

Baseline

An MDM agnostic macOS deployment tool

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CONSULTING, INC.

What is Baseline?

- An MDM agnostic workstation setup tool for macOS.
- A zsh script which can process Packages, Scripts, and Installomator labels in a defined order while giving users feedback about what's happening.
- Baseline can be run from a package or as a script.
- Detailed documentation is available on Github.
- swiftDialog - Dependency
- Installomator Integration - Optional



Why Did We Make This?

- One tool regardless of management platform.
- More control than some MDM vendors provide.
- Easy to configure and easy to modify.
- Scales to small or larger environments that we manage.



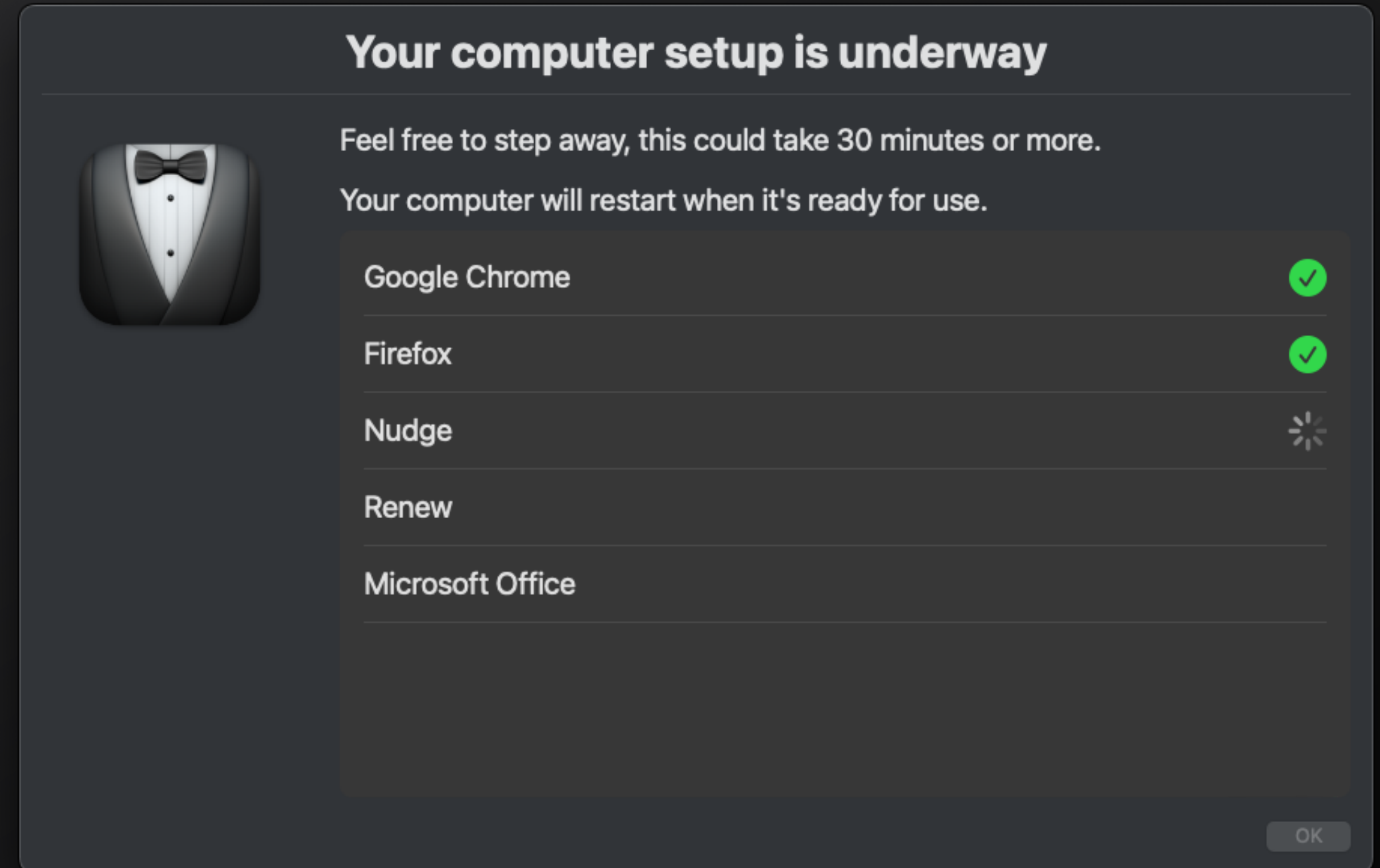
swiftDialog

- Written Bart Reardon
- Show informative messages via scripts, and relay back the users actions.
- Users can be prompted for text, choose from dropdown menus, switches, or checkboxes, and more.



swiftDialog

- The primary Baseline window uses the swiftDialog “List View” to inform the user of what’s happening.
- The List View is dynamically updated as items complete, giving the user awareness of what is happening and what may have had a problem.



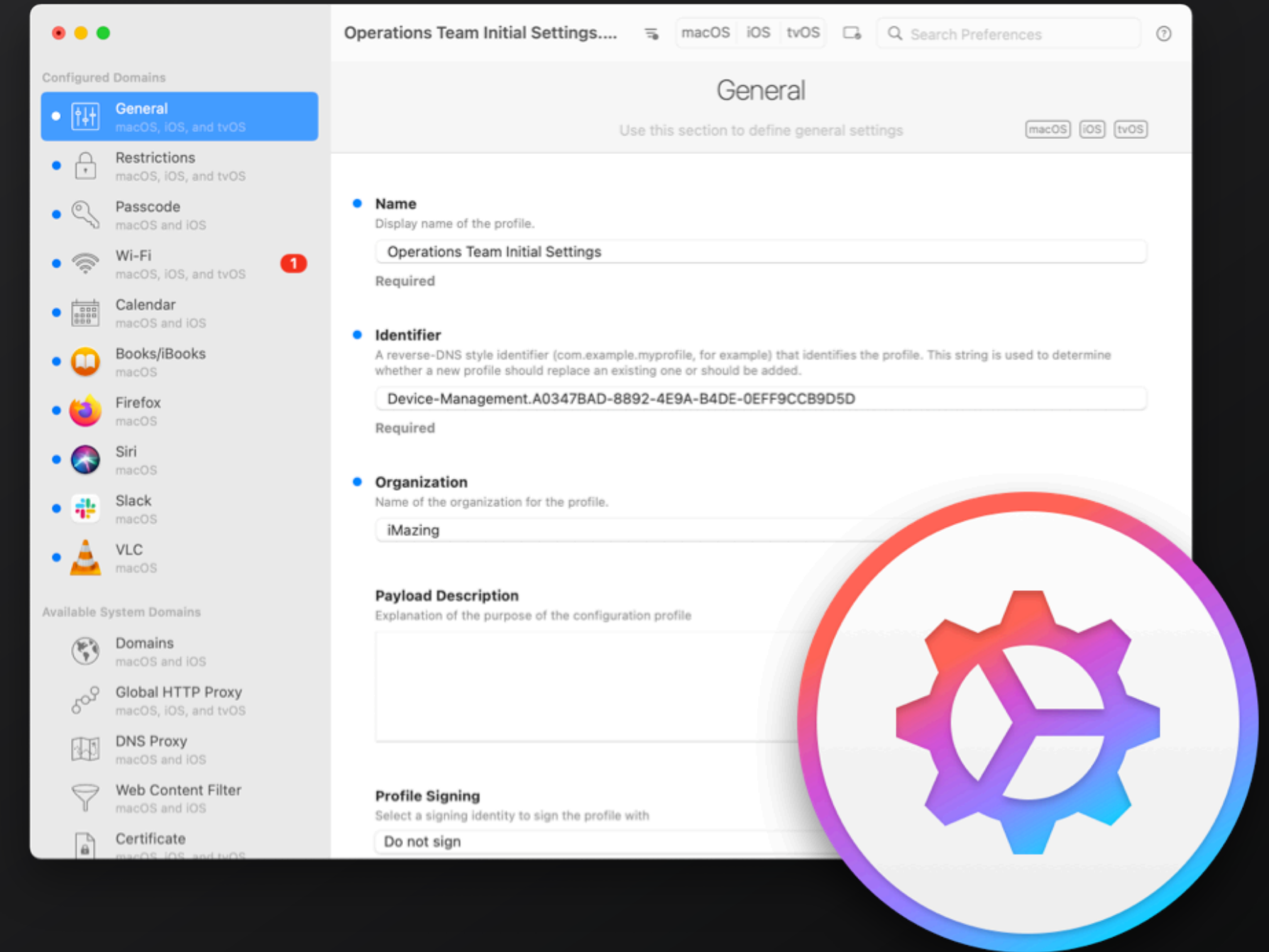
Installomator

- A macOS application installer supertool.
- Zsh script which can be used to download the latest version of common applications directly from the developer.
- Validates the authenticity of the installers by verifying the item is both Signed and Notarized with the expected Team Identifier.
- Authored by:
 - Armin Briegel - @scriptingosx
 - Isaac Ordonez - @issacatmann
 - Søren Theilgaard - @Theile
 - Adam Codega - @acodega
 - Dozens of Mac Admins that have provided Labels for various software titles



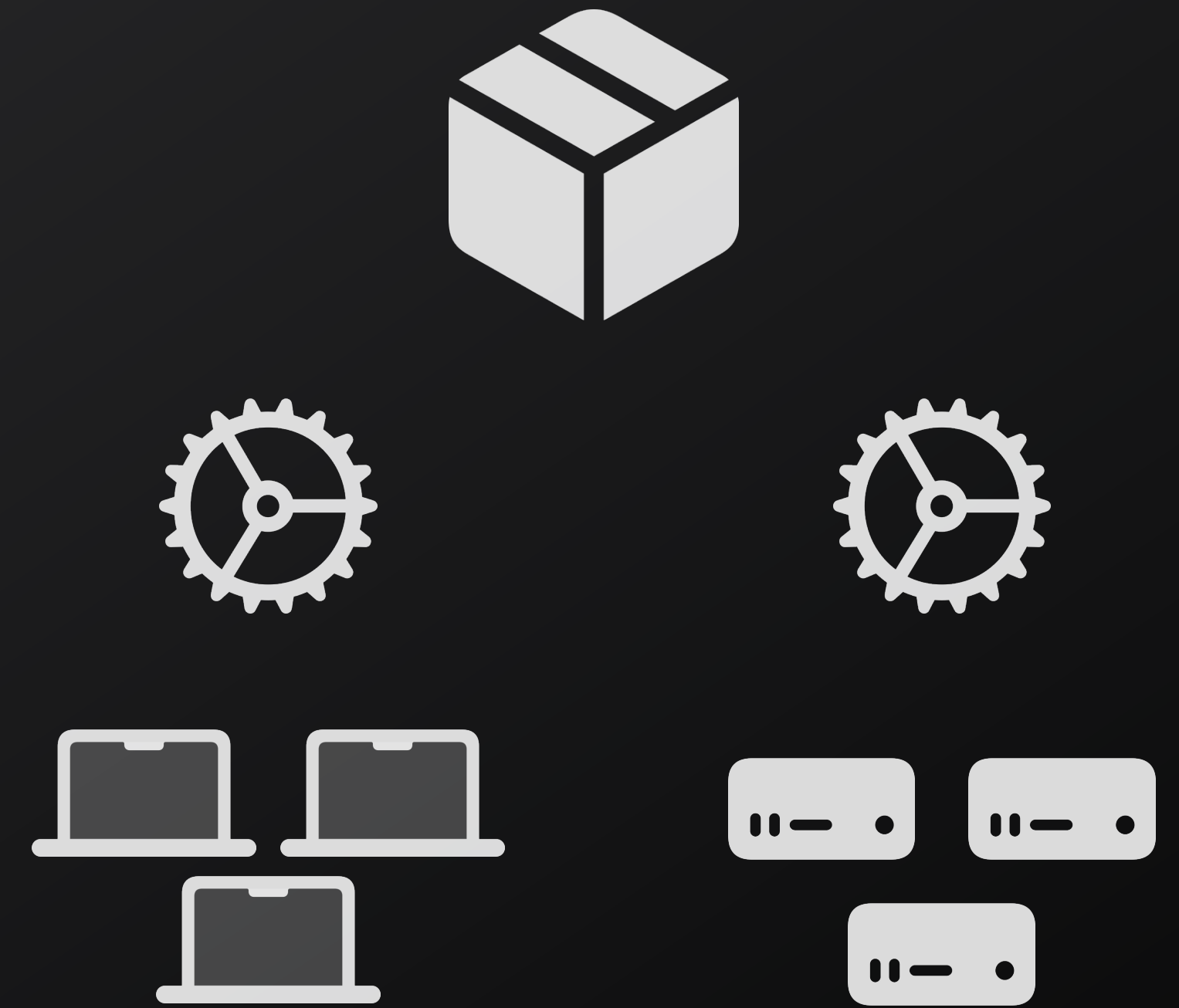
MDM Profile or Plist

- Baseline takes instructions from a configuration file.
- A configuration file can be in the form of an MDM profile or a plist.
- Use iMazing Profile Editor to create your configuration file
- Jamf users can use a custom JSON schema



One Package, Many Profiles

- Use the provided PKG, or create your own.
 - The provided PKG is signed and Notarized, so that it can be used during Automated Enrollment.
- Building your own package gives you the opportunity to deliver scripts, icons, alternate plists, or other assets at the same time that Baseline is installed.
- One PKG can be reused for many deployment scenarios by managing the configuration file.



Configuration Options

- Scripts
- Packages
- Installomator Labels
- swiftDialog Options
- Additional Baseline Options



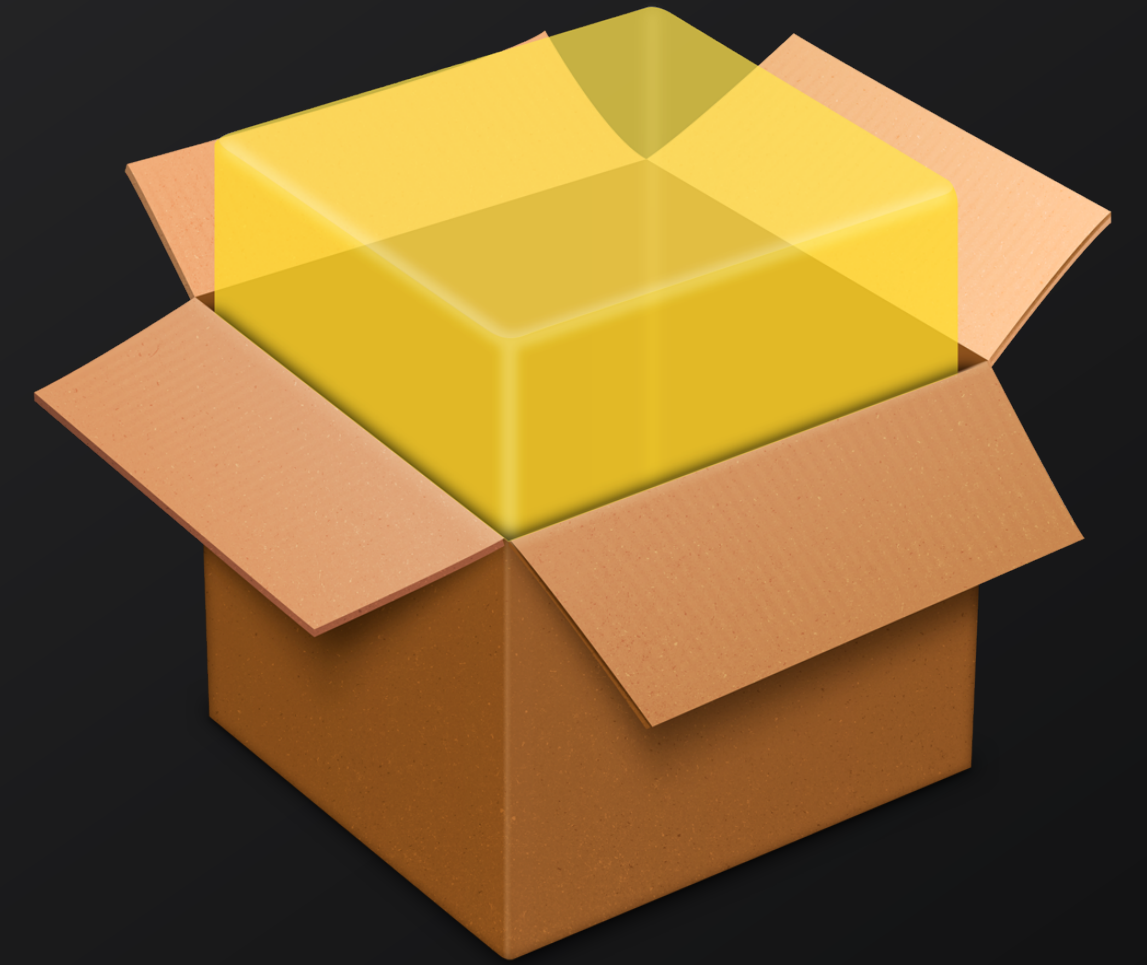
Defining Packages

Required Values

- Display Name
- Path to a .pkg
 - Local file path or remotely hosted

Optional Values

- Package Arguments
- TeamID for Validation
- MD5 Checksum for Validation



Defining Scripts

Required Values

- Display Name
- Path to an executable script or binary
 - Local file path or remotely hosted

Optional Values

- Script Arguments
- MD5 Checksum for Validation



Script Example

```

/usr/local/Baseline/Scripts — -zsh — 79x15
[/usr/local/Baseline/Scripts % ./Install-Asset-Management.sh "Acme-Artists"
Downloading... success.
Installing... success.
Assigning group: Acme-Artists... success.

[/usr/local/Baseline/Scripts % ./Install-Asset-Management.sh "Acme-Sales"
Downloading... success.
Installing... success.
Assigning group: Acme-Sales... success.

/usr/local/Baseline/Scripts %
```

Scripts written to accept command line arguments can be reused for multiple environments or departments.

Defining Installomator Labels

Required Values

- Display Name
- Label

Optional Values


- Installomator Arguments



Initial Scripts

- No built in swiftDialog window component during Initial Scripts.
- Initial Scripts run before the Baseline “List View” window.
- Use Initial Scripts to:
 - Provide a “Welcome Message”.
 - Allow users to choose options that get referenced later on.
 - Create or download configuration files for any packages which may need them.

Computer Setup Underway



Let's get you started on your new computer.

First, please choose your department and which building you are in.

Department

☒ Art

☐ Sales

☐ Accounting

Building

OK

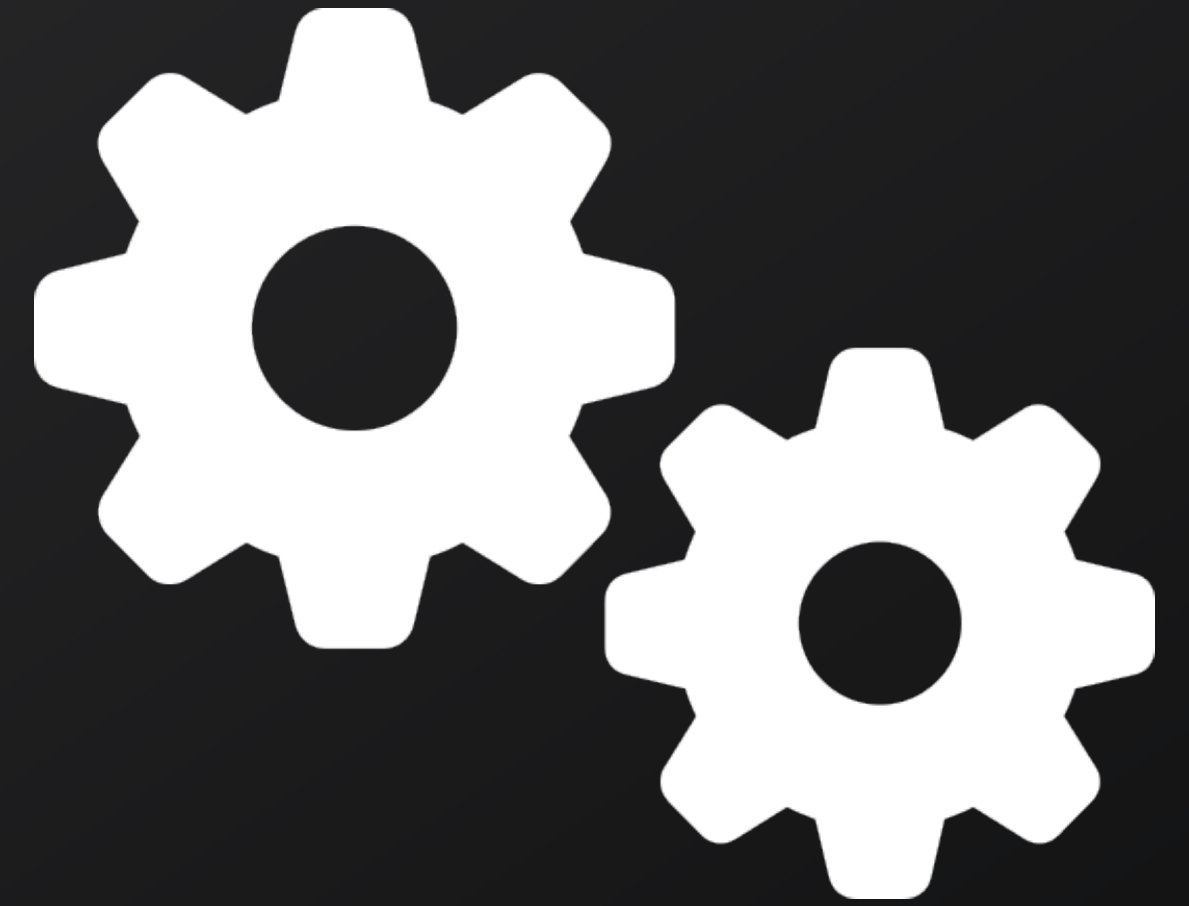
Zero Touch Workflow

- Automated Enrollment
- Profiles Assigned
- Baseline PKG is installed
- Launch Daemon initiates the script



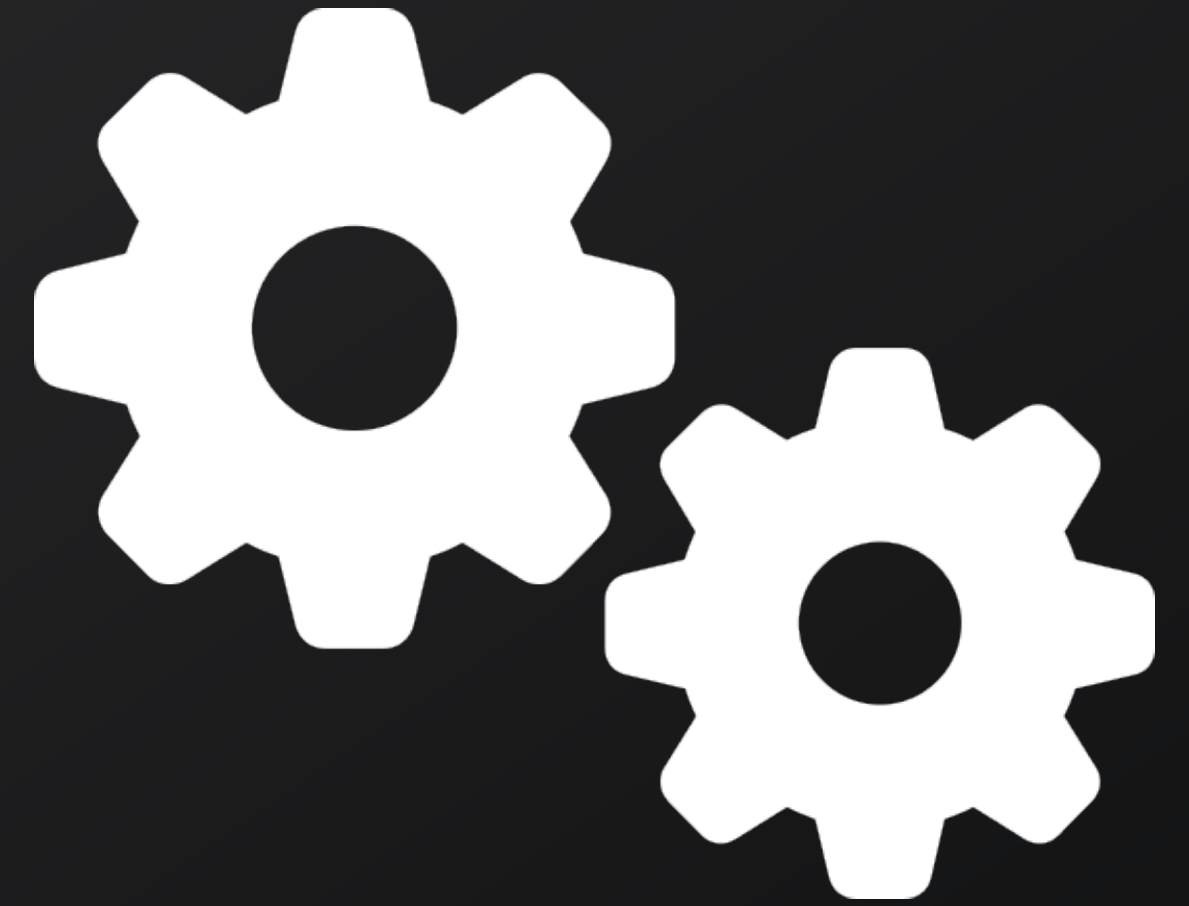
Order of Operations

- swiftDialog and Installomator installed by Baseline
- Wait for the end user session
- Initial Scripts



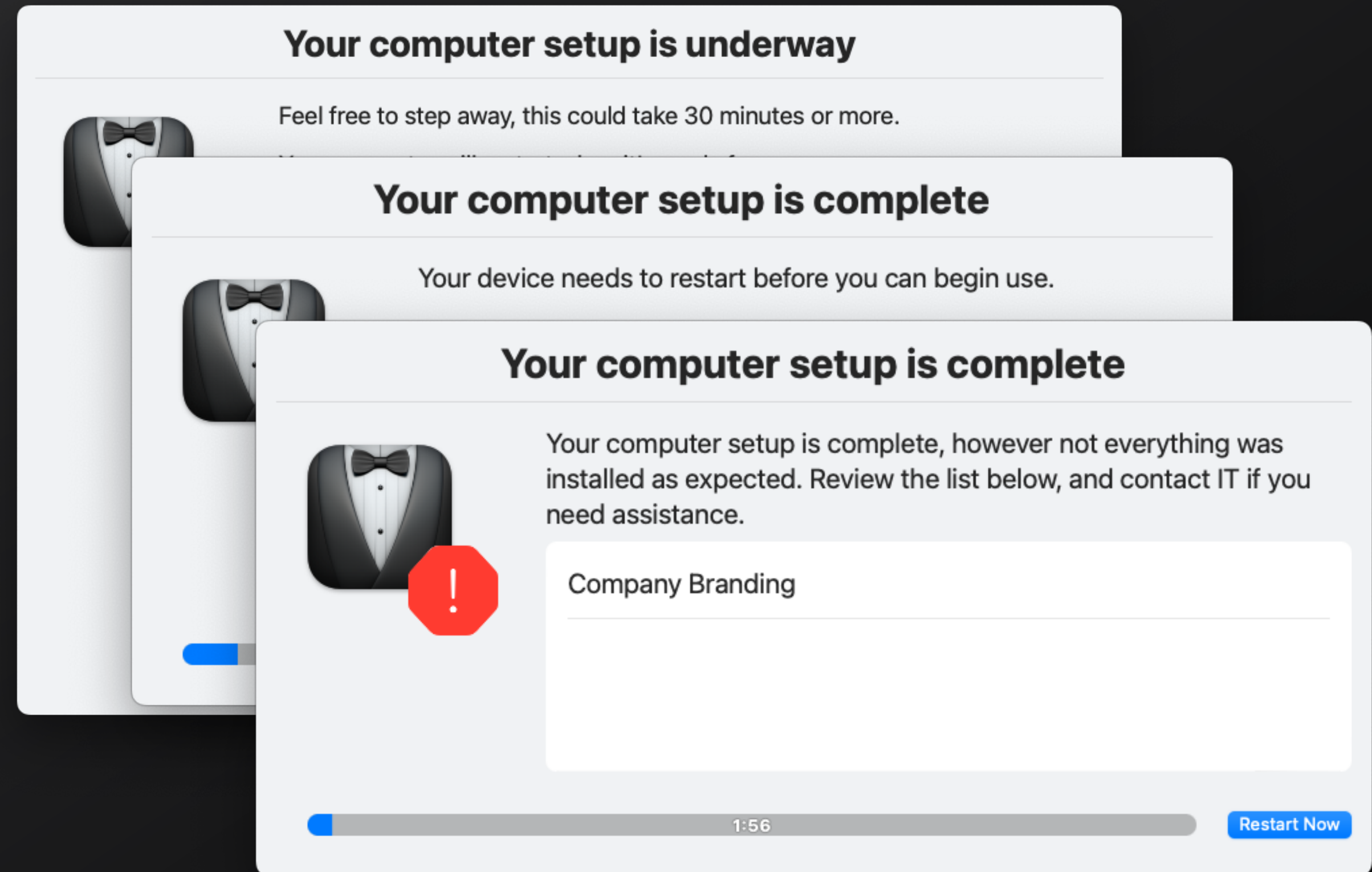
Order of Operations

- Baseline “List View” window
- Installomator Labels
- Packages
- Scripts
- Success or Failure window
- Cleanup and Restart



Customize Dialog Windows

- List Dialog
- Success Dialog
- Failure Dialog
- Pass any swiftDialog arguments using the same syntax as you would use at the command line to customize your messaging.



Additional Features

- Install a specific provided version of swiftDialog or Installomator.
- Require a Restart (default) after a run, or don't.
- Check for a file or folder, and exit quietly if it exists.
- Choose to delete the Baseline installation directory (default) or leave it behind.

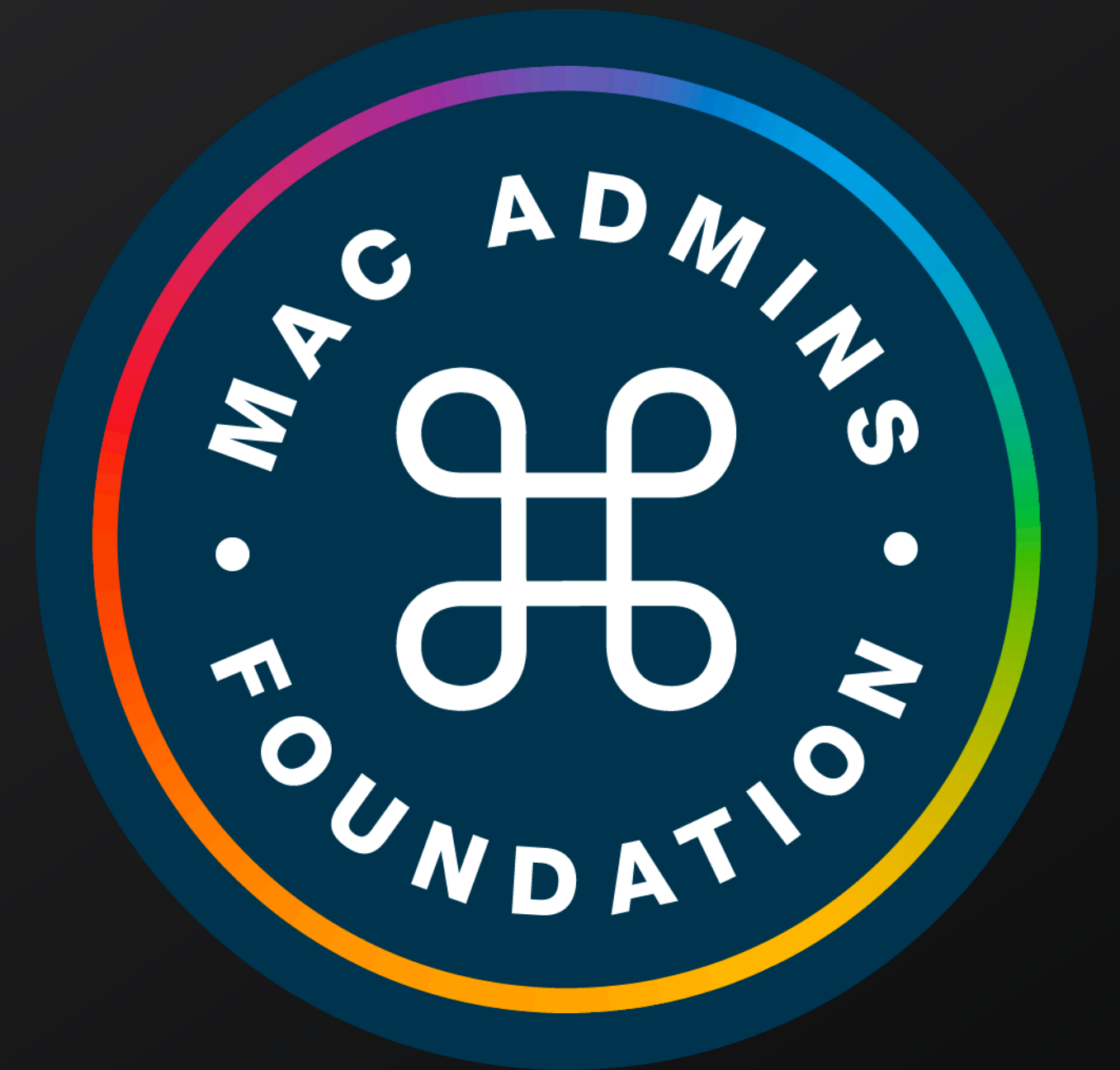


Thank You!

A huge thanks to everyone in the MacAdmins community that has contributed to any open source projects, or given guidance along the way.

Thank you to my employer, Second Son Consulting, for allowing me to make this free and open for everyone and for their generous support of the Mac Admins Foundation.

Check out the Second Son GitHub for our other projects and swiftDialog-Examples repo.



Links and Resources

Essentials

- <https://github.com/SecondSonConsulting/Baseline>
- <https://github.com/bartreardon/swiftDialog>
- <https://github.com/Installomator/Installomator>

Extras

- <https://github.com/SecondSonConsulting/Renew>
- <https://github.com/SecondSonConsulting/swiftDialogExamples>
- <https://www.macadmins.org/>

