

PowerShell Conference Europe 2019

Hannover, Germany

June 4-7, 2019

# Click Free Application Deployment with the Magic Of PowerShell and Chocolatey

**PAUL BROADWITH**

Platinum  
Sponsor



5

Video operator, did you start the recording?

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# Click Free Application Deployment with the Magic Of PowerShell and Chocolatey

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# This Session

- Understand what Chocolatey is;
- Understand the difference between packages and installers;
- Be able to create a package;
- Learn how to work with installers that won't install silently;
- Learn to use Pester to test your packages;
- Learn what the Chocolatey Community Repository;
- Learn how to keep your package continually updated;







# **TO DO LIST:**

- 
- 1. CLOSE OPPORTUNITIES**
  - 2. TAKE OVER THE WORLD**

# What Is Chocolatey?





# History of Package Managers

Linux has:

```
apt install -y powershell
```

```
yum install -y powershell
```

```
pacman -Sy powershell
```

Mac has:

```
brew cask install powershell
```

Windows has:

```
Click Next, Click Next, Click Next
```



# What is Chocolatey?

- Chocolatey is a package manager for Windows
- Created by Rob Reynolds (@ferventcoder)
- First version released on 23 March 2011
- Now Windows has:

```
choco install powershell-core -y
```



# Fundamental Tenet of Chocolatey



Chocolatey Manages Packages

Packages Manage Installers

Chocolatey Does Not Manage Installers



# Chocolatey Prerequisites

- Windows 7+ / Server 2003+
- Windows PowerShell 2 / .NET 4\*
- Not Nano ☹
  - (see GitHub issue #1371 - <https://github.com/chocolatey/choco/issues/1371>)

\* Some functionality requires .NET 4.5



# What Is A Chocolatey Package?





# What Is A Chocolatey Package?

- Special Zip file with a .nupkg extension;
- Commonly called 'nupkeg' or 'noo package' due to file extension;
- It contains metadata, PowerShell scripts and sometimes other files;
- Builds on NuGet package framework while remaining compatible with v2 repositories;



`packagename.nuspec`



`chocolateyInstall.ps1`



`installer.msi`



# What Can A Chocolatey Package Do?

- Chocolatey ❤️ PowerShell;
- PowerShell scripts install, upgrade and uninstall software;
- Almost anything you can do in PowerShell you can do with a Chocolatey package;



**chocolateyInstall.ps1**

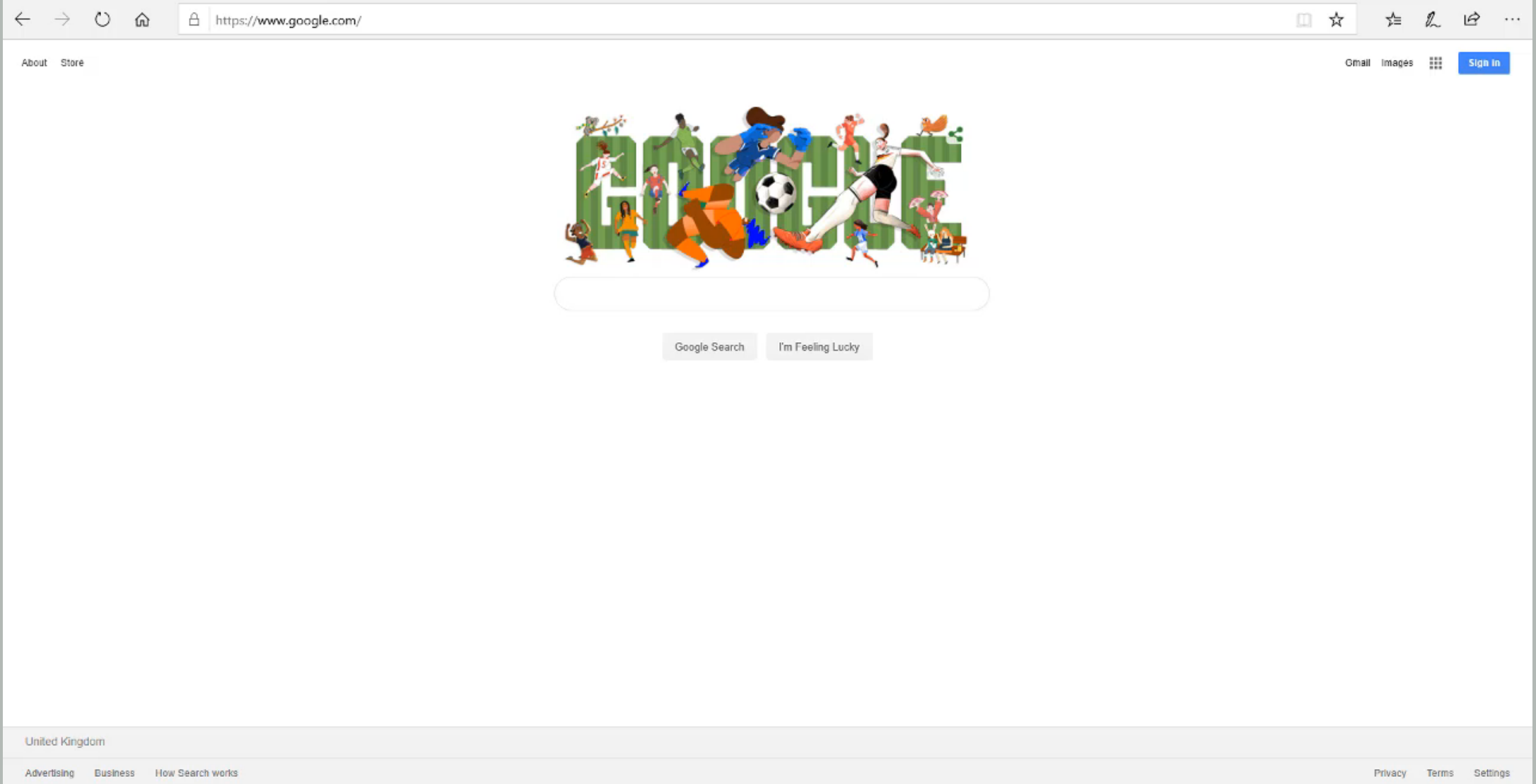


**chocolateyBeforeModify.ps1**



**chocolateyUninstall.ps1**





 @pauby

# DEMO

## Lets Look At Chocolatey Packages

# Chocolatey Community Repository

Everything you wanted to know but were too afraid to ask.



 @pauby

# Chocolatey Community Repository

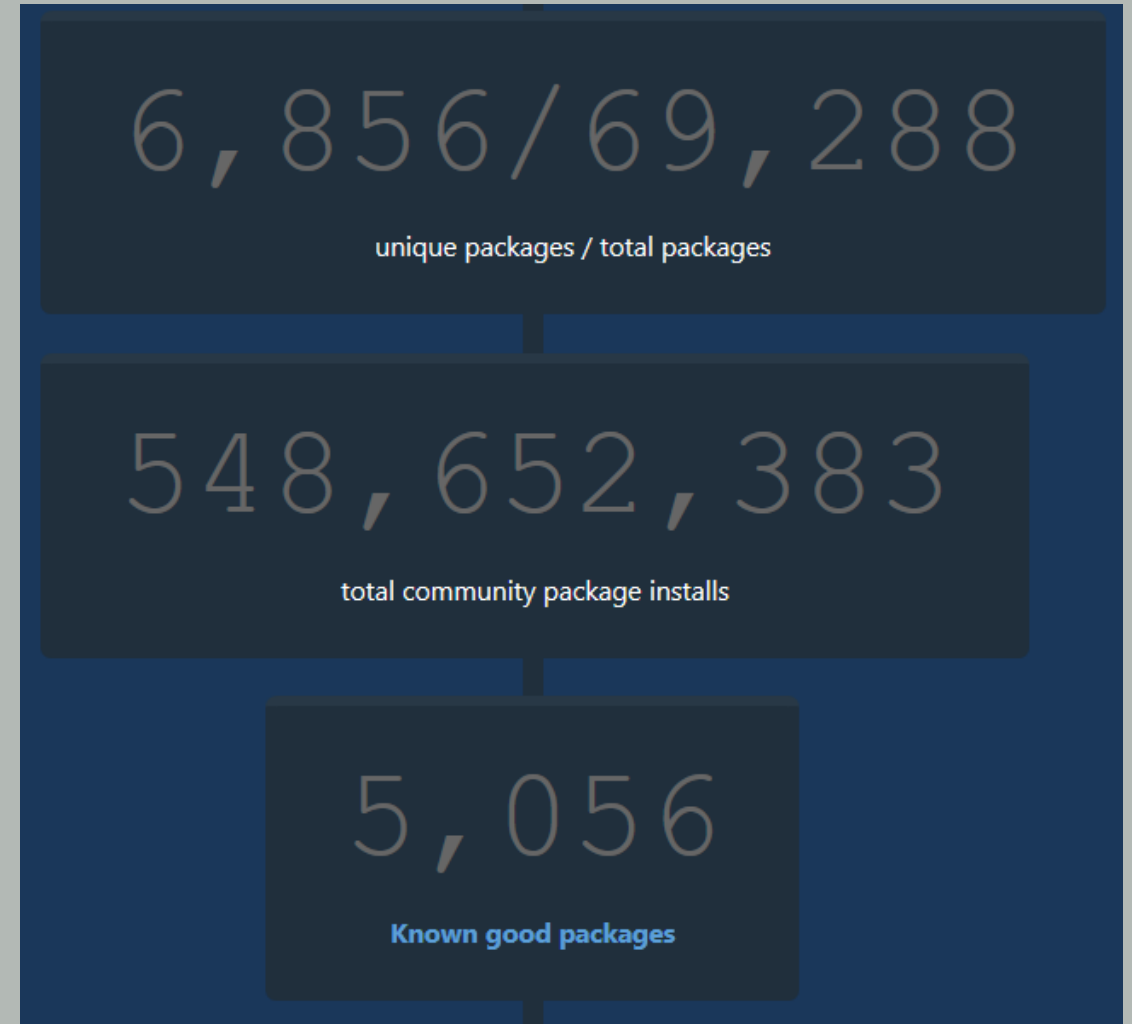
- Repository is at **chocolatey.org** hosted by Chocolatey;
- Chocolatey uses it as the default **chocolatey** package source;
- Vast majority of packages created by volunteer maintainers;
- Some vendors maintain their own packages;
- Repository is for the many and not the few - use is monitored;
- Licensing is important - does not have redistribution rights;



# Chocolatey Community Repository

Monthly website stats as of Feb 2019:

- 1.4 B requests;
- 221.7 TB of data;
- 1.1M unique visitors



# Excessive Community Repository Use



Rate Limiting – 1 hour block

- Downloads of Chocolatey Package: 5
- Downloads of ANY OTHER Package: 20



Monthly Download Monitoring – fixed block

- Tens of thousands of package downloads over a specific period





# Community Repository Package Checks

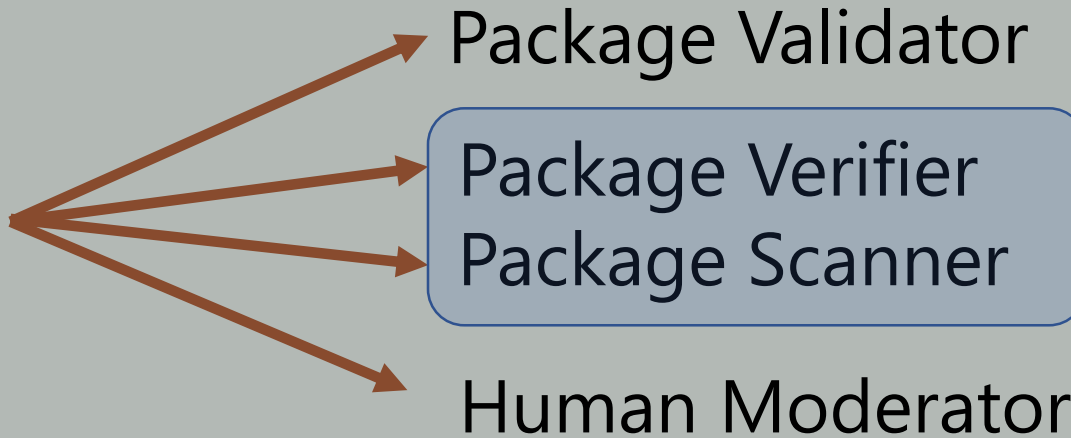


Push

← `choco push mypackage.1.0.0.nupkg --apikey 123456`



Received



Approved



Monthly Package Verifier



# Organizational Community Repository Use

- Not recommended for direct use by organisations;
- Recommend you create package repository with Artifactory, Nexus or ProGet;
- Disable Chocolatey Community Repository:  
`choco source disable -n=chocolatey`  
`choco source disable -n=chocolatey.licensed`



# DEMO

## Testing Your Packages and Keeping Them Updated

# Summary

- We know what Chocolatey is;
- We know how to create a package and how to use the template;
- Learned how to deal with troublesome installers;
- Use Pester to test our packages;
- Learn what happens when you submit a package to the Chocolatey Community Repository;
- What to use to keep your package continually updated;



# Slides and demo code

`Start-Process -FilePath https://github.com/psconfeu/2019`

# Questions?

Use the conference app to vote for this session:

<https://my.eventraft.com/psconfEU>

The background features a large, stylized graphic in shades of red and grey. It includes a large, overlapping 'P' and 'S' that form a central emblem. Below this emblem is a banner with the text 'PSCONF.EU' in a bold, sans-serif font. Radiating lines emanate from the central emblem, creating a sunburst or starburst effect.

# PUSH THE BUTTON!

If you liked the talk.

@pauby

# about\_Speaker



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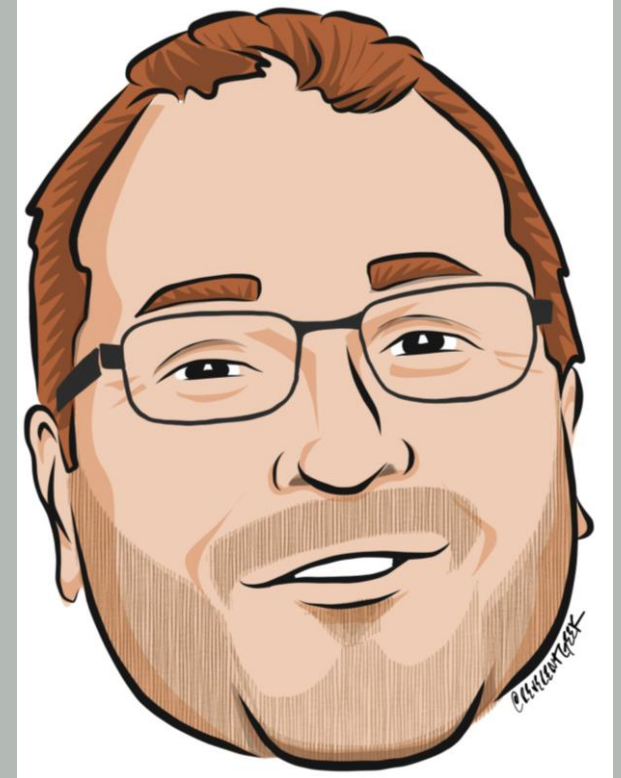
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