

PowerShell Conference Europe 2019

Hannover, Germany

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# PowerShell Core – from an OP's perspective

**THORSTEN BUTZ**

Platinum  
Sponsor



# Previously

- 2017, Hannover  
Sliding Windows: Microsoft 3.0  
With Joey Aiello & Bartosz Bielawski  
<http://slidingwindows.de/sl07/>
- 2018, Hannover  
The X factor, with Bartosz Bielawski



**dev ops**



**huki**

@huki

One of the most misunderstood term in IT is DevOp. It means: You build, you run it.

Most people seem to think its Ops who write deployment scripts.

The idea is to not separate Development and Operations.

People get around that by calling operations now platform team 🙄

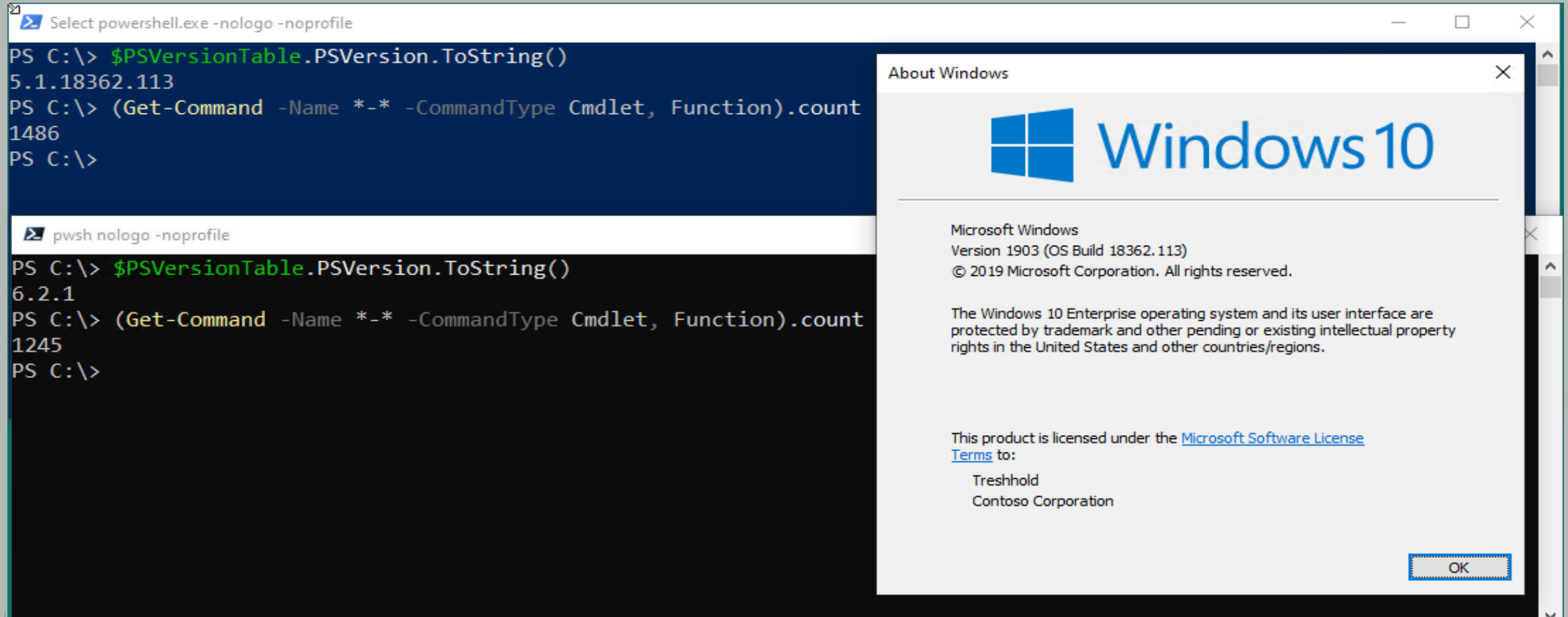
4:00 PM - 30 Jan 2019

# This Session

- PwSh: 1st impressions as seen by a "mere mortal"
- Administering Windows Server with MacOS
- #wtf ...



# Never mind the shell ...



# DEMO

## PwSh: “first impressions”



# Get-Command

	W10 1803		W10 1809		W10 1903	
PoSh 5.1	1455		1497		1486	
PwSh 6.2.1	375		1162		1245	

(Get-Command -Name \*-\* -CommandType Cmdlet, Function).count





# BuiltIn Cmdlets + RSAT

	W10 1803		W10 1809		W10 1903	
PoSh 5.1	1455	2704	1497	2787	1486	2795
PwSh 6.2.1	375	375	1162	1486	1245	1793

(Get-Command -Name \*-\* -CommandType Cmdlet, Function).count



# SSHD configuration WS 2019\*

1. Add "windows capability" from FOD iso or online
2. Start-Services: sshd, ssh-agent
3. Check Firewall (should be configured by setup)
4. Add default shell via Registry
5. Add subsystem "powershell" to sshd\_config



\* also applies to Win10-1809 and, probably, later releases

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# Not yet complete

## PowerShell Remoting Over SSH

08/14/2018 • 5 minutes to read • Contributors 

### Overview

PowerShell remoting normally uses WinRM for connection negotiation and data transport. SSH is now available for Linux and Windows platforms and allows true multiplatform PowerShell remoting.

WinRM provides a robust hosting model for PowerShell remote sessions. SSH-based remoting doesn't currently support remote endpoint configuration and JEA (Just Enough Administration).

SSH remoting lets you do basic PowerShell session remoting between Windows and Linux machines. SSH Remoting creates a PowerShell host process on the target machine as an SSH subsystem. Eventually we'll implement a general hosting model, similar to WinRM, to support endpoint configuration and JEA.

The `New-PSSession`, `Enter-PSSession`, and `Invoke-Command` cmdlets now have a new parameter set to support this new remoting connection.

```
[ -HostName <string> ] [ -UserName <string> ] [ -KeyFilePath <string> ]
```

 Copy

To create a remote session, you specify the target machine with the `HostName` parameter and provide the user name with `UserName`. When running the cmdlets interactively, you're prompted for a password. You can also, use SSH key authentication using a private key file with the `KeyFilePath` parameter.



# DEMO

Call me a hipster:  
Managing AD from MacOS



# DEMO

Finally, the boss fight:  
Microsoft Exchange



# dev

Create Stuff

Open Source

Agile development

Minimized OS

SSH, WSMAN

Always online

Always current

# ops

Buy products

Maintenance

Evolution

Full GUI servers

RDP

Often offline

Legacy software





# One more thing ?





# The Revolution devours its own ~~children?~~ parents



**Jeffrey Snover** ✓

@jsnover

News: I've started my new role as Architect for the Office 365 Intelligent Substrate Platform.

This was a once in a lifetime opportunity to apply the most important new technology (AI) to one of our most important assets (everything in O365).

2:36 PM - 6 Mar 2019



**Bruce Payette**

@BrucePayette

Well - after 17 years, Microsoft and I have parted ways. I'm now looking for my next gig so if you know anyone who needs a senior PowerShell guy, feel free to DM me or hit me up on LinkedIn. Cheers

7:07 PM - 8 Mar 2019



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# PSConfEU 2017: PowerShell Team AMA



# 2019



# Questions? Opinions?

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