



POWERSHELL v3.0 EASY RIDER

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AGENDA

- New Help Options
- Default Parameter Values
- Simplified Syntax
- Improved Tab Completion
- Redirection Options
- Improved ISE Experience
- Q&A



WHO AM I?

- Windows PowerShell MVP
- PowerShell Author
 - Windows PowerShell 2.0: TFM (with Don Jones)
 - Managing Active Directory with Windows PowerShell: TFM 2nd Ed.
- Prof. PowerShell
- IT trainer and consultant
- <http://jdhitsolutions.com/blog>
- <http://twitter.com/jeffhicks>



A NOTE...

- All demos will be made available
- Demos are written mostly as one-liners.
- Using the most current publicly available CTP on Windows 7



NEW HELP OPTIONS

- Help can now be updated via download
- Use the Update-Help cmdlet
- Can limit to certain modules
- Default download limit is once a day
- Download from a local source



DEFAULT PARAMETER VALUES

- Define a hash table of cmdlets and default parameter values
- Stored in automatic variable `$PSDefaultParameterValues`
- Always used unless you specify a different value

```
$PSDefaultParameterValues.Add("get-  
wmiobject:class", "win32_operatingsystem")
```



SIMPLIFIED SYNTAX

- The `$_` has always confused people
- Most commonly used in Where-Object and ForEach-Object
- Script block with `$_` is optional

```
PS C:\> get-service | where status -eq  
"running"
```

- Or you can still use original



SIMPLIFIED SYNTAX

- Get-Command searches all modules whether loaded or not
- Get-Help searches all modules whether loaded or not
- If you know a command, run it. PowerShell will load the module for you.



IMPROVED TAB COMPLETION

- Mid line tabbing no longer wipes your command
- Tab completion for parameter values
 - Limited to core cmdlets
- Tab completion for enumerations



REDIRECTION OPTIONS

- Redirect streams to Unicode text files

Stream	Value
Pipeline (Success)	1
Errors	2
Warning	3
Verbose	4
Debug	5

- Write >
- Append >>
- Merge >&



REDIRECTION OPTIONS

```
PS C:\> get-wmiobject win32_logicaldisk  
-comp "F00","client2" 2>err.txt
```

```
PS C:\> c:\scripts\myscript.ps1 -verbose  
2>err.txt 3>warn.txt 4>verbose.txt
```

```
PS C:\> c:\scripts\myscript.ps1 2>&1  
1>data.txt
```

- Merge only to success



IMPROVED ISE EXPERIENCE

- Syntax parsing
- Intellisense
- Most Recent File List
- Autosave
- Snippets
- Integrated Command Help



IMPROVED ISE EXPERIENCE

The screenshot displays the Windows PowerShell ISE interface. A 'Group-Object Help' dialog box is open, showing the following content:

Find: [] Previous Next Settings

Synopsis
Groups objects that contain the same value for specified properties.

Syntax
Group-Object [-AsHashTable] [-AsString] [[-Property] <Object[]>] [-CaseSensitive] [-Culture <string>] [-InputObject <psobject>] [-NoElement] [<CommonParameters>]

Description
The Group-Object cmdlet displays objects in groups based on the value of a specified property. Group-Object returns a table with one row for each property value and a column that displays the number of items with that value.
If you specify more than one property, Group-Object first groups them by the values of the first property, and then, within each property group, it groups by the value of the next property.

Parameters
-AsHashTable <SwitchParameter>

The background shows a PowerShell script with the following code:

```
19  
20  
21 Write-Verbose "$(Get-Date) Finished testing conn  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39 1..10 | foreach { $_*2  
40  
41 write-host "done  
42 ~  
43 ~  
44 ~
```

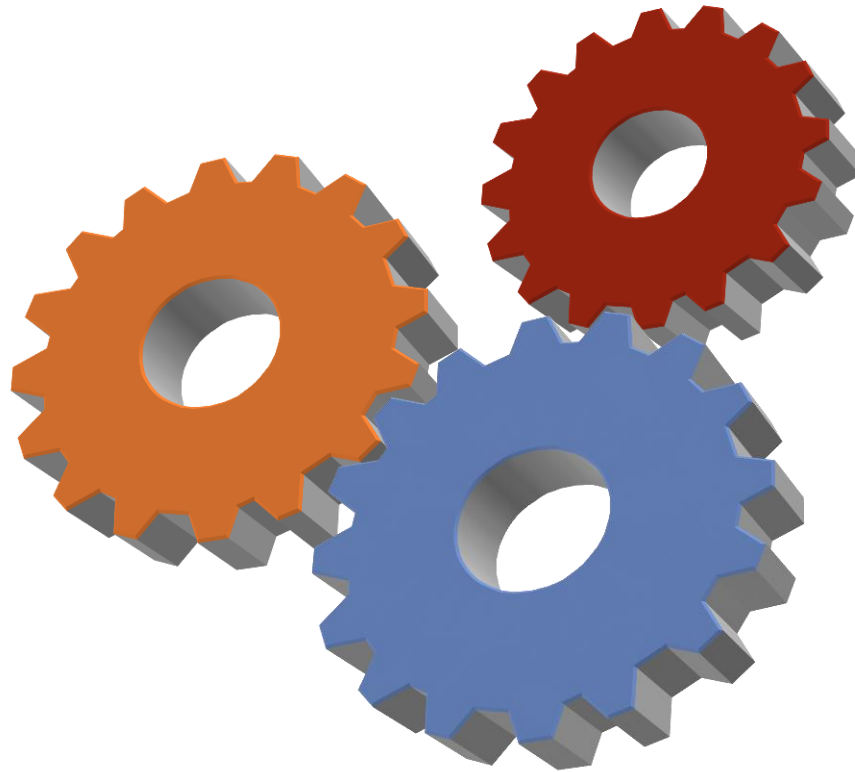
The 'Commands' pane on the right shows the following configuration:

Modules: All
Name: []
Get-WmiObject
Get-WSManCredSSP
Get-WSManInstance
Group-Object
H: []
Parameters: [?]
 AsHashTable
 AsString
 CaseSensitive
Culture: []
InputObject: []
 NoElement
Property: []
Common Parameters [v]
 Show On Startup
Run Insert Copy Hide

At the bottom right, the status bar shows 'Ln 29 Col 2' and '160%'.



DEMOS



RESOURCES

- Windows PowerShell Team blog
(<http://blogs.msdn.com/powershell>)
- The Lonely Administrator
(<http://jdhitsolutions.com/blog>)
- Prof. PowerShell
(<http://mcpmag.com/articles/list/prof-powershell.aspx>)



QUESTIONS



THANK YOU

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