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**PowerShell Conference Europe**

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# powercharge your box setups with Boxstarter

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**PRAGUE23**  
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# Many thanks to our sponsors:





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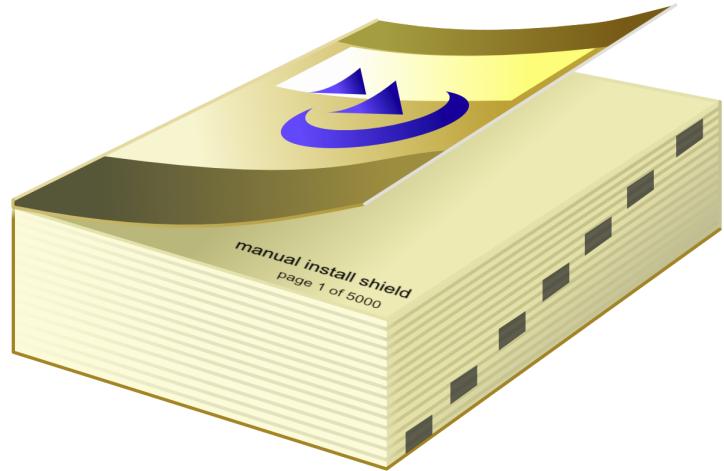
- Software Engineer (~15 years)
  - Freelancer, R&D
  - Automotive
- PowerShell since 2016 (Chocolatey)
- @schusterfredl @mastodon.social
- <https://mwallner.net>





## killing golden images

- (I don't like 'em)
  - Chocolatey Fest 2018
  - WinOps 2019

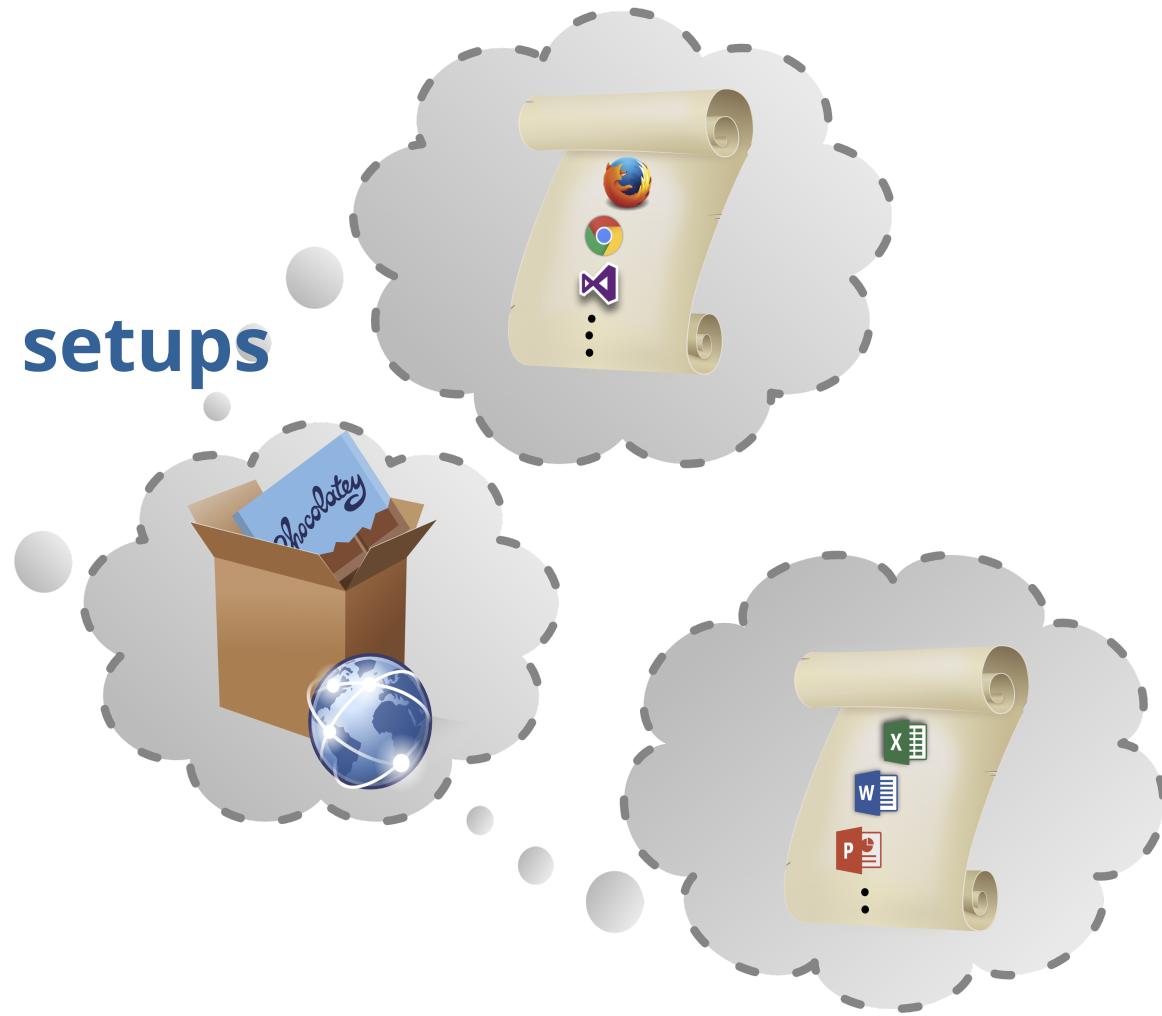


## another extreme

- documentation good,  
offloading repetitive workload  
to the user - NOT GOOD!
- automate it!

## automating host setups

- repeatable
- unattended
- remote



## Boxstarter

<https://boxstarter.org>







## Boxstarter weblauncher

```
https://boxstarter.org/package/nr/firefox,thunderbird
```

```
START https://boxstarter.org/package/nr/url?url=https://gist.github.com/some-gistfile1.txt
```



## dev-box setup scripts

```
# Windows config
Update-ExecutionPolicy RemoteSigned
Disable-GameBarTips
Disable-BingSearch
Move-LibraryDirectory "Personal" "$env:UserProfile\skydrive\documents"
Set-WindowsExplorerOptions -EnableShowFileExtensions -EnableExpandToOpenFolder
Set-TaskbarSmall
Disable-WindowsOptionalFeature -Online -FeatureName smb1protocol
Enable-RemoteDesktop

# Windows features
choco install TelnetClient -source windowsfeatures
choco install NetFx3 -source windowsfeatures

#PowerShell help
Update-Help -ErrorAction SilentlyContinue

# Software
choco install firefox
choco install FiraCode
choco install vscode
...
```



## Boxstarter choco helpers

```
New-PackageFromScript MyScript.ps1 MyPackage
```

```
New-BoxstarterPackage -Name MyPackage  
-Description "hello psconf.eu"
```

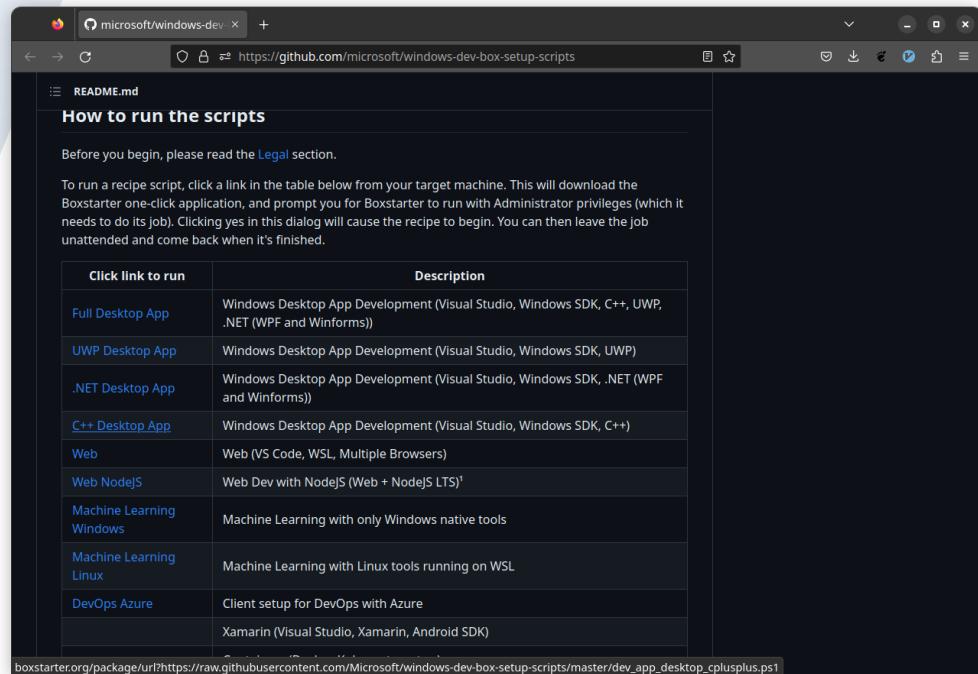
```
Set-BoxstarterConfig -LocalRepo "c:\packages"
```

```
...
```



## test/remote install

```
$invocationArgs = @{
    PackageName  = '<pkg-id / url / script-path>'
    ComputerName = 'mybox42'
    Credential   = Get-Credential
}
Install-BoxstarterPackage @invocationArgs
```



**How to run the scripts**

Before you begin, please read the [Legal](#) section.

To run a recipe script, click a link in the table below from your target machine. This will download the Boxstarter one-click application, and prompt you for Boxstarter to run with Administrator privileges (which it needs to do its job). Clicking yes in this dialog will cause the recipe to begin. You can then leave the job unattended and come back when it's finished.

Click link to run	Description
Full Desktop App	Windows Desktop App Development (Visual Studio, Windows SDK, C++, UWP, .NET (WPF and Winforms))
UWP Desktop App	Windows Desktop App Development (Visual Studio, Windows SDK, UWP)
.NET Desktop App	Windows Desktop App Development (Visual Studio, Windows SDK, .NET (WPF and Winforms))
C++ Desktop App	Windows Desktop App Development (Visual Studio, Windows SDK, C++)
Web	Web (VS Code, WSL, Multiple Browsers)
Web NodeJS	Web Dev with NodeJS (Web + NodeJS LTS) <sup>1</sup>
Machine Learning Windows	Machine Learning with only Windows native tools
Machine Learning Linux	Machine Learning with Linux tools running on WSL
DevOps Azure	Client setup for DevOps with Azure
	Xamarin (Visual Studio, Xamarin, Android SDK)

boxstarter.org/package?url=https://raw.githubusercontent.com/Microsoft/windows-dev-box-setup-scripts/master/dev\_app\_desktop\_cplusplus.ps1

# Boxstarter weblauncher

github.com/microsoft

- windows-dev-box-setup-scripts



## Boxstarter on UNC share

```
Copy-Item $Boxstarter.BaseDir E:\ -Recurse  
E:\BoxstarterDir\Boxstarter example
```

```
# setup a Boxstarter share on the current host  
Set-BoxstarterShare Boxstarter
```

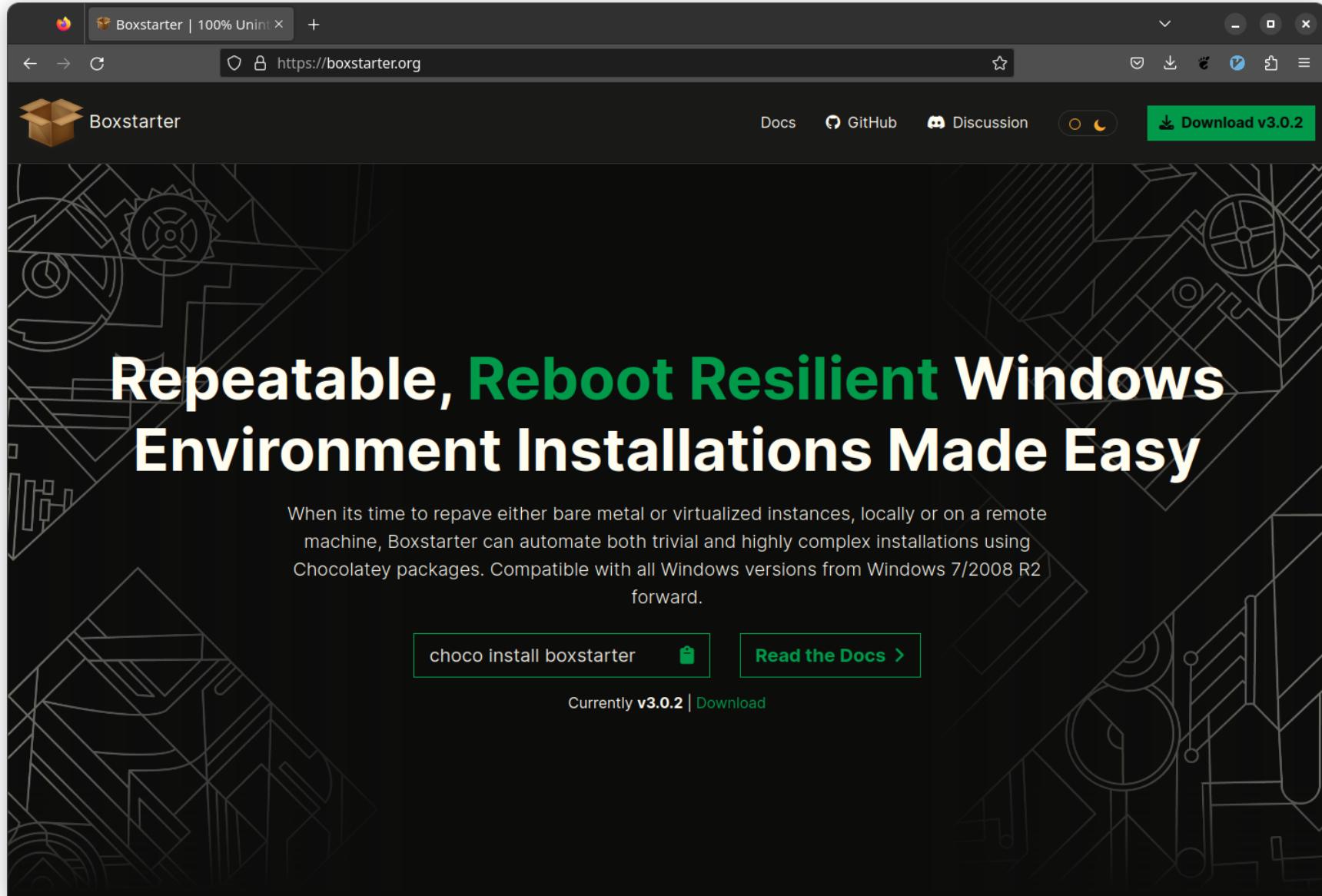
```
# use Boxstarter from somewhere else in the network  
\boxhost\Boxstarter\Boxstarter.bat MyPackage
```



## remote debugging package deployments

```
$invocationArgs = @{
    PackageName  = '<pkg-id / url / script-path>'
    ComputerName = 'mybox42'
    Credential   = Get-Credential
}
Install-BoxstarterPackage @invocationArgs
```



A screenshot of the Boxstarter.org website. The page has a dark background with a faint, light-colored mechanical or gear-like pattern. At the top, there's a navigation bar with a logo, a search bar, and links for 'Docs', 'GitHub', 'Discussion', and a green 'Download v3.0.2' button. The main title 'Repeatable, Reboot Resilient Windows Environment Installations Made Easy' is displayed in large, bold, white and green text. Below the title is a descriptive paragraph in white text: 'When its time to repave either bare metal or virtualized instances, locally or on a remote machine, Boxstarter can automate both trivial and highly complex installations using Chocolatey packages. Compatible with all Windows versions from Windows 7/2008 R2 forward.' At the bottom, there are two calls-to-action: 'choco install boxstarter' with a Chocolatey icon, and 'Read the Docs >'. A note 'Currently v3.0.2 | Download' is also present.



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Boxstarter | Boxstarter X + https://boxstarter.org/winconfig

Why Boxstarter?  
Launch from the Web  
Installing Boxstarter  
Using Boxstarter Commands  
Understanding Packages  
Creating Packages  
Pushing Packages  
Installing Packages  
Installing Packages On A Virtual Machine  
Testing Packages  
**Boxstarter WinConfig Features**  
More Boxstarter Resources  
Guides  
License

Enables UAC.

## Install-WindowsUpdate

Finds, downloads and installs all Windows Updates. By default, only critical updates will be searched. However the command takes a `-criteria` argument allowing one to pass a custom Windows Update query.

For details about the `Install-WindowsUpdate` command, run:

```
1 | Help Install-WindowsUpdate -Full
```

## Move-LibraryDirectory

Libraries are special folders that map to a specific location on disk. These are usually found somewhere under `$env:userprofile`. This function can be used to redirect the library folder to a new location on disk. If the new location does not already exist, the directory will be created. Any content in the former library directory will be moved to the new location unless the `DoNotMoveOldContent` switch is used. Use `Get-LibraryNames` to discover the names of different libraries and their current physical directories.

```
1 | Move-LibraryDirectory "Personal" "$env:UserProfile\skydrive\documents"
```

This moves the Personal library (aka Documents) to the documents folder off of the default SkyDrive directory.

## Set-StartScreenOptions

Sets options for the Start Screen in Windows 8/8.1.

```
1 | Set-StartScreenOptions -EnableBootToDesktop -EnableDesktopBackgroundOnStart -EnableShowStartOnActiveScreen -EnableStartScreen
```

It is also possible to do the converse actions, if required.

```
1 | Set-StartScreenOptions -DisableBootToDesktop -DisableDesktopBackgroundOnStart -DisableShowStartOnActiveScreen -DisableStartScreen
```

## Set-CornerNavigationOptions

Sets options for the Windows Corner Navigation in Windows 8/8.1.

Edit This Page

On This Page

- Disable-InternetExplorerESC
- Disable-GameBarTips
- Disable-MicrosoftUpdate
- Disable-UAC
- Disable-BingSearch
- Enable-RemoteDesktop
- Enable-MicrosoftUpdate
- Enable-UAC**
- Install-WindowsUpdate
- Move-LibraryDirectory
- Set-StartScreenOptions
- Set-CornerNavigationOptions
- Set-WindowsExplorerOptions
- Set-BoxstarterTaskbarOptions
- Update-ExecutionPolicy



