

Click Free Application Deployment

With The Magic Of PowerShell and Chocolatey

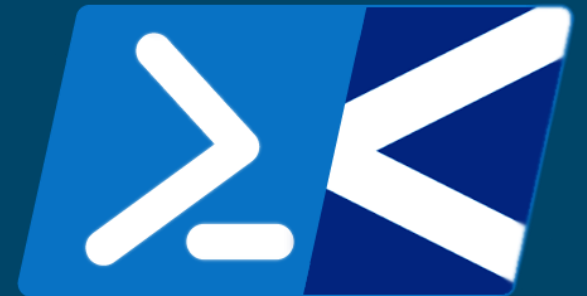
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Who Am I?

- Paul Broadwith, Glasgow, Scotland
- 25+ years in defence, government, financial sectors
- Lead Engineer on Boxstarter and Chocolatey
cChoco DSC Resource





In 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
```

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
```





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

Fundamental Tenet of Chocolatey



Chocolatey Manages Packages

Packages Manage Installers

Chocolatey Does Not Manage Installers

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



Google Search

I'm Feeling Lucky

DEMO

Lets Look At Chocolatey Packages

Chocolatey Community Repository

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

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 February 2019:
- 1.4 B requests;
- 221.7 TB of data;
- 1.1M unique visitors

7,125 / 74,477

unique packages / total packages

637,335,313

total community package installs

5,274

Known good packages

Excessive Community Repository Use



Rate Limiting – 1 hour block

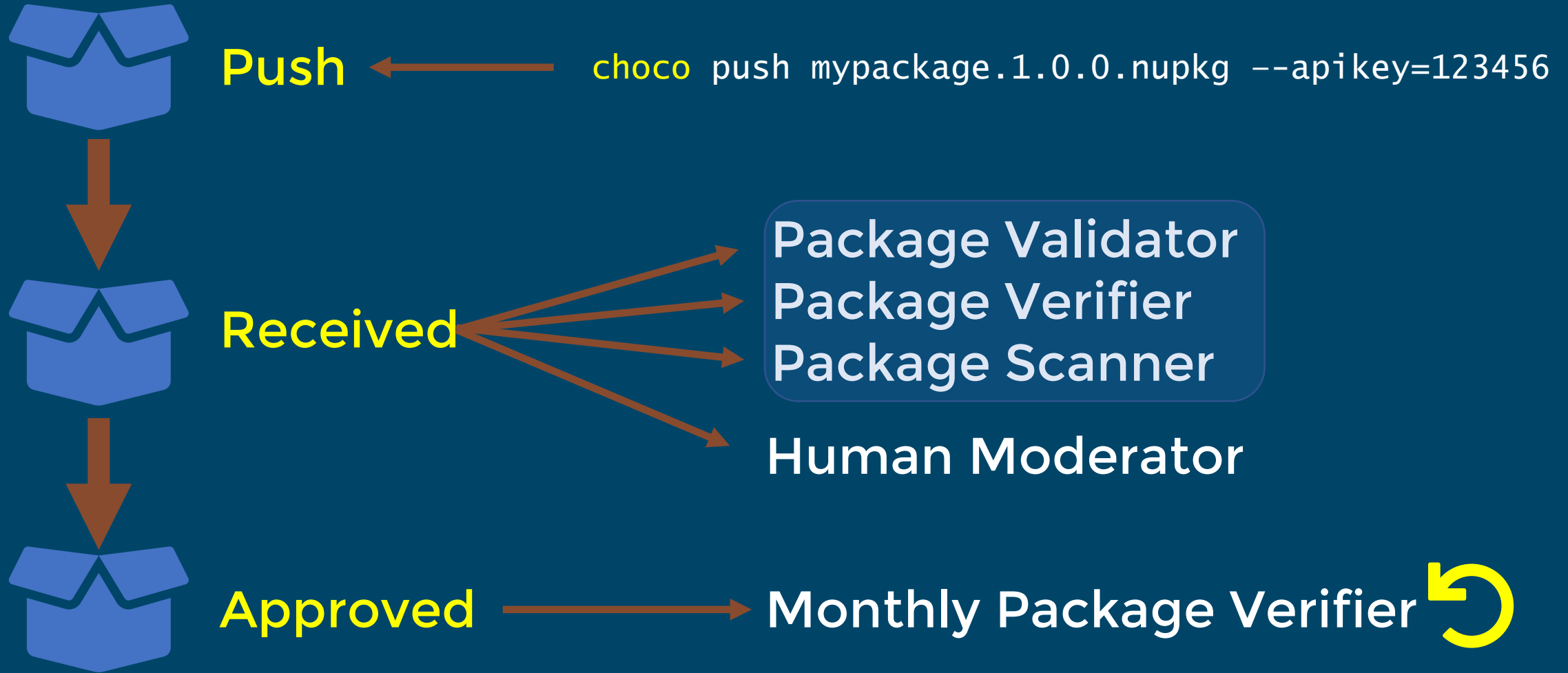
- Downloads of Chocolatey Package: 5
- Downloads of ANY OTHER Package: 20



Monthly Download Monitoring – fixed block

- Tens of thousands of package downloads over a specific period

Community Repository Package Checks



Organizational Community Repository Use

- Not recommended for direct use by organisations:
 - Reliability;
 - Trust;
 - Bandwidth;
 - Distribution rights;
- Recommend you create package repository with Artifactory, Nexus or ProGet;
- Disable Chocolatey Community Repository:
`choco source disable --name=chocolatey`

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;

Questions?

Thank You!



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