

# Comparing WinGet and Chocolatey

## A Real-World Look at Package Management Tools

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PURE STORAGE®



ScriptRunner®

The #1 for PowerShell Management





# Paul Broadwith

- Technical Engineering Manager, Chocolatey Software Inc.
- Glasgow, Scotland.
- 33 years in IT in many different sectors.



Microsoft®  
Most Valuable  
Professional





- Personal opinion.
- Not sponsored by Chocolatey Software.
- Research & findings based.
- No scores.



# Questions At The End?



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# What This Talk Isn't

```
winget list -q adobe.acrobat.reader  
choco search adobereader
```

```
winget install --id adobe.acrobat.reader.64-bit  
choco install adobereader
```

```
winget list  
choco list
```

```
winget uninstall --id adobe.acrobat.reader.64-bit  
choco uninstall adobereader
```



# What This Talk Is

- History.
- Supported and unsupported platforms.
- Installation options.
- Integration and third-party support.
- Packages, manifests, submissions and community.
- Organizational options.
- Privacy.
- Summary.



# Windows Package Manager History

*"The true creator is necessity, who is the mother of our invention."*

*Plato, 375 BCE*



# Timeline

**March 2011**  
Chocolatey CLI Released  
(v0.6.0)

**13 May 2020**  
WinGet Released  
(v0.1.41331 Preview)



**September 2011**  
Chocolatey Community Repository

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# Supported and Unsupported Platforms

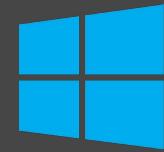
And a bit of “what it runs on”, thrown in for good measure.

# Supported Operating Systems



- Windows 11 22H2 / 23H2  
- Windows 10 22H2  
- Windows Server 2022 
- Windows Server 2019 
- Windows Server 2016 
- Windows Server 2012 R2 
- Windows Server 2012 

# Operating Systems “It Runs On”



Windows 8.1



Windows Server 2008



Windows Server 2008



Microsoft  
Windows Server 2003



Windows 7



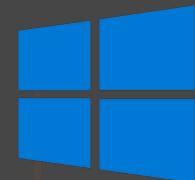
Windows 11



Windows Server 2019



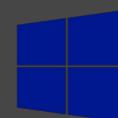
Windows Server 2012



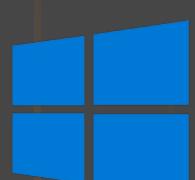
Windows 10 1809+



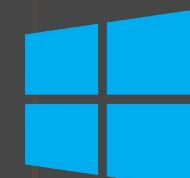
Windows Server 2022



Windows Server 2016



Windows 10 < 1809



Windows 8



Microsoft  
Windows Server 2003 R2



Windows  
Server 2012 R2

A silhouette photograph of several construction cranes against a dramatic, cloudy sky at sunset or sunrise. The cranes are dark silhouettes, and the sky is filled with various shades of orange, yellow, and grey clouds.

# Installation

The subtle art of getting up and running.

# Installation Options



- Microsoft Store (App Installer).
- From GitHub.
- *Windows 10 Patch (sort of)?*
- *Windows 11 OOB (sort of).*
- *(Chocolatey package).*



- Install script from [chocolatey.org/install.ps1](https://chocolatey.org/install.ps1)
- MSI.
- WinGet.



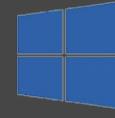
# Integrations & Third Party Support

What does it work with. What works with it.

# Configuration Managers



ANSIBLE



Microsoft  
Intune



CHEF



PowerShell DSC



Otter



'SALTSTACK'



AnyPackage



Octopus Deploy



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# Repository Managers



# All About The PowerShell

- PowerShell Gallery module:  
`Microsoft.WinGet.Client`
- Chocolatey CLI package:  
`winget.powershell`
- PackageManagement / AnyPackage provider.
- *Cobalt - Crescendo wrapper ([github.com/ethanbergstrom/Cobalt](https://github.com/ethanbergstrom/Cobalt)).*
  - *Last update Feb 2023.*



# All About The PowerShell

- Machine readable output.
- Official Community PowerShell modules.
- cChoco and Chocolatey DSC Resources.
- PackageManagement / AnyPackage provider.
- It's built on PowerShell!
- *Foil - Crescendo wrapper (github.com/ethanbergstrom/Foil).*
  - *Last update Dec 2023.*



# Supported Sources



- Microsoft Store.
- Azure REST Source.
- Static web source.
- *File Share*.
- *Local Folder*.



- NuGet v2 (OData).
- NuGet v3 (JSON).
- Static NuGet v3 source.
- File Share.
- Local Folder.

# Packages and Manifests

And submitting those packages and manifests. And stuff about where they are submitted to.

# Manifests

- Use separate wingetcreate tool.
- PowerShell script YamlCreate.ps1.
- Find defaults from MSI.
- Simple, question-based approach.
- Creates multiple YAML files.
- No flexibility.
- Only runs installers or adds supported formats.
- Can submit from the tool.



# Packages

- Use choco new command.
- Use templates to accelerate and simplify.
- Finds defaults from most installers.
- XML format.
- Use choco push command to 'submit'.
- Uses PowerShell to give flexibility (package parameters etc.).
- Package Builder and Package Pusher UI with Business edition.



# WinGet Community Repository

- Steps unclear: validation, installation and scanning.
- AV is Defender and 'other' scanners.
- Installers that are not silent cannot be added.
- False positive AV scans not accepted.
- Interaction via Pull Request comments.
- Moderation by WinGet Team and Community Moderators.
- 5,332 packages and 38,916 versions (repository count).



# Chocolatey Community Repo.

- Not silent installers can be scripted, are accepted.
- Work with maintainers on AV false positives and package issues.
- Interaction via Moderation comments.
- Chocolatey Team and Community Moderators.



**10,334/215,374**

Unique Packages / Total Packages

**2,902,948,169**

Total Community Package Installs



boring  
business systems

# Organizational Options

Different needs for different use cases.

# Organizations & Support

- Deployment *may* be easy.
- Open-source license important for some orgs.
- Tied to Microsoft and Azure.
- No / limited internal support – manifest & binary location.
- Limited repository manager options.
- *No source authentication?*
- Free. No business support.



# Organizations & Support

- Deployment is easy.
- Open-source license important for some orgs.
- Flexible and decentralized.
- Integrates with everything.
- Internal package support.
- NuGet v2 and v3 repository managers.
- Free and business options.





# Privacy

The world of being watched in everything you do.

# Telemetry

My stan  
deeper  
~~telemetry~~ Data/Telemetry

The winget.exe client is instrumented to collect usage and diagnostic (error) data and sends it to Microsoft to help improve the product.

If you build the client yourself the instrumentation will not be enabled and no data will be sent to Microsoft.

Here's the /src/App  
You might names. I happen not actu zero col use the maybe been wo See the privacy statement for more details.

The winget.exe client respects machine wide privacy settings and users can opt-out on their device, as documented in the Microsoft Windows privacy statement [here](#). In addition, you may also explicitly block telemetry using [settings](#).

In short to opt-out, do one of the following:

**Windows 11:** Go to `start`, then select `Settings > Privacy & security > Diagnostics & feedback > Diagnostic data` and unselect `Send optional diagnostic data`.

**Windows 10:** Go to `start`, then select `Settings > Privacy > Diagnostics & feedback`, and select `Required diagnostic data`.

<https://github.com/microsoft/winget-cli/issues/179>

# Summary



- Easy Installation.
- Early - 4 years old.
- Large repository.
- Simple.
- Nice terminal integration.
- Manifest is limiting.
- Microsoft / Azure centric.
- Docs need work.



- Easy installation.
- Mature - 13 years old.
- Largest Windows repository.
- Powerful. Can be complex.
- Metadata & PowerShell are a blessing & curse.
- Flexible and decentralized.
- Docs need work.

# What to Choose?





# pau.by/talks



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[github.com/pauby](https://github.com/pauby)



[pau.by/linkedin](https://pau.by/linkedin)



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# THANK YOU

Please review this session



Session Review

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