

PowerShell vs. Unix Bash

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BASH

THE BOURNE-AGAIN SHELL

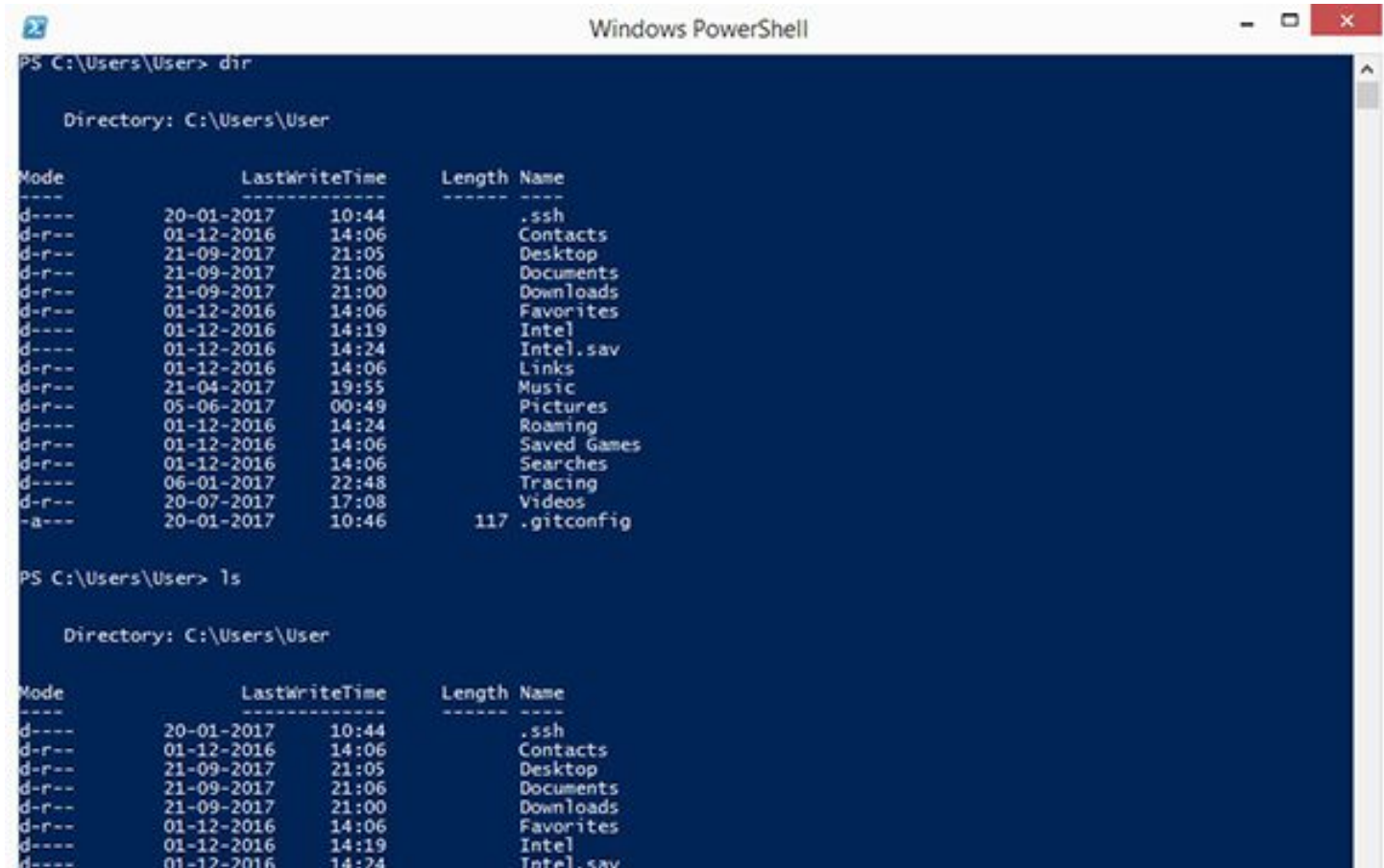


KEEP
CALM
AND
LEARN
POWERSHELL

Windows 10 Anniversary Update



In this comparison of Windows PowerShell vs. Bash, the output for Bash's **Ls** command and PowerShell's **dir** command is similar.



```
Windows PowerShell

PS C:\Users\User> dir

Directory: C:\Users\User

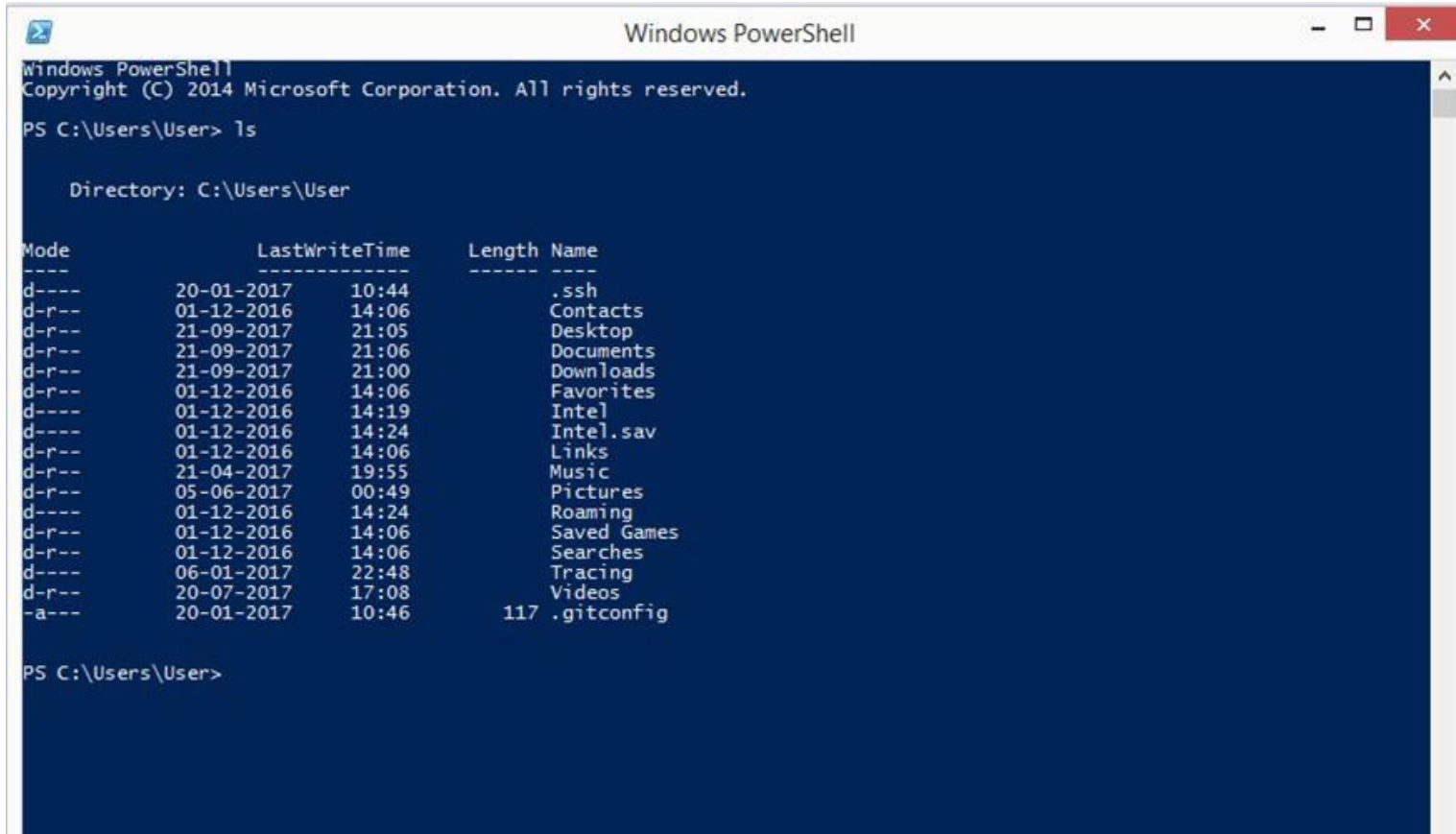
Mode                LastWriteTime         Length Name
----                -
d-----          20-01-2017    10:44             .ssh
d-r--          01-12-2016    14:06           Contacts
d-r--          21-09-2017    21:05           Desktop
d-r--          21-09-2017    21:06           Documents
d-r--          21-09-2017    21:00           Downloads
d-r--          01-12-2016    14:06           Favorites
d-----          01-12-2016    14:19             Intel
d-----          01-12-2016    14:24           Intel.sav
d-r--          01-12-2016    14:06             Links
d-r--          21-04-2017    19:55             Music
d-r--          05-06-2017     00:49           Pictures
d-----          01-12-2016    14:24           Roaming
d-r--          01-12-2016    14:06           Saved Games
d-r--          01-12-2016    14:06           Searches
d-----          06-01-2017    22:48           Tracing
d-r--          20-07-2017    17:08           Videos
-a---          20-01-2017    10:46           117 .gitconfig

PS C:\Users\User> ls

Directory: C:\Users\User

Mode                LastWriteTime         Length Name
----                -
d-----          20-01-2017    10:44             .ssh
d-r--          01-12-2016    14:06           Contacts
d-r--          21-09-2017    21:05           Desktop
d-r--          21-09-2017    21:06           Documents
d-r--          21-09-2017    21:00           Downloads
d-r--          01-12-2016    14:06           Favorites
d-----          01-12-2016    14:19             Intel
d-----          01-12-2016    14:24           Intel.sav
```

PowerShell output for a directory list shows objects and properties.



```
Windows PowerShell
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PS C:\Users\User> ls

    Directory: C:\Users\User

Mode                LastWriteTime         Length Name
----                -
d-----         20-01-2017         10:44      .ssh
d-r--         01-12-2016         14:06      Contacts
d-r--         21-09-2017         21:05      Desktop
d-r--         21-09-2017         21:06      Documents
d-r--         21-09-2017         21:00      Downloads
d-r--         01-12-2016         14:06      Favorites
d-----         01-12-2016         14:19      Intel
d-----         01-12-2016         14:24      Intel.sav
d-r--         01-12-2016         14:06      Links
d-r--         21-04-2017         19:55      Music
d-r--         05-06-2017          00:49      Pictures
d-----         01-12-2016         14:24      Roaming
d-r--         01-12-2016         14:06      Saved Games
d-r--         01-12-2016         14:06      Searches
d-----         06-01-2017         22:48      Tracing
d-r--         20-07-2017         17:08      Videos
-a---         20-01-2017         10:46    117 .gitconfig

PS C:\Users\User>
```

This chart shows the differences between Windows PowerShell and Bash.

A comparison of PowerShell vs. Bash commands

TASK	POWERSHELL	BASH
Create a variable	<code>\$var=0</code>	<code>Var=0</code>
Add a number (2) to a variable	<code>\$var +=2</code>	<code>Let var=\$var+2</code>
Print a string on the screen	Echo string (or) Write-Host string	Echo String
Write a comment	<code># comment</code>	<code># comment</code>
Compare strings	<code>-eq -ne -ceq -cne</code>	<code>= !=</code>
Transform a string	<code>-replace</code>	Sed
Print lines that match a pattern	Select-string	Grep
Work with Boolean values	<code>\$true \$false</code>	True false
Enact an if statement	<code>if (condition) { codeblock }</code>	<code>if [condition] then codeblock fi</code>
Create a for loop	<code>foreach (\$var in \$array) { codeblock }</code>	<code>for var in \$array do codeblock done</code>
List files	Ls or Get-Childitem	Ls
Search path	<code>\$env:path</code>	<code>\$PATH</code>