PowerShell - A one trick unicorn

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Agenda

- What, why, PowerShell
- Objects, why?
- Formatting
- Performance
- Demos
- A lot of Unicorns!

Unicorn Facts!

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Unicorns do not have wings!

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The PowerShell language

PowerShell

Monad[12] Manifesto

Welcome to the PowerShell-6.0.0-x64 Setup Wizard

The Setup Wizard will install PowerShell-6.0.0-x64 on your computer. Click Next to continue or Cancel to exit the Setup Wizard.

```
Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

PS C:\Users\Jaap Brasser>
```

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More than the language…

PowerShell + DevOps Global Summit

April 29 - May 2, 2019 • Bellevue, WA, USA

PSDAY.UK

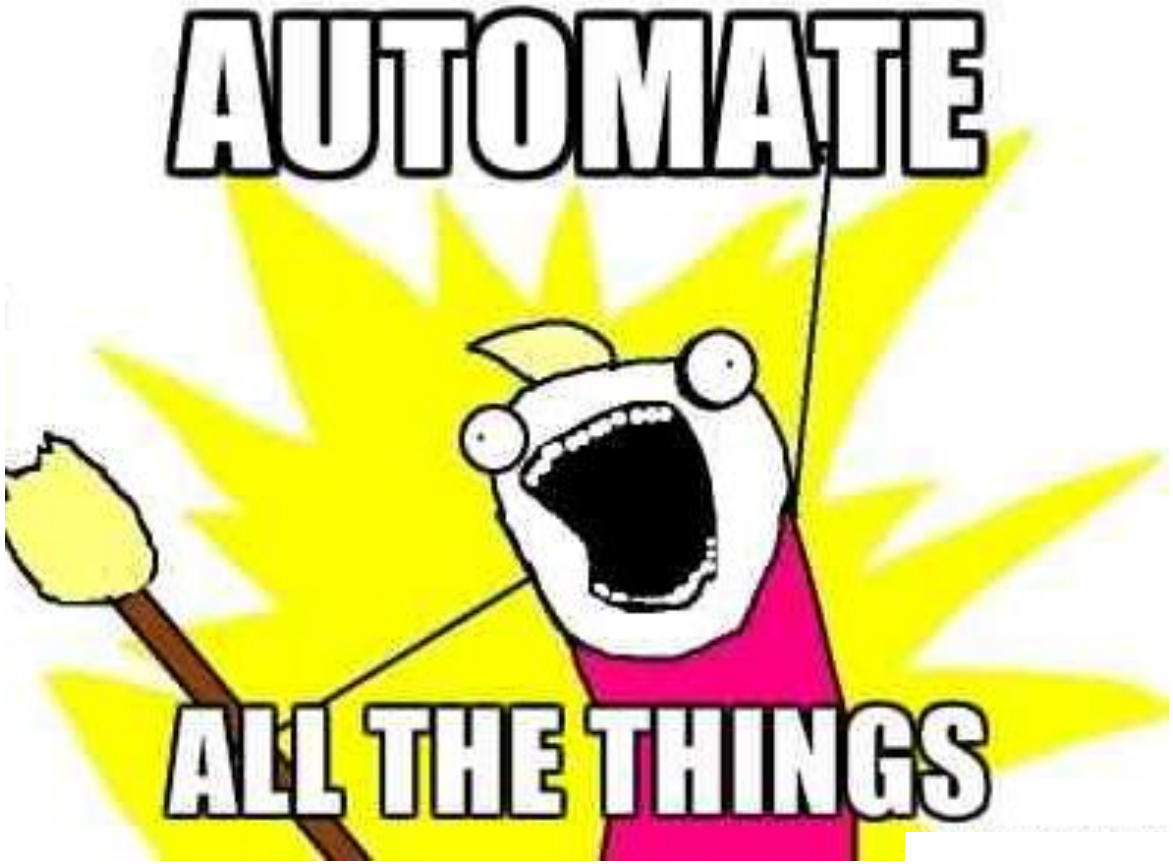
ONF.EU

Powershell Conference Asia

Singapore 18 - 20 October 2018

2018

But what are we trying to do



How can we get there…

By using PowerShell…

- We make scripts
- We create functions
- We develop advanced functions
- We package in modules
- We share online

Share your success

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Objects, why?

Structured output

PowerShell is an object-based scripting language

- Structured output is easily converted
- Can be used throughout the pipeline

Unicorn Facts!

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Unicorns exist in Asian mythology

```
PS C:\Users\Jaap Brasser> Write-Host -ForegroundColor Green
'True' -NoNewline;Write-Host ' / ' -NoNew;Write-Host -Foregr
oundColor Red 'False'
True / False
```

Unicorn Facts!

True:

In Chinese/Japanese mythology a Qilin/Kirin is a one horned creature, often translated to Unicorn.

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Performance

We want it faster

Determine when you want to make it faster

- Avoiding pipeline
- Use regular expressions
- Filter on the left
- Use .Net/Com objects
- Parallel execution

Unicorn Facts!

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A baby unicorn is called a puppy

```
PS C:\Users\Jaap Brasser> Write-Host -ForegroundColor Green
'True' -NoNewline;Write-Host ' / ' -NoNew;Write-Host -Foregr
oundColor Red 'False'
True / False
```

False:

It is referred to as a sparkle

Unicorn Facts!

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False:

It is referred to as a sparkle

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Formatting

Formatting your strings

Strings and everything else

- Double and single quotation marks
- Here-strings
- -f format operator
- Regular expressions
- .Net methods and classes

Formatting your code

PowerShell Coding

- How to line break
- Brackets ?
- How to use splatting to write better code
- Store script blocks in variables

Unicorn Facts!

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The pope bought a unicorn horn

```
PS C:\Users\Jaap Brasser> Write-Host -ForegroundColor Green
'True' -NoNewline;Write-Host ' / ' -NoNew;Write-Host -Foregr
oundColor Red 'False'
True / False
```

Unicorn Facts!

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True:

In 1560, German merchants sold a unicorn horn for an astronomical 90,000 scudi—then about £18,000—to the pope.

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Thank you

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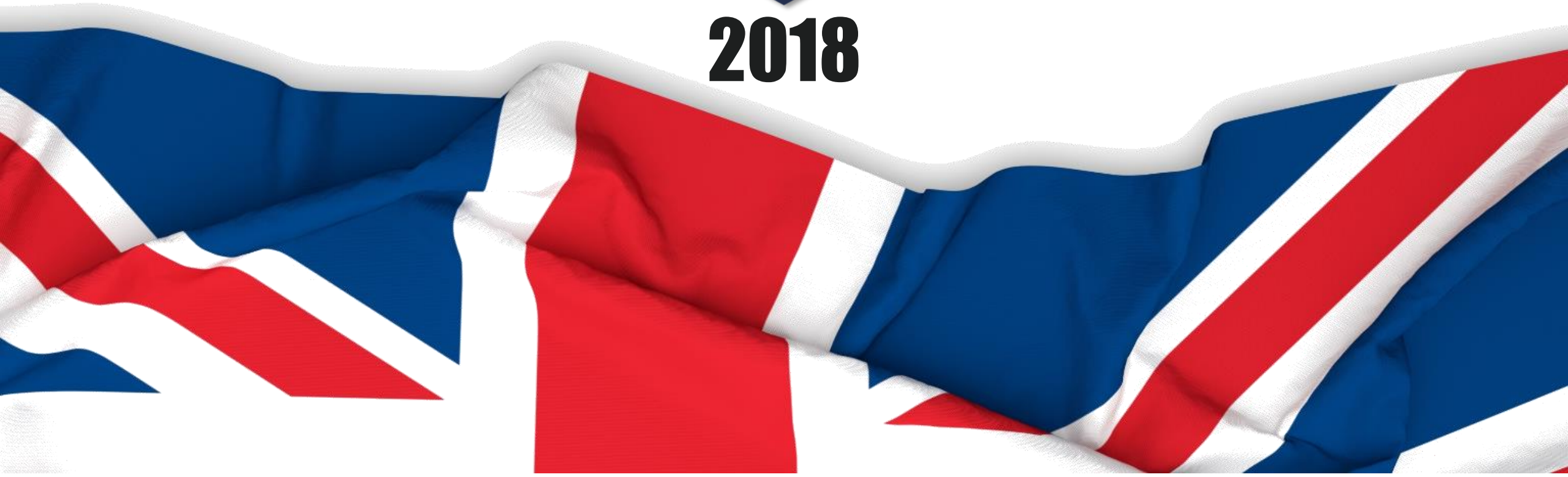
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