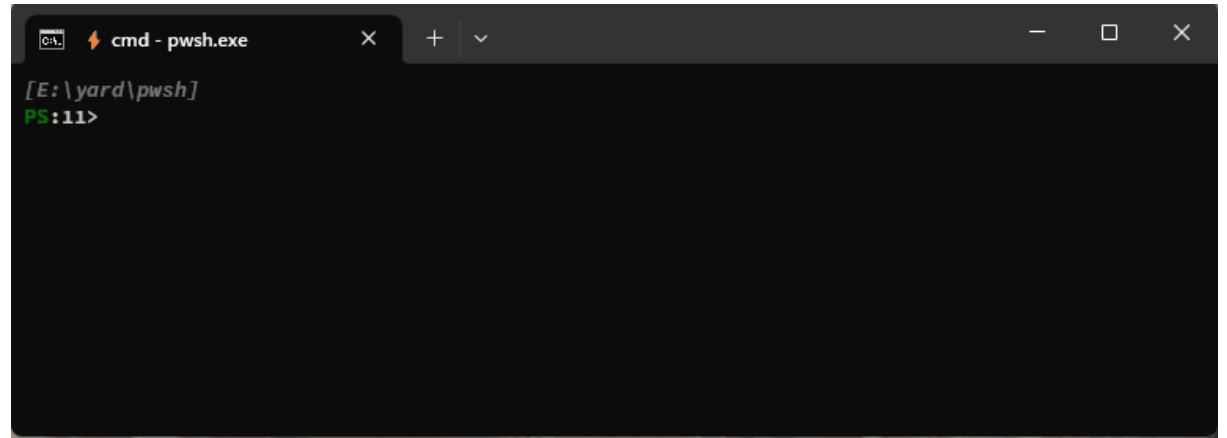
# Some AWESOME Plugin Predictors

- Completion Predictor
- Az.Tools.Predictor
- Community Predictors
  - PnP.PowerShell.Predictor
  - PowerType
  - Directory Predictor
  - And many more!



# Improvements to PSReadLine

- BUNCH of stability improvements
- Scrollable View
- Adjustable height
- Tooltip
- Deduplication
- Available in PSReadLine2.3.0-beta.
- Demo time again!



# Other Shell Enhancements from PSReadLine

- PSReadLine Key Handlers
- PSReadLine Options
  - [CommandValidationHandler](#)
- Sample Profile in module install folder

# Feedback Providers

- Predictors are preventative but we know errors will always be inevitable
- Next evolution of assistance in the shell

# What *are* feedback providers??

- Feedback Providers are PowerShell modules that subscribe to the IFeedbackProvider interface
- Currently have one built in one to suggest installed cmdlets [General]
- Lots of development coming soon in the future

# What triggers Feedback Providers?

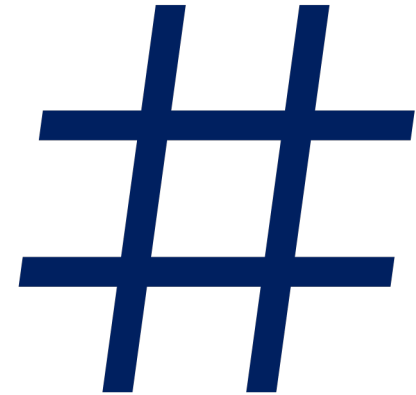


Error

- CommandNotFound
- ErrorRecordObject



Success



Comment

# Demos

We love Demos!



# How to keep up with Feedback Providers?

- [Main · Feedback Provider Roadmap \(github.com\)](#)
- Submit an Issue in PowerShell repo
  - Mention IFeedbackProvider interface
  - Or tag @StevenBucher98 on GitHub
- @StevenBucher13 on Twitter

# What is next for shell enhancements?

- GA PSReadLine 2.3 soon
- Continued feedback provider work
  - Documentation and content very soon
- JSON Adapter Module release in June
- A.I is of course top of mind



# Links

- [Completion Predictor v0.1.1 Release - PowerShell Team \(microsoft.com\)](#)
- [PSReadLine 2.3.1-beta1 Release - PowerShell Team \(microsoft.com\)](#)
- [Feedback Provider Roadmap](#)

# Q&A

15 minutes

