```json
{
    "title":  "The X factor",
    "Speaker":  "Bartosz Bielawski, Thorsten Butz",
    "StartTime":  "2018-04-19 17:15:00",
    "Category":  "Core",
    "ID":  65
}
```

Previously

- 2015, Essen
  WPK: OMI, DSC @Linux …

- 2017, Hannover
  Sliding Windows: "Microsoft 3.0"
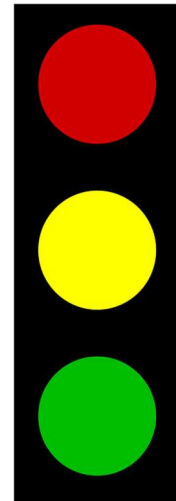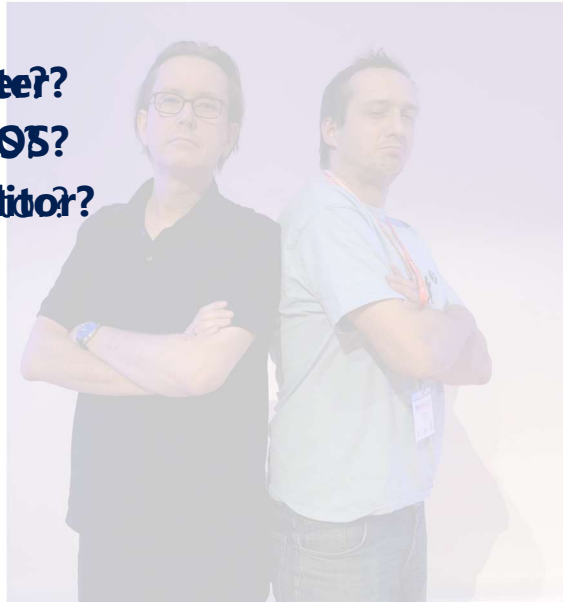 with Joey Aiello
  http://slidingwindows.de/slw07/

The perfect match?

The perfect match?

- First computer?
- First (prof.) OS?
- Favourite editor?
- Religion?

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Get-Content

- PowerShell Core 6
  - $isLinux = $true
- PSRP interop
  - Win32-OpenSSH on Windows and *nix
- Beyond the CLI: Universal Dashboard
- ~~DSC Core~~
- Get-Content | more

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```
PS /root> cat /etc/os-release | grep PRETTY
PRETTY_NAME="Raspbian GNU/Linux 9 (stretch)"
PS /root> uname -a
Linux pi3 4.9.59-v7+ #1047 SMP Sun Oct 29 12:19:23 GMT 2017 armv7l GNU/Linux
PS /root> $PSVersionTable

Name                        Value
----                        -----
PSVersion                   6.0.2
PSEdition                   Core
GitCommitId                 v6.0.2
OS                          Linux 4.9.59-v7+ #1047 SMP Sun Oct 29 12:19:23 GMT 2017
Platform                    Unix
PSCompatibleVersions        {1.0, 2.0, 3.0, 4.0...}
PSRemotingProtocolVersion   2.3
SerializationVersion        1.1.0.1
WSManStackVersion           3.0


PS /root> /public/Get-KrakenExchangeRates.ps1

Currency    High     Low Weighted_price  Volume
--------    ----     --- --------------  ------
EUR         6833  6440.3        6628.22 5427.37
USD         8422  7943.3        8167.39 4304.17
CAD        10098    8892        9609.56   41.25
JPY       909279  847790      875939.86    1.95
```

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PoSh Core 6

- 1st version of PoSh Core: WS 2016 NANO
- Support for Windows 7+
- Support for LOTS of Linux distros/releases
- Support for MaCOS 10.12+

- Supports Unzip/Copy/Paste installations + multiple versions side-by-side
- Comes with .NET Core 2.0 "attached", no sides effects on existing installations

4

Mind the gap: Windows vs. *nix

- "Same" CmdLets with different capabilites: Invoke-Command, ConvertTo-Json, …
- Less Built-In CmdLets
- Missing aliases:
  ls, ps, wget, curl …

- NO RSAT for *nix
- Case sensitivity

```
PS /> function HelloWorld { 'Hello World!' }
PS /> helloworld
Hello World!
PS /> /public/HelloWorld.ps1
Hello World!
PS /> /public/helloworld.ps1
/public/helloworld.ps1 : The term '/public/helloworld.ps1' is not recognized as the
name of a cmdlet, function, script file, or operable program.
Check the spelling of the name, or if a path was included, verify that the path is c
orrect and try again.
At line:1 char:1
+ /public/helloworld.ps1
+ ~~~~~~~~~~~~~~~~~~~~~~~
+ CategoryInfo          : ObjectNotFound: (/public/helloworld.ps1:String) [], Comman
dNotFoundException
+ FullyQualifiedErrorId : CommandNotFoundException
```

Demo

- Setup Win32-OpenSSH on Windows and Linux
- Password less login
- PowerShell Core on Linux:
  Strings vs. Objects

Azure Cloud Shell

```
Bash    ∨ | ⏻ ? ⚙ ⤒ ⎘                                                        — □
Requesting a Cloud Shell.Succeeded.
Connecting terminal...

Welcome to Azure Cloud Shell

Type "az" to use Azure CLI 2.0
Type "help" to learn about Cloud Shell

t@Azure:~$ uname -a
Linux cc-ad10-b4b95bdb-2651052326-jf5nm 4.4.0-119-generic #143-Ubuntu SMP Mon Apr 2 16:08:24 UTC 2018 x86_64 x86_64 x86_64 GNU/Linux
t@Azure:~$ cat /etc/os-release
NAME="Ubuntu"
VERSION="16.04.4 LTS (Xenial Xerus)"
ID=ubuntu
ID_LIKE=debian
PRETTY_NAME="Ubuntu 16.04.4 LTS"
VERSION_ID="16.04"
HOME_URL="http://www.ubuntu.com/"
SUPPORT_URL="http://help.ubuntu.com/"
BUG_REPORT_URL="http://bugs.launchpad.net/ubuntu/"
VERSION_CODENAME=xenial
UBUNTU_CODENAME=xenial
t@Azure:~$ █
```

Azure Sphere (OS) for IoT devices

Jeffrey Snover
@jsnover
Follow ∨

Microsoft ships Linux!
#MicDrop

For the first time ever, Microsoft will distribute its own version of Linux
"After 43 years, this is the first day that we are announcing, and will be distributing, a custom Linux kernel," said Microsoft President Brad Smith.
amp.businessinsider.com

4:02 AM - 17 Apr 2018

- A new system for securing the tiny processors that power smart appliances, connected toys, and other gadgets.
- Powered in large part by Linux,
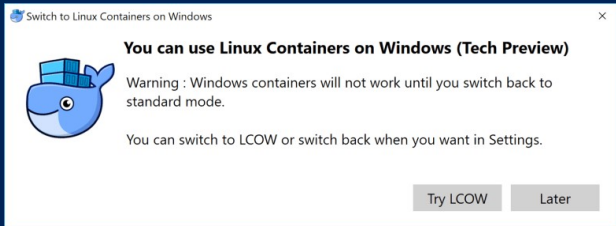- Announced by Brad Smith *
  this (!) week
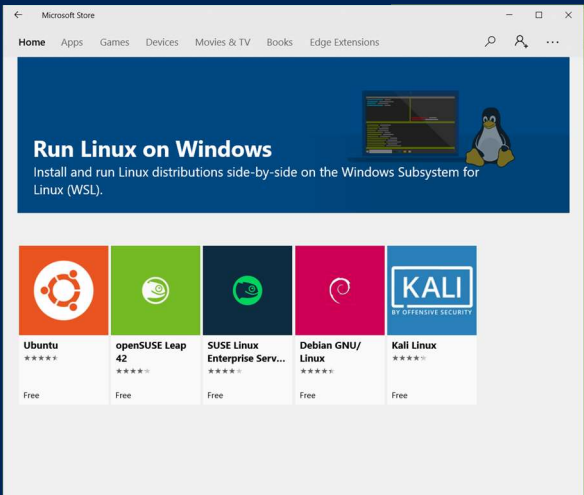
* Microsoft's president and chief legal officer

LinuxKit / LCOW

- LinuxKit
  - A toolkit for building custom minimal, immutable Linux distributions
  - < 40 MB
- LCOW
  - LinuxKit images and utilities for Microsoft's <u>L</u>inux <u>C</u>ontainers <u>o</u>n <u>W</u>indows.
  - Requires Hyper-V Containers
    https://github.com/linuxkit/lcow

Skip this, you know it already …

7

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Wrap up!

- PoSh + Win32_OpenSSH
  - partially BETA quality
  - rapid deployment
  - community driven
  - $isConfusing = $true

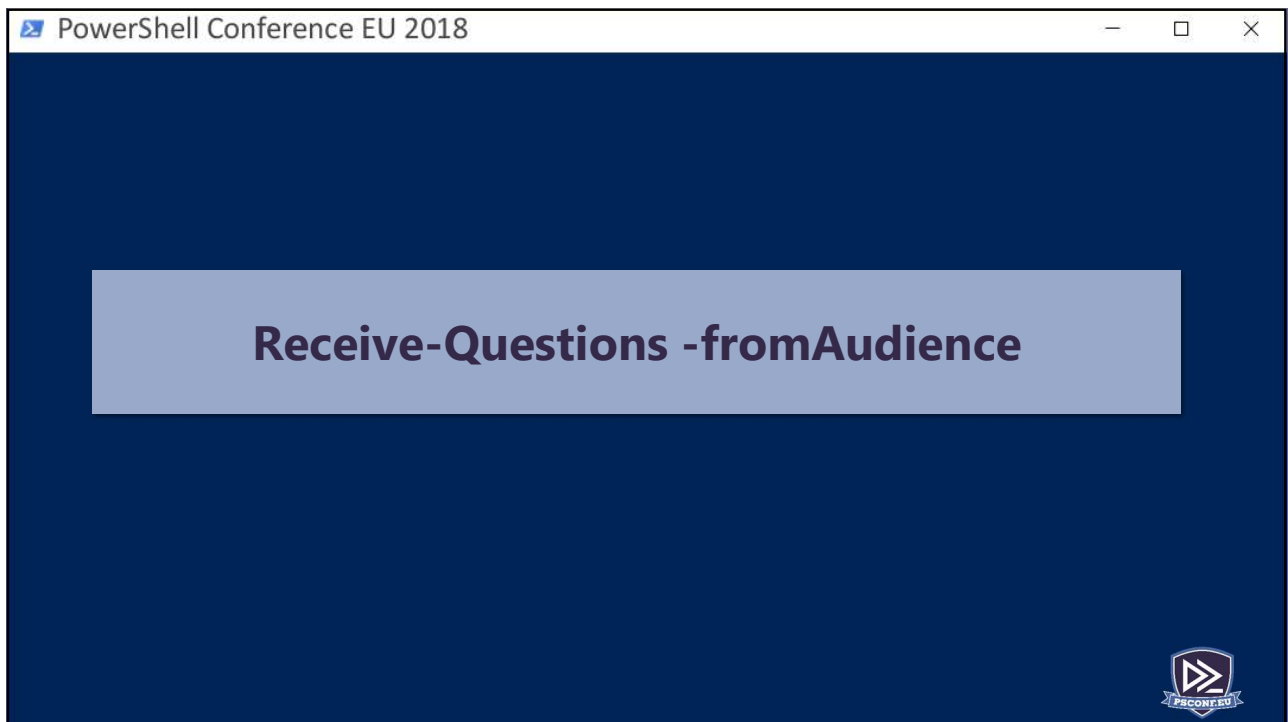
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Wrap up!

about_pwsh

"I really don't see it as Microsoft's product anymore,

this is very much a community OpenSoure project

that all of us are working on."

Joey Aiello