









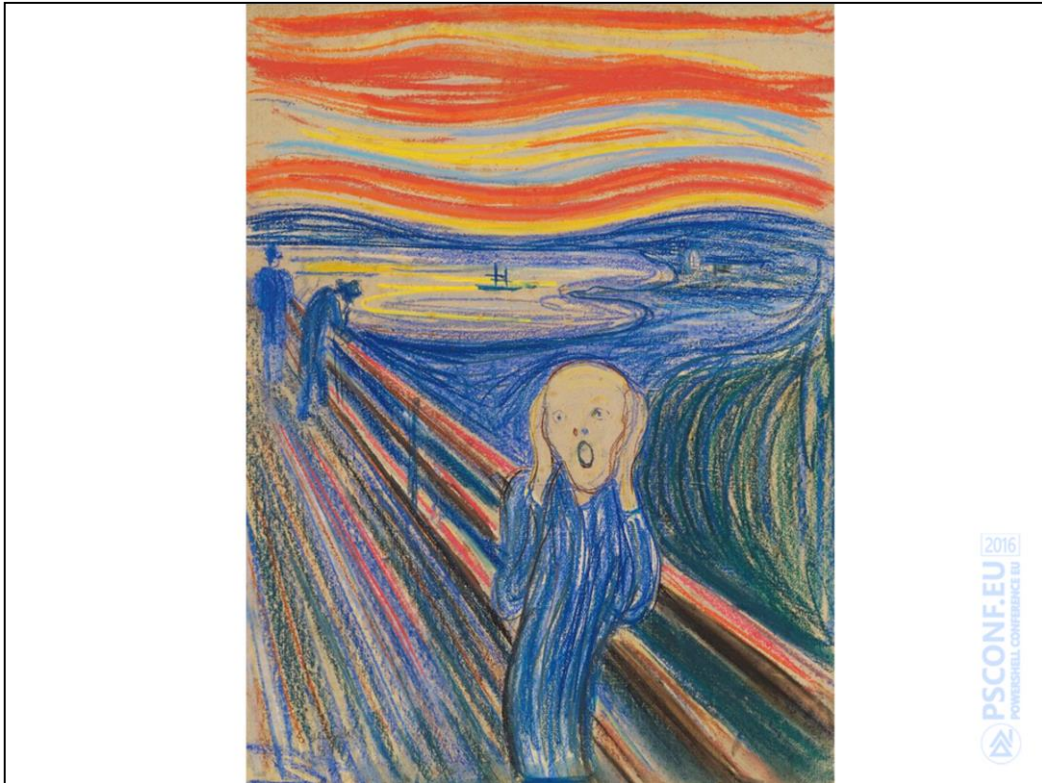
PowerShell Conference Europe
Hannover, 2016
www.psconf.eu

```
PowerShell Conference EU 2016
Sample Code.ps1 X

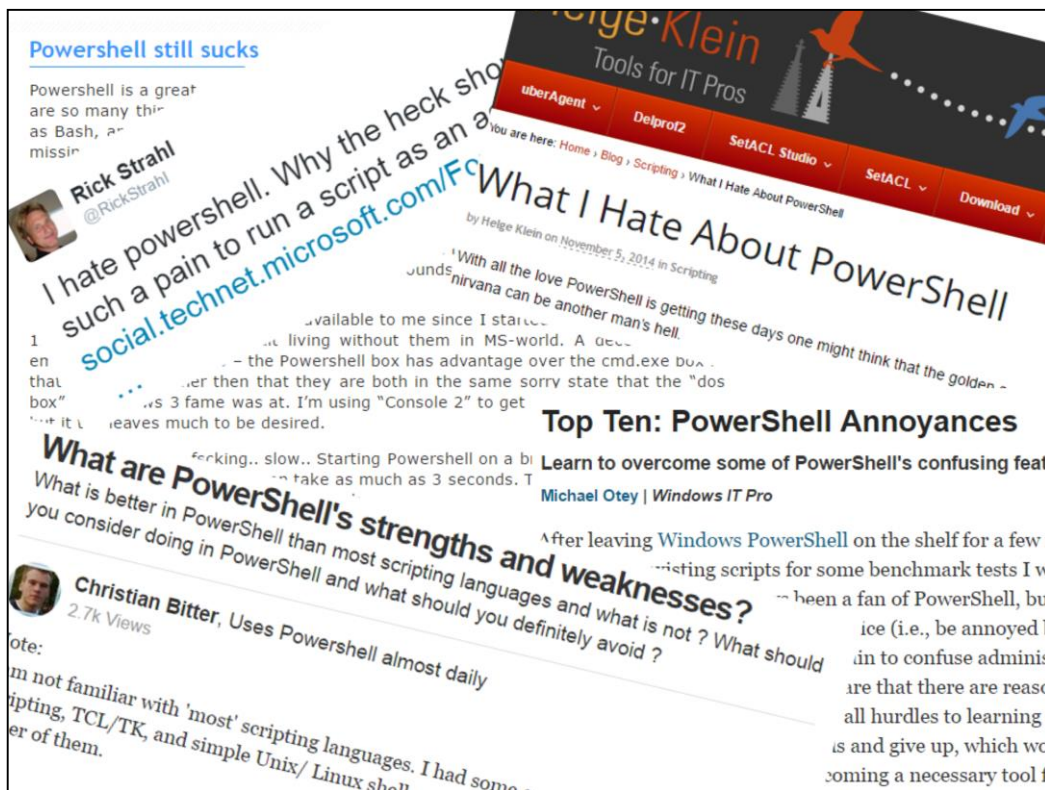
# about_me

$speaker = @{
    name='Thorsten Butz'
    jobrole = 'Trainer','Consultant','Author'
    certification = 'MC*','LPIC-2'
     = @thorstenbutz
     = gplus.to/thorstenbutz
     = facebook.com/thbutz
     = thorsten-butz.de
     = slidingwindows.de
}


```



Edvard Munch - en.wikipedia, public domain
<https://commons.wikimedia.org/w/index.php?curid=37640961>



Helge Klein

What I Hate About Powershell

<https://helgeklein.com/blog/2014/11/hate-powershell/>

What are PowerShell's strengths and weaknesses?

Christian Bitter

<https://www.quora.com/What-are-PowerShells-strengths-and-weaknesses>

Things n' Stuff

<http://geek.co.il/2013/03/17/powershell-still-sucks>

Michael Otey | Windows IT Pro

Top Ten: PowerShell Annoyances

<http://windowsitpro.com/powershell/top-ten-powershell-annoyances>

Rick Strahl (on Twitter)

<https://twitter.com/rickstrahl/status/598171607492743168>



KEEP
CALM
FOR
YOUR
MILEAGE
MAY VARY

The usual suspects

- ComparisonOperators
- ExecutionPolicies
- Write-Host -foregroundcolor 'blue'
- Strict mode, variable declaration
- WMI
- Powershell -ne 'Bash'
- `$yourOpinionGoesHere`
- ...



My personal

TOP 10 LIST

of

PowerShell

annoyances



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Sample Code.ps1 X

```
# 10: Walking on thin ice  
[System.ServiceProcess.ServiceController]::GetServices()  
Get-Service
```

Netlogon Properties (Local Computer)

General Log On Recovery Dependencies

Service name: Netlogon

Display name: Netlogon

Description: Maintains a secure channel between this computer and the domain controller for authenticating users

Path to executable: C:\Windows\system32\lsass.exe

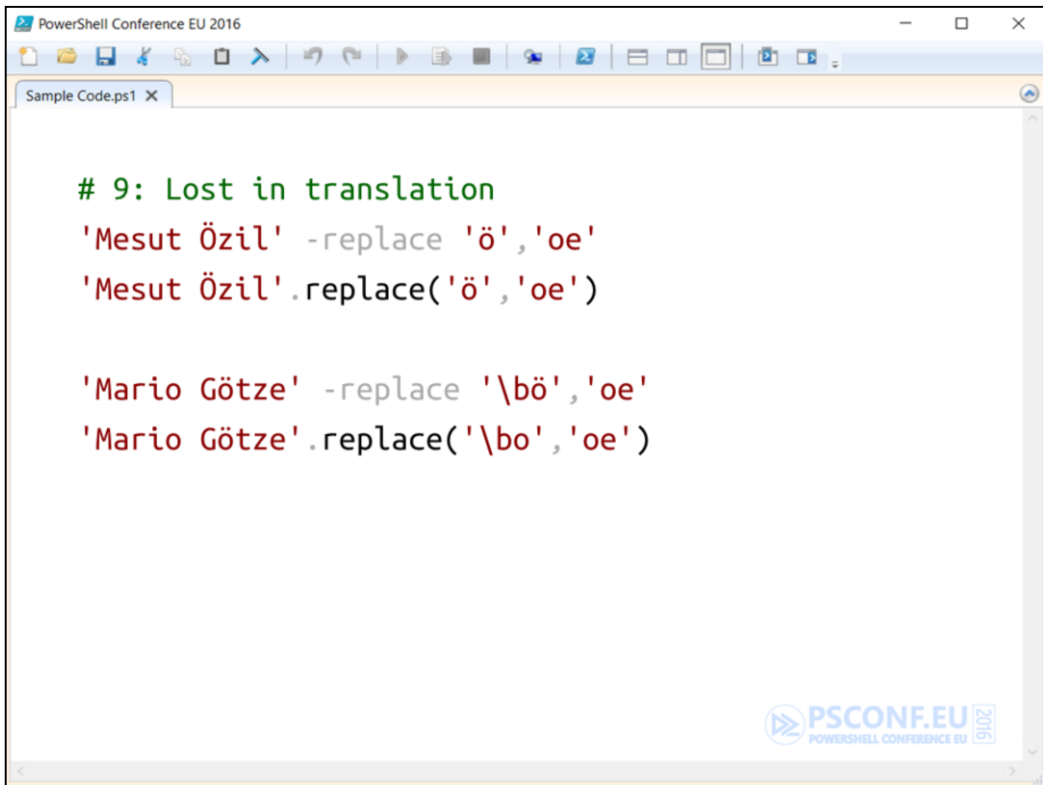
Startup type: Automatic

Service status: Running

Start Stop Pause Resume

You can specify the start parameters that apply when you start the service from here.

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```
# 9: Lost in translation
'Mesut Özil' -replace 'ö','oe'
'Mesut Özil'.replace('ö','oe')

'Mario Götze' -replace '\bö','oe'
'Mario Götze'.replace('\bo','oe')
```


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Sample Code.ps1 X

```
# 8: Consistency
1..5 | ForEach-Object
{
    $_
}

while ($b -lt 5)
{
    $b++
    $b
}
```



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Sample Code.ps1 X

```
# 7: Keep it simple?
Get-Process |
  Where-Object { $_.WS -gt 40MB } |
  Sort- Object WS -Descending

Get-Process |
  where { $PSITEM.WS -gt 40MB } |
  sort WS -Descending

ps | ? { $_.WS -gt 40MB } | sort WS -des


ps | ? WS -gt 40MB | sort WS -des
```

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Sample Code.ps1 X

```
# 6: Mr Bool and the evil [switch]
Get-NetFirewallRule -Enabled true
New-ADUser 'Donald' -Enabled $true
Remove-ADUser 'Donald' -Confirm:$false
```



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```
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Sample Code.ps1 X



# 5: Nice try ...
Get-ADAccountAuthorizationGroup BloatT

Get-ADAccountAuthorizationGroup : An unspecified error has occurred
At line:1 char:1
+ Get-ADAccountAuthorizationGroup BloatT
+ ~~~~~
+ CategoryInfo          : NotSpecified: (BloatT:ADAccount) [Get-
ADAccountAuthorizationGroup], ADException
+ FullyQualifiedErrorId :
ActiveDirectoryServer:0,Microsoft.ActiveDirectory.Management.Commands.GetA
DAccountAuthorizationGr
```

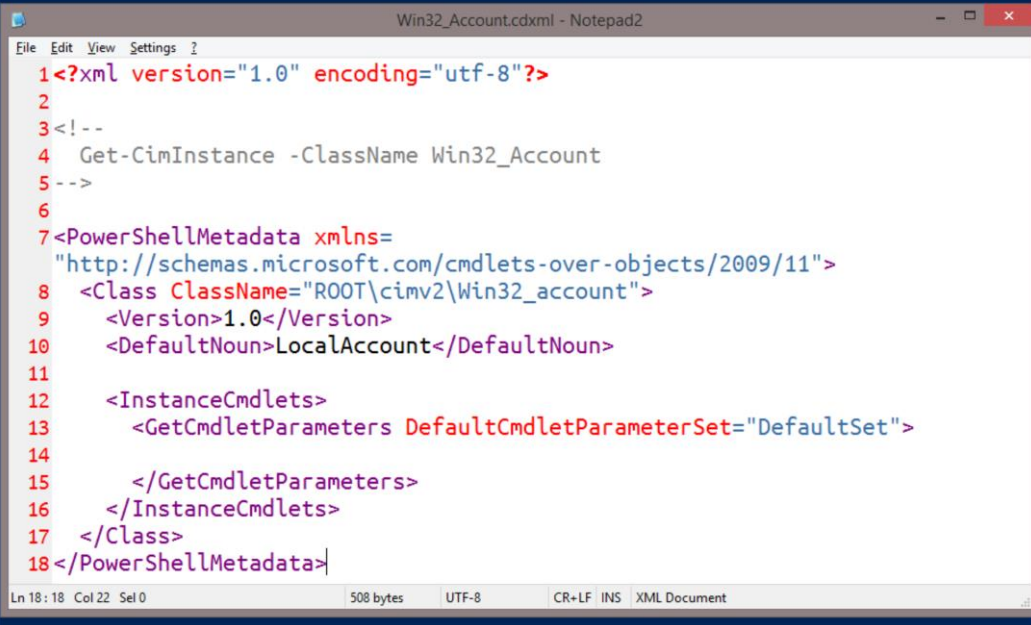
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Sample Code.ps1 X

```
# 4: The impact of speed has been greatly exaggerated
$count = 10000
[System.Collections.ArrayList]$al = @()
foreach ($i in 1..$count) {
    $test = Get-Random
    $al.Add($test)
}
[array]$arr = @()
foreach ($i in 1..$count) {
    $test = Get-Random
    $arr += $test
}
```

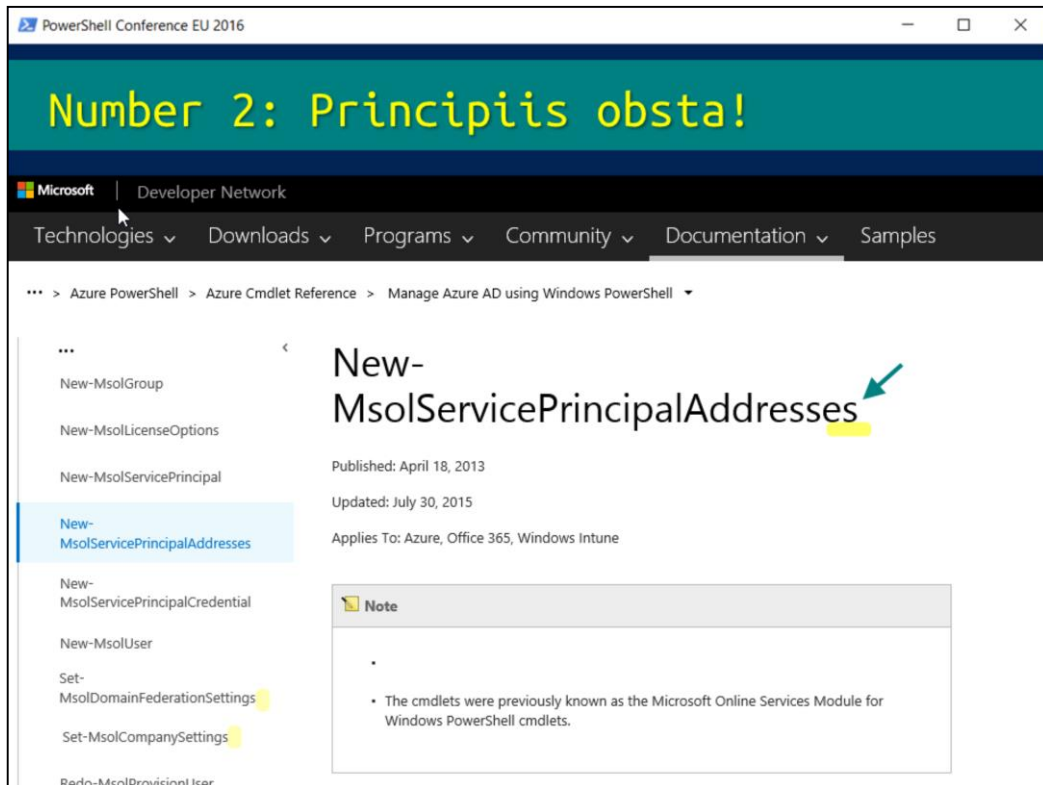


Number 3: CDXML



```
1<?xml version="1.0" encoding="utf-8"?>
2
3<!--
4  Get-CimInstance -ClassName Win32_Account
5-->
6
7<PowerShellMetadata xmlns=
8  "http://schemas.microsoft.com/cmdlets-over-objects/2009/11">
9  <Class ClassName="ROOT\cimv2\Win32_account">
10    <Version>1.0</Version>
11    <DefaultNoun>LocalAccount</DefaultNoun>
12    <InstanceCmdlets>
13      <GetCmdletParameters DefaultCmdletParameterSet="DefaultSet">
14
15      </GetCmdletParameters>
16    </InstanceCmdlets>
17  </Class>
18</PowerShellMetadata>
```

Ln 18: 18 Col 22 Sel 0 508 bytes UTF-8 CR+LF INS XML Document



"Principiis obsta" = Resist the beginnings

<https://en.wikiquote.org/wiki/Ovid>

<https://msdn.microsoft.com/library/dn169221.aspx>

Malformed cmdlets:

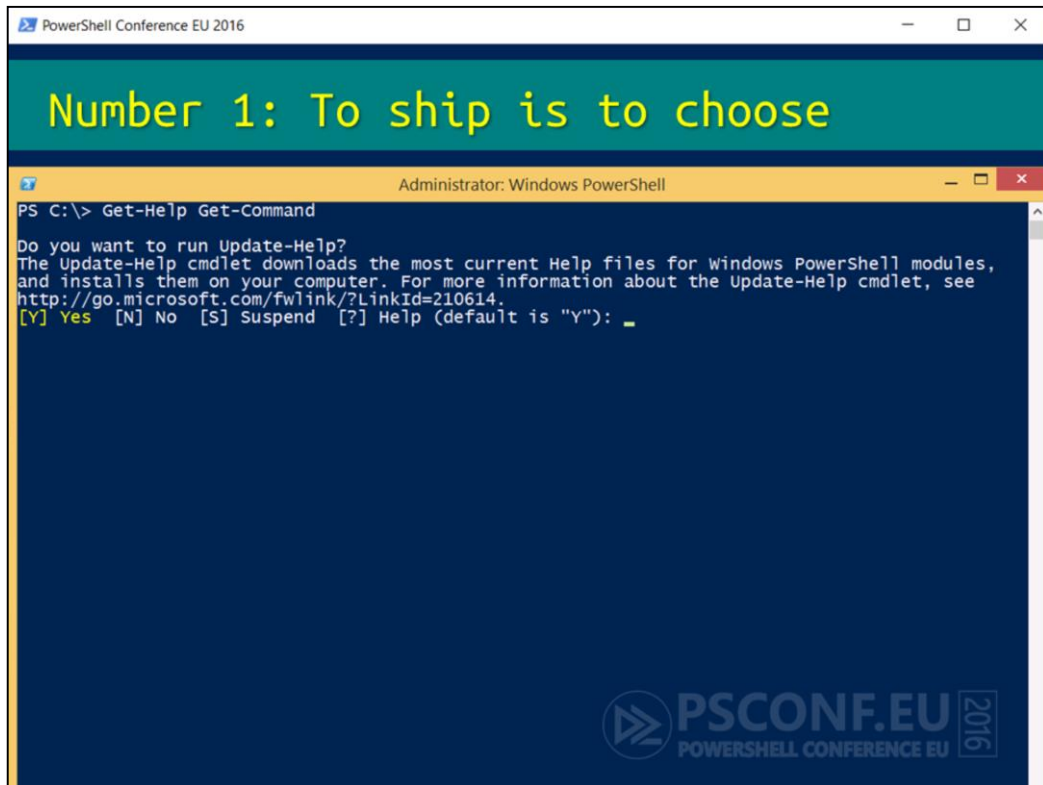
New-MsolServicePrincipalAddresses

Set-MsolDomainFederationSettings

Set-MsolCompanySettings



<https://upload.wikimedia.org/wikipedia/commons/e/ed/Stapellauf.jpg>



"Principiis obsta" = Resist the beginnings

<https://en.wikiquote.org/wiki/Ovid>

Malformed cmdlets:

New-MsolServicePrincipalAddresses

Set-MsolDomainFederationSettings

Set-MsolCompanySettings

Reference:

<https://msdn.microsoft.com/library/dn169221.aspx>





The monad manifesto

1. "Most solutions are home brewed and composed out of existing commands by administrators.
2. Most solutions are focused on either automating management or providing ad hoc fixes.
3. Most administrators are para-programmers. They either don't have the desire, skill or (more often), the time to do sophisticated programming.
4. Most application developers won't make their code manageable unless there is immediate and substantial user benefit"



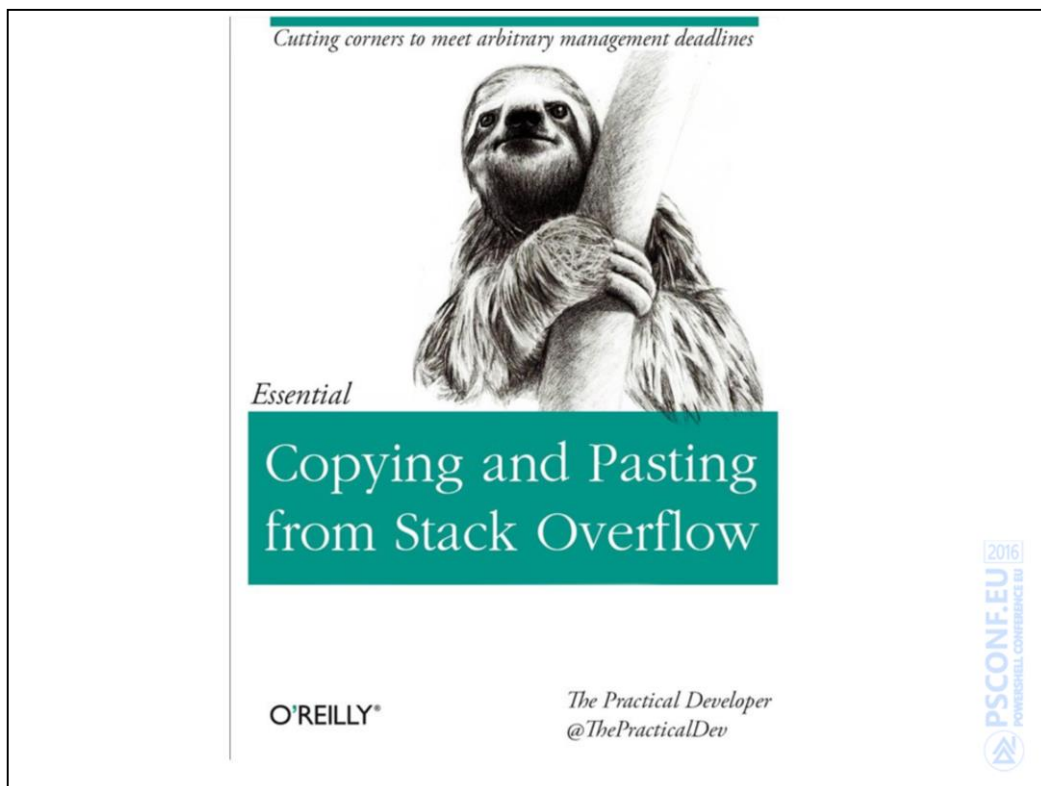
<http://www.jsnover.com/Docs/MonadManifesto.pdf>

Page 3:

"4 New Approaches

Monad takes new approaches to the issues of 1) building commands, 2) composing solutions 3) management models and 4) management GUIs. The Monad architecture flows from the following observations:

1. Most solutions are home brewed and composed out of existing commands by administrators.
2. Most solutions are focused on either automating management or providing ad hoc fixes.
3. Most administrators are para-programmers. They either don't have the desire, skill or (more often), the time to do sophisticated programming.
4. Most application developers won't make their code manageable unless there is immediate and substantial user benefit. "



<https://twitter.com/nixcraft/status/705848396926464000>



I love PowerShell !





