# Automate Windows Software Management with Chocolatey & Ansible

Adil Leghari
Senior Solutions Architect

Paul Broadwith
Senior Technical Engineer

AnsibleFest

# Introductions

Who are these two voices from the ether?

**Adil Leghari**
Senior Solutions Architect
Chocolatey Software
🌎 Vancouver, Canada
- 15+ years in IT
- Govt. and Education sector
- PowerShell Community Speaker & Organizer
- Co-Host of BridgeConf and PNW-PSUG

**Paul Broadwith**
Senior Technical Engineer
Chocolatey Software
🌍 Glasgow, Scotland
- 25+ years in IT
- Financial, Govt., Mfg. and Svcs. sectors
- Lead Engineer on Boxstarter & cChoco DSC
- Cloud & Datacenter Management MVP

# Audience

Dear Listener

- **Linux Admin** - familiar with package management frameworks, and interested in Windows side
- **Windows Admin** - looking for ways to use Ansible to better manage software on your servers and workstations
- **Cross-Platform Admin** - looking for a standardized approach to package management on Linux & Windows

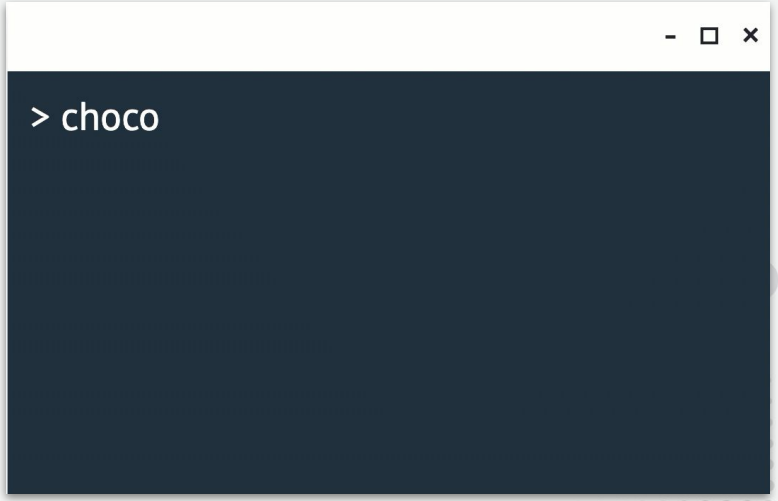
# What is Chocolatey?

Give me the CliffsNotes©.

**TL; DR**

Have you used `yum` or `apt` on Linux?

It's like that. But for Windows.

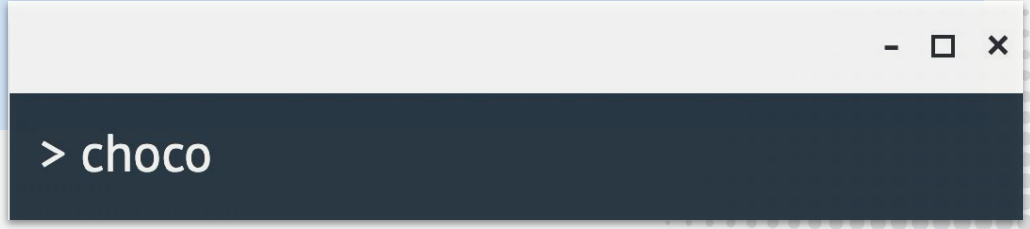


# What is Chocolatey?

I'm intrigued. Explain further?

Chocolatey is a **complete package management system** for Windows that provides you total control over your software lifecycle. This includes:

- A PowerShell-based framework for installing, upgrading, and uninstalling applications
- A universal ".nupkg" packaging format (zips, scripts, binaries)
- A repeatable and pipeline-friendly automated approach to installation and patching
- Support for all current Windows OS's
- Access to over 8000 pre-made packages via Community Package Repository



## Choose from Thousands of Community Packages

Chocolatey has the largest online registry of Windows packages. Chocolatey packages encapsulate everything required to manage a particular piece of software into one deployment artifact by wrapping installers, executables, zips, and/or scripts into a compiled package file.

Package submissions go through a rigorous moderation review process, including automatic virus scanning. The community repository has a strict policy on malicious and pirated software. **Read more.**

**8,042/101,928**

Unique Packages / Total Packages

**1,121,512,569**

Total Community Package Installs

https://chocolatey.org/packages

# Why Chocolatey?

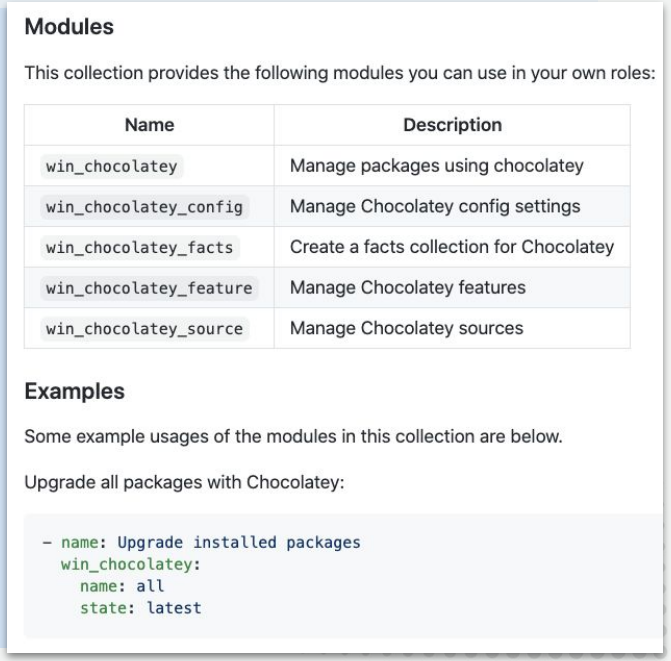
OK, and why should I add another thing to learn?

- Packaging on Windows is non-standard, almost by design (GUI-first)
- Your install, upgrade, and uninstall process is only as good as your packaging standard
- If it isn't easy to update/patch, it won't get done (security risk exposure ☣)
- DevOps/Automation pipelines are not just the future, they're already here, and here to stay

# Why Chocolatey & Ansible?

Make this easier for me!

- Certified Ansible Content Collection: **`chocolatey.chocolatey`** (available in Ansible Automation Hub or Ansible Galaxy)
- Declaratively define your Chocolatey config., features, sources, and package state
- Speak the domain-specific language of Ansible Playbooks (YAML)
- Maintain **idempotence** (re-run playbooks without worry)
- Use Ansible Tower to manage scheduling, maintenance, and access



**Modules**

This collection provides the following modules you can use in your own roles:

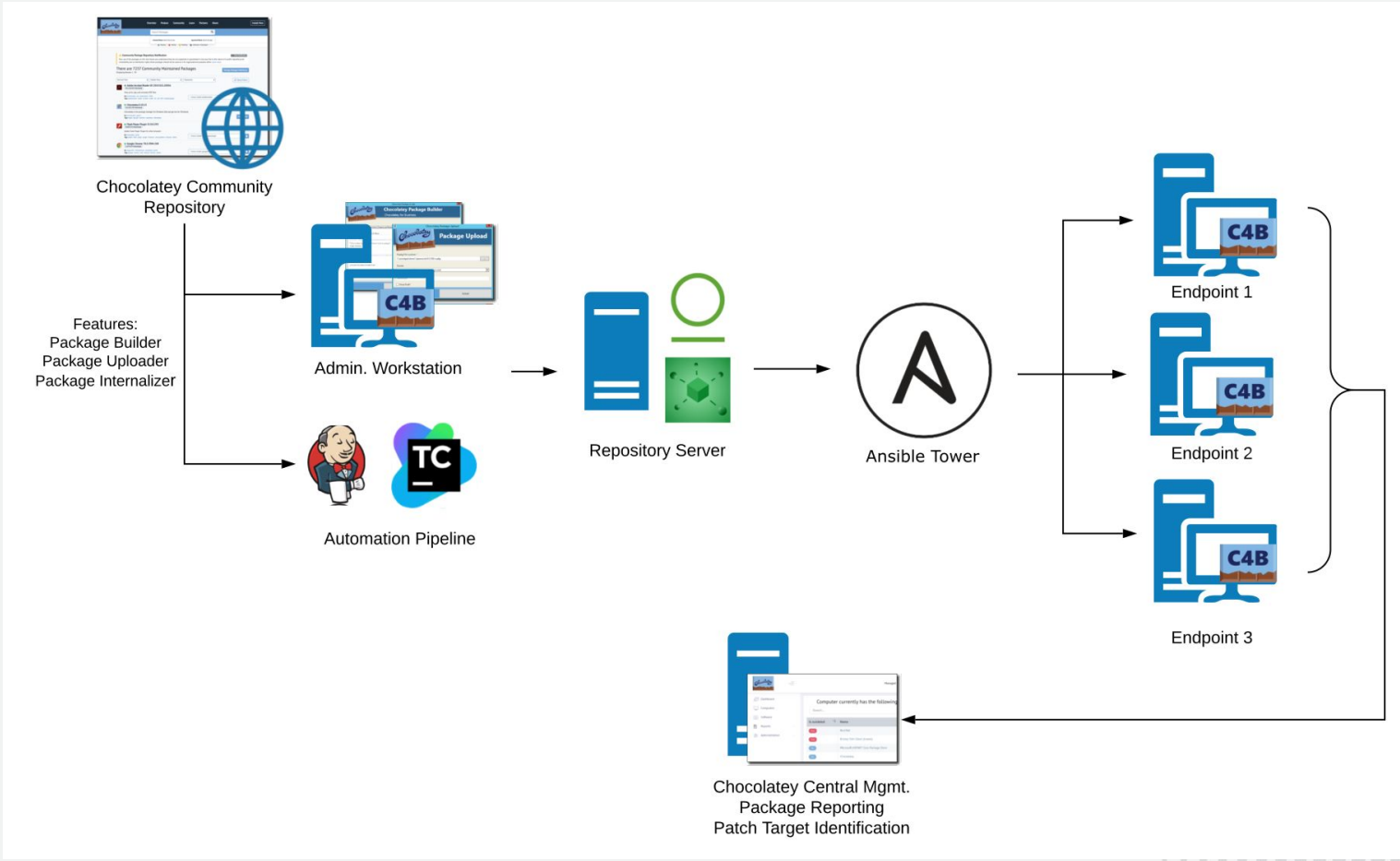
| Name | Description |
|---|---|
| `win_chocolatey` | Manage packages using chocolatey |
| `win_chocolatey_config` | Manage Chocolatey config settings |
| `win_chocolatey_facts` | Create a facts collection for Chocolatey |
| `win_chocolatey_feature` | Manage Chocolatey features |
| `win_chocolatey_source` | Manage Chocolatey sources |

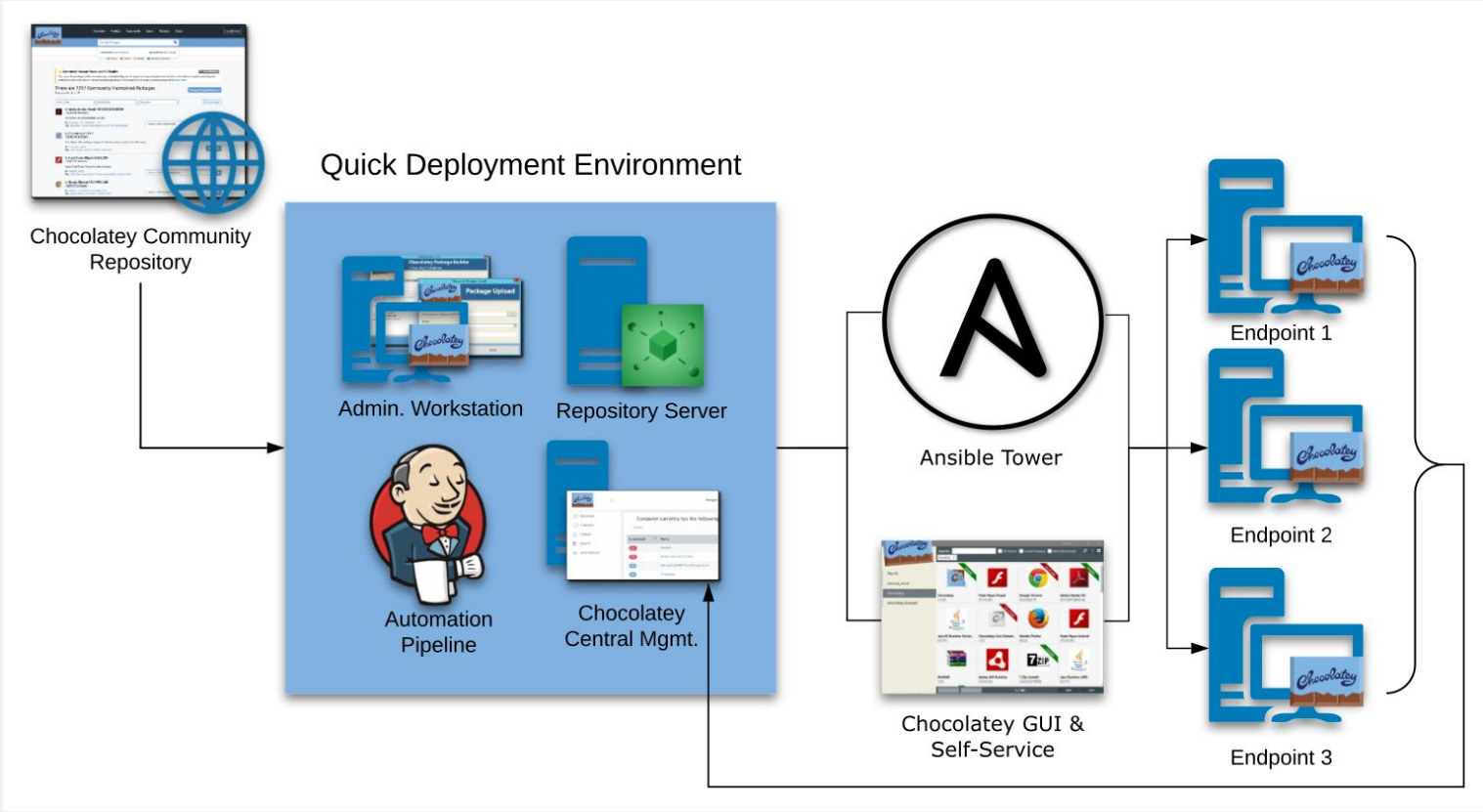
**Examples**

Some example usages of the modules in this collection are below.

Upgrade all packages with Chocolatey:

```
- name: Upgrade installed packages
  win_chocolatey:
    name: all
    state: latest
```


Chocolatey Community Repository
Features:
Package Builder
Package Uploader
Package Internalizer
Admin. Workstation
Automation Pipeline
Repository Server
Ansible Tower
Endpoint 1
Endpoint 2
Endpoint 3
Chocolatey Central Mgmt.
Package Reporting
Patch Target Identification


Chocolatey Community Repository
Quick Deployment Environment
Admin. Workstation
Repository Server
Automation Pipeline
Chocolatey Central Mgmt.
Ansible Tower
Chocolatey GUI & Self-Service
Endpoint 1
Endpoint 2
Endpoint 3

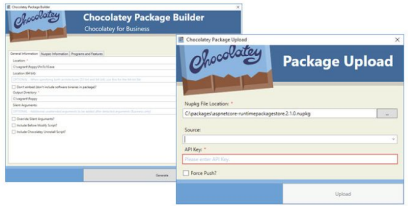
# How?

Show me what you got....

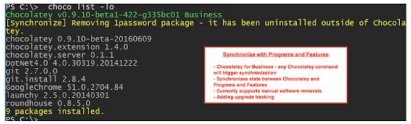
# DEMO!

# Advanced Functionality with Chocolatey for Business

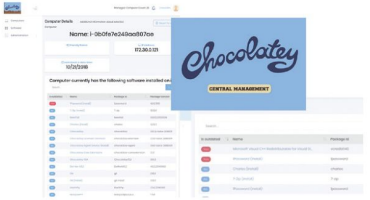
**Accelerate Deployments**
Package Builder & Package Uploader



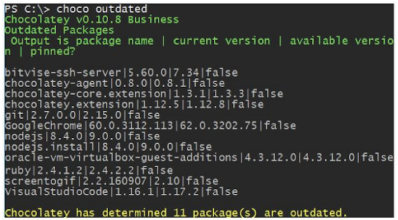

**Improve Accuracy & Simplify Software Management**
Package Synchronizer



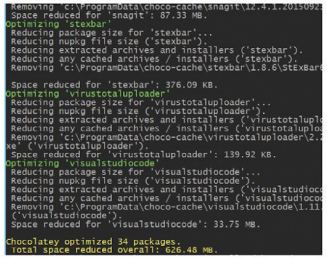

**Real-time Insights**
Chocolatey Central Management



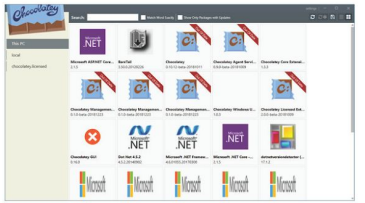

**Improve Security & Controls**
Package Internalizer & Package Audit




**Optimization & Environments**
Package Reducer & Package Throttle




**Enhance User Experience**
Self-Service GUI



Learn more and get a **free** organizational trial at **chocolatey.org/business**

# Thank you!

adilio.io

@adilio

linkedin.com/in/adilio

pauby.com

@pauby

linkedin.com/in/paulbroadwith

ch0.co/af-repo

ch0.co/youtube

chocolatey.org

AnsibleFest