

Desired State: A close look at the PowerShell and DSC integrations with Chef

Stuart Preston, Principal Engineer – Chef Software Microsoft MVP (Azure)

stuart@chef.io @stuartpreston

Agenda

- What do we know about Chef?
- A history of our PowerShell and Windows support
- What problems are we still trying to solve?
- Demos
- Summary
- Questions/Feedback session



What do we know about Chef?

- Configuration Management/Policy Management
- Client/Server, pull based model
- Ruby, cross-platform including Solaris and AIX
- Cookbooks, Recipes, Resources
- Attributes (ohai/automatic, custom)
- Environments (override attributes)
- Two-phase compilation on client
- Ecosystem Chef Supermarket



PowerShell Timeline

- 2003 No native support in Chef
- 2008 PowerShell 3.0, powershell_out "mixin"
- 2012 PowerShell 4.0, dsc_script
- 2016 PowerShell 5.0, dsc resource
- Future tbc



What problems are we trying to solve?

- We want contributors to build amazing things
- Using their existing skills and knowledge
- Current PowerShell script execution is not fast
- Lots of "screen scraping" and hacks
- Existing patterns mainly deal with script output, not objects



Demo

Code is available at: https://github.com/stuartpreston/psconfeu2018



Summary

- 1. DSC Script example
- 2. DSC Resource example
- 3. "notifies" and "subscribes" in resources
- 4. PowerShell Script example
- 5. powershell_out benchmark
- 6. Introducing "powershell_exec"
- 7. powershell_exec benchmark
- 8. Custom resource example using powershell_exec



The Future

- Project Honolulu/Windows Admin Center
- PowerShell Core
- Open Source LCM ?





Feedback



Next Steps

Now: 15 min break

- Grab a coffee
- Stay here to enjoy next presentation
- Change track and switch to another room
- Ask me questions or meet me in a breakout session room afterwards

