

Integrating Microsoft Office with Windows PowerShell

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The Challenge

- IT Pros love Microsoft Excel as a data source
- IT Pros love Microsoft Excel as a reporting tool
- IT Pros need richer documentation options

General Concepts

- Despite the .NET Framework, we really still use COM via the Microsoft.Office.Interop classes
- Adding assemblies doesn't seem to make a difference
- Explore interactively in the shell
- Record an application macro to discover objects, methods and constants

Issues

- Very much a developer-oriented task, i.e. no cmdlets.
- Still can face System.__ComObject
- Heavy use of constants like wdStory

Disclaimer

- I'm not a developer
- Searching for ways to make life easier for IT Pros
- There are sometimes many ways to do the same thing

Microsoft Excel Basics

- Create the Excel.Application COM object
- Not visible by default
- Open or create a WorkBook object
- Grab the ActiveSheet
- Navigate via Cells and Rows
- Assign values or read Text property
- Close Workbook
- Quit Excel

Microsoft Excel Demos

- Demo-ReadExcel2.ps1
- New-ExcelDiskSpace.ps1
- New-ExcelDiskSpace3.ps1



Microsoft Word Basics

- Create the Word.Application COM object
- Add a document object
- Get a selection
- TypeText(strings)
- TypeParagraph()
- Save document
- Close document
- Quit Word

The Constant Struggle

- Usually PowerShell values like \$True will work
- Define constant variables at the beginning if you can discover the value
- Constants found as System.Enum in Office and Interop classes

Microsoft Word Demos

- New-OfficeConstants.ps1
- New-WordDoc.ps1
- New-WordDoc2.ps1
- Demo-WordMailMerge.ps1
- Demo-WordReport.ps1



VBA to PS

- Create your end result recorded as a macro
- Edit the macro
- Find object
- Review method parameters

Still to do

- PowerPoint
 - <http://blogs.technet.com/b/heyscriptingguy/archive/2010/05/13/hey-scripting-guy-how-can-i-customize-microsoft-powerpoint-presentations.aspx>
- OneNote
 - Objects create XML documents that you parse.
- Outlook
 - Use Send-MailMessage

Discussion



Thank You

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