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The Argo Ecosystem: Tailoring Your Installation Through Community Add-ons

*Jesse Suen, Akuity
Alexander Matyushentsev, Intuit*

Introductions



Jesse Suen
Co-Founder, Akuity



Alexander Matyushentsev
Principal Software Engineer, Intuit

1983

Founded

**1993**

IPO

**19**

Locations

**\$9.6B
FY21**

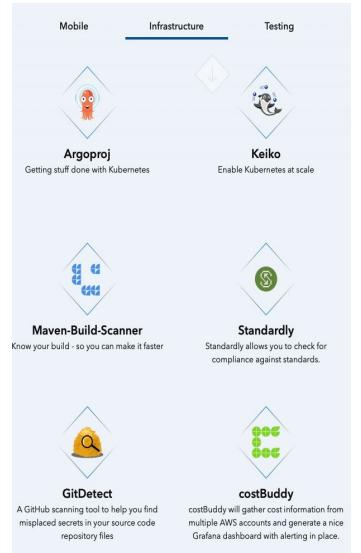
Revenue

**60M**

Customers

**75**

Projects

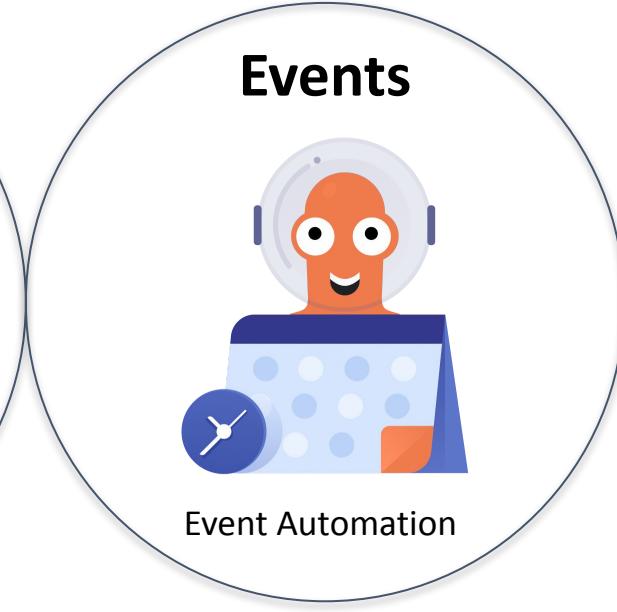
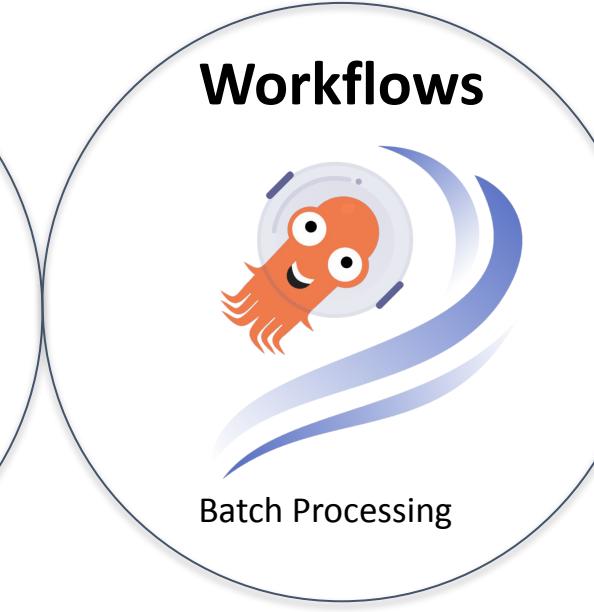
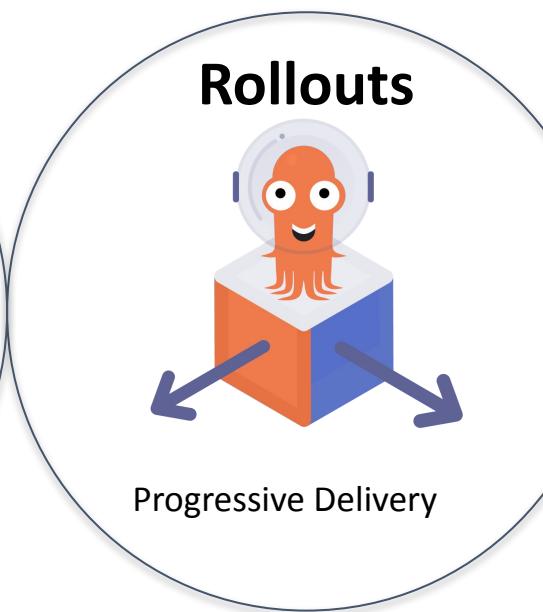
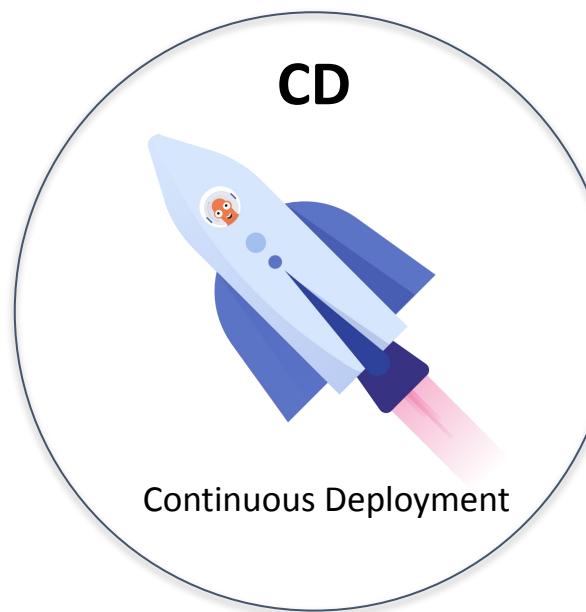


A K U I T Y

- Vendor supported enterprise grade distribution of Argo
- Expert support and services from project maintainers

Argo at a Glance

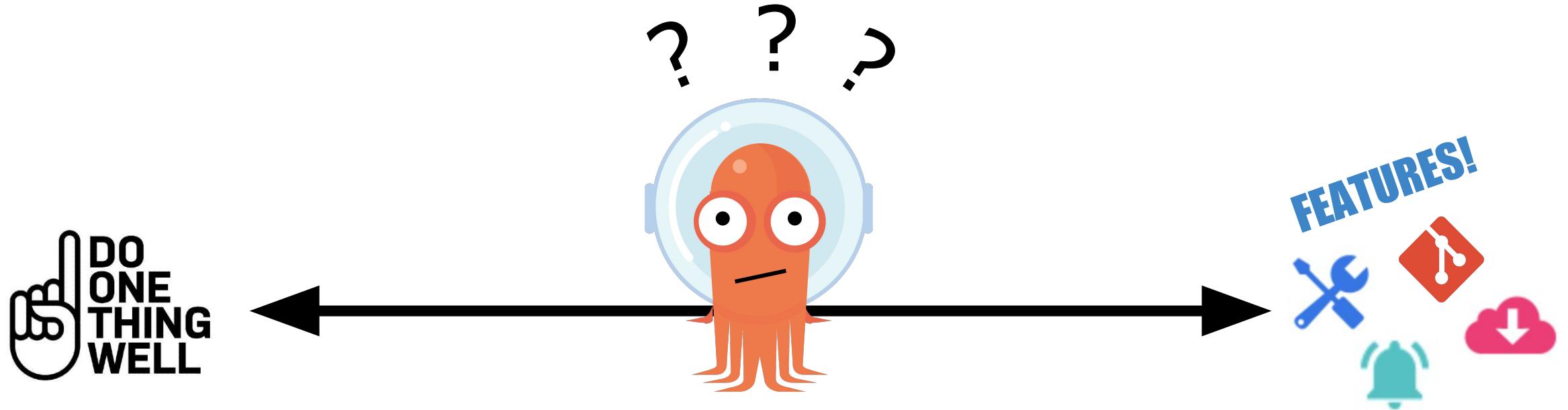
Argo is a suite of open source Kubernetes-native tools for deploying and running applications and workloads on Kubernetes.



Design Philosophy

- Focus on single use case, and do it well
- Provide a great & **complete** user experience
- Avoid bloat

Design Philosophy



- + Lightweight
- + Simpler
- + Smaller Scope
- Less functional

- + Better UX
- + Full-featured
- Bloated
- Complex
- Fragile

Annotations to the Rescue!

```
kind: Application
metadata:
  name: guestbook
  annotations:
    cool-new-experimental-feature.io/schedule: mon,wed,fri
```

- Add new features, without affecting core
- Minimal difference in user experience
- Can be developed as an independent project

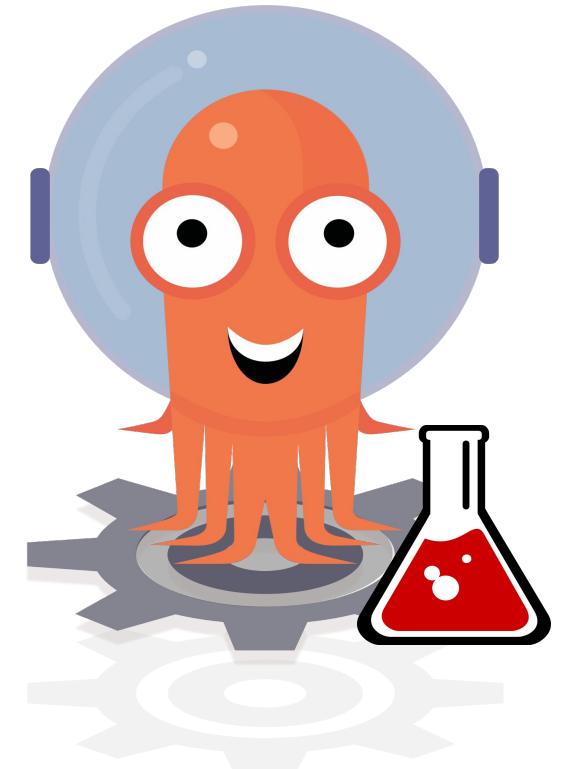
Benefits of a independent project

- Higher development velocity
- Free to experiment and make breaking changes
- Can give earlier access to features
- Can be abandoned
- Keeps core project lightweight
- Can always decide to formalize it and bring it into core later

Argoproj Labs

<https://github.com/argoproj-labs>

- Hosts repositories ecosystem projects which complement the core projects
- Incubator for experimental features



Argo Ecosystem

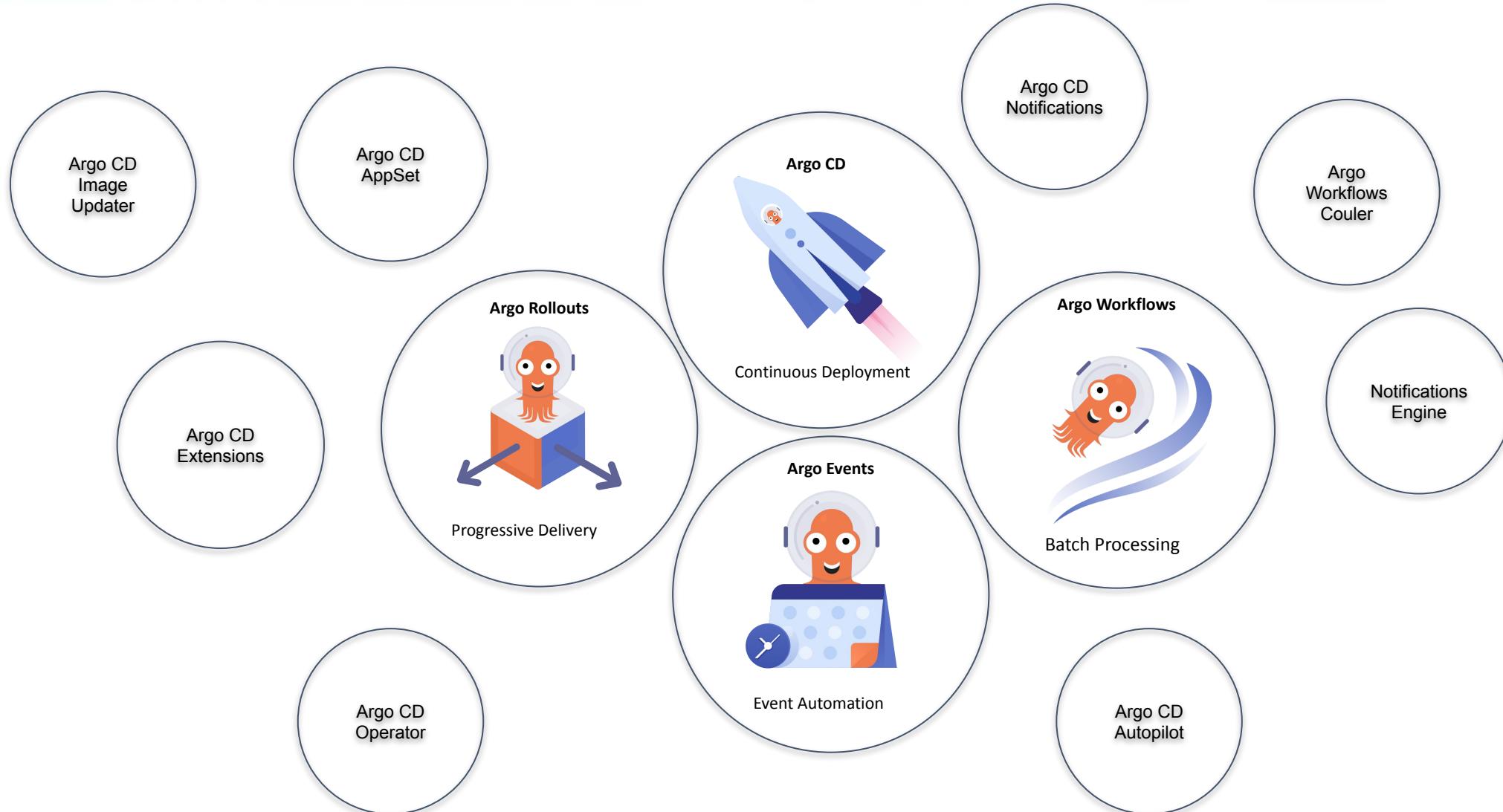


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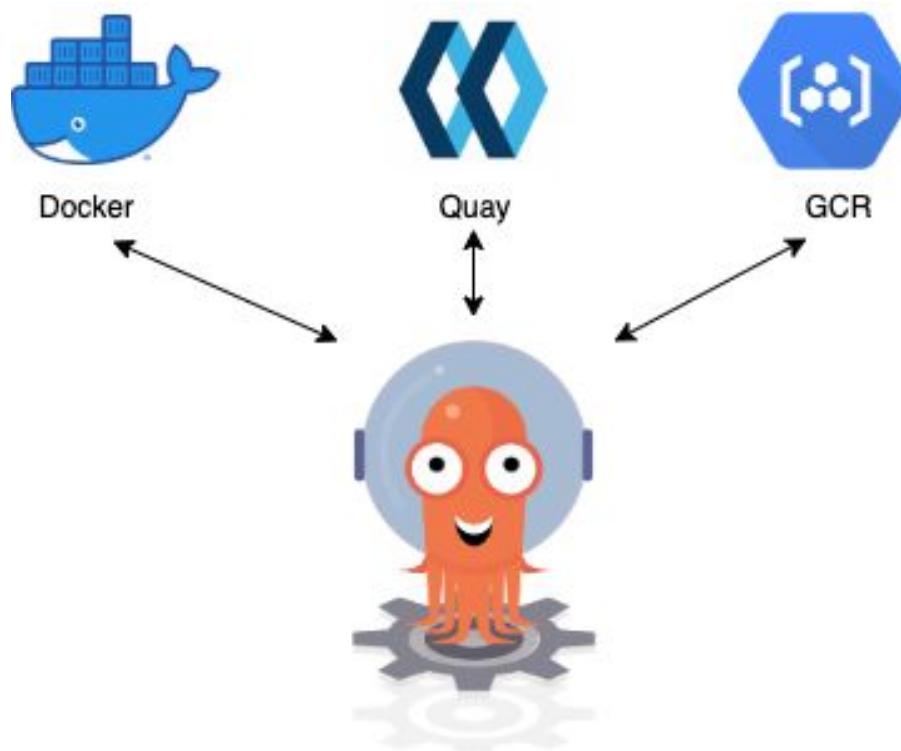
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Argo CD Image Updater

🐱 ⭐ 315 <https://github.com/argoproj-labs/argocd-image-updater>

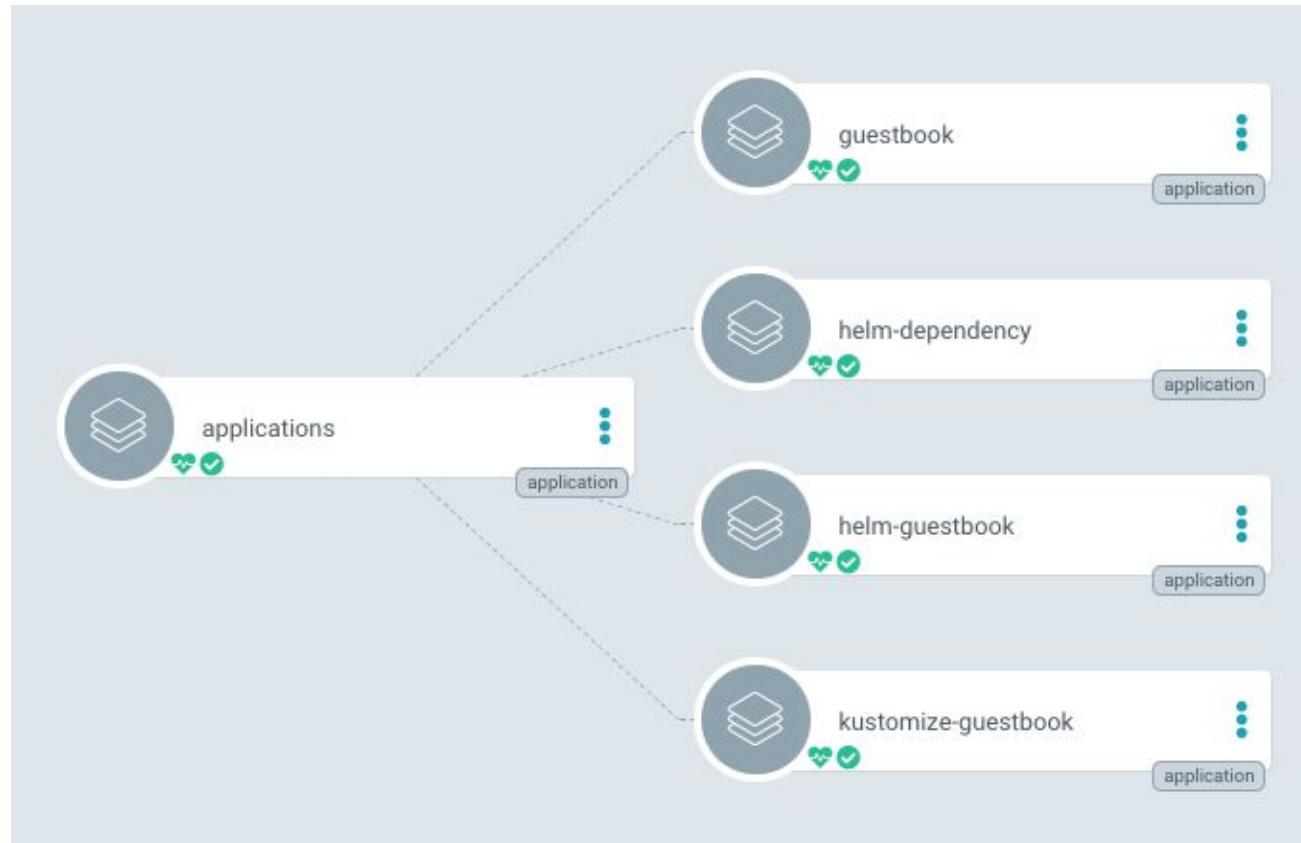
A tool to automatically update the container images of Kubernetes workloads that are managed by Argo CD.



Argo CD ApplicationSet

🐱 ⭐ 316 <https://github.com/argoproj-labs/applicationset>

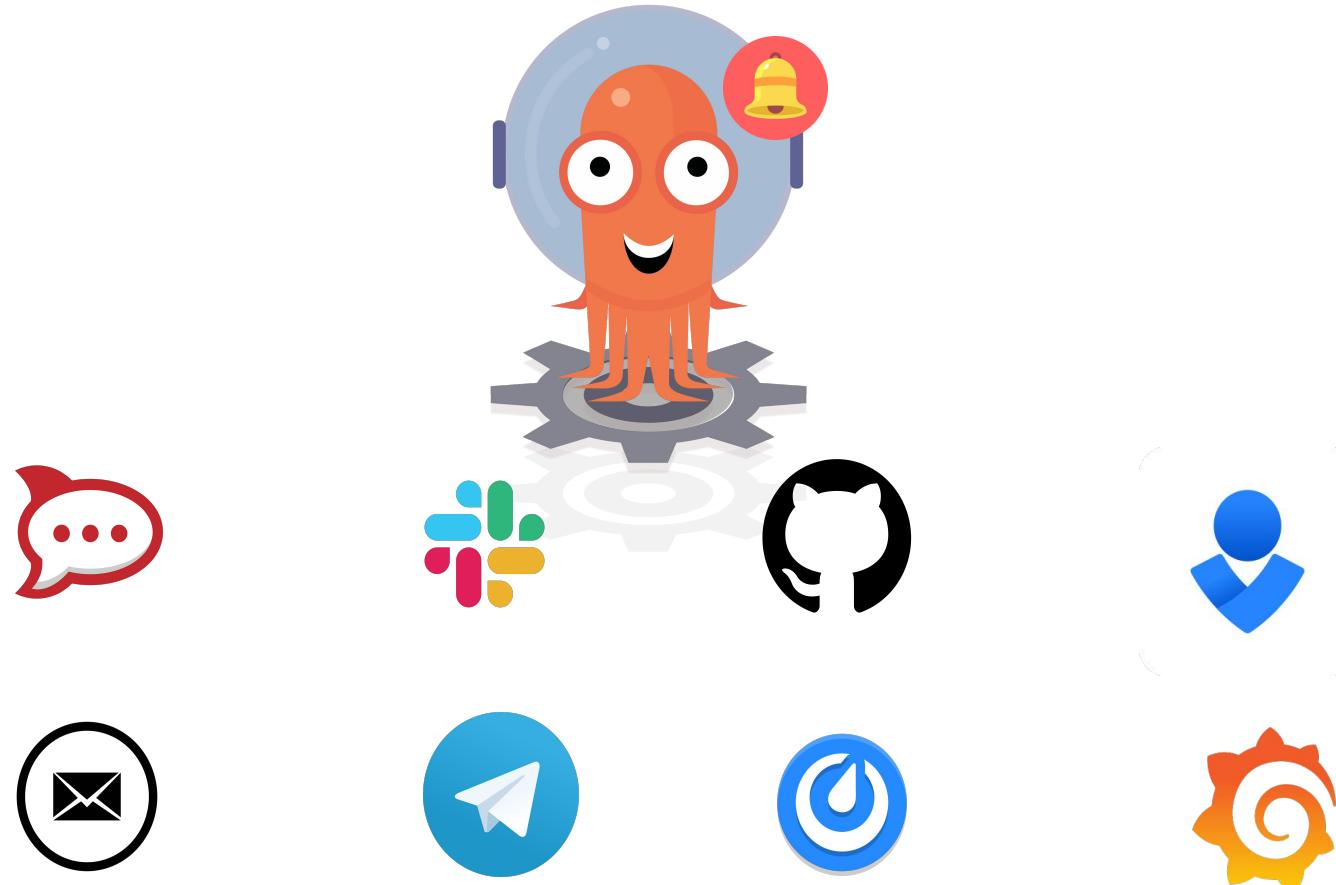
ApplicationSet enables automation and greater flexibility when managing Argo CD Applications across a large number of clusters and within monorepos.



Argo CD Notifications

334 <https://github.com/argoproj-labs/argocd-notifications>

Seamless Argo CD integration with dozen of notification services .

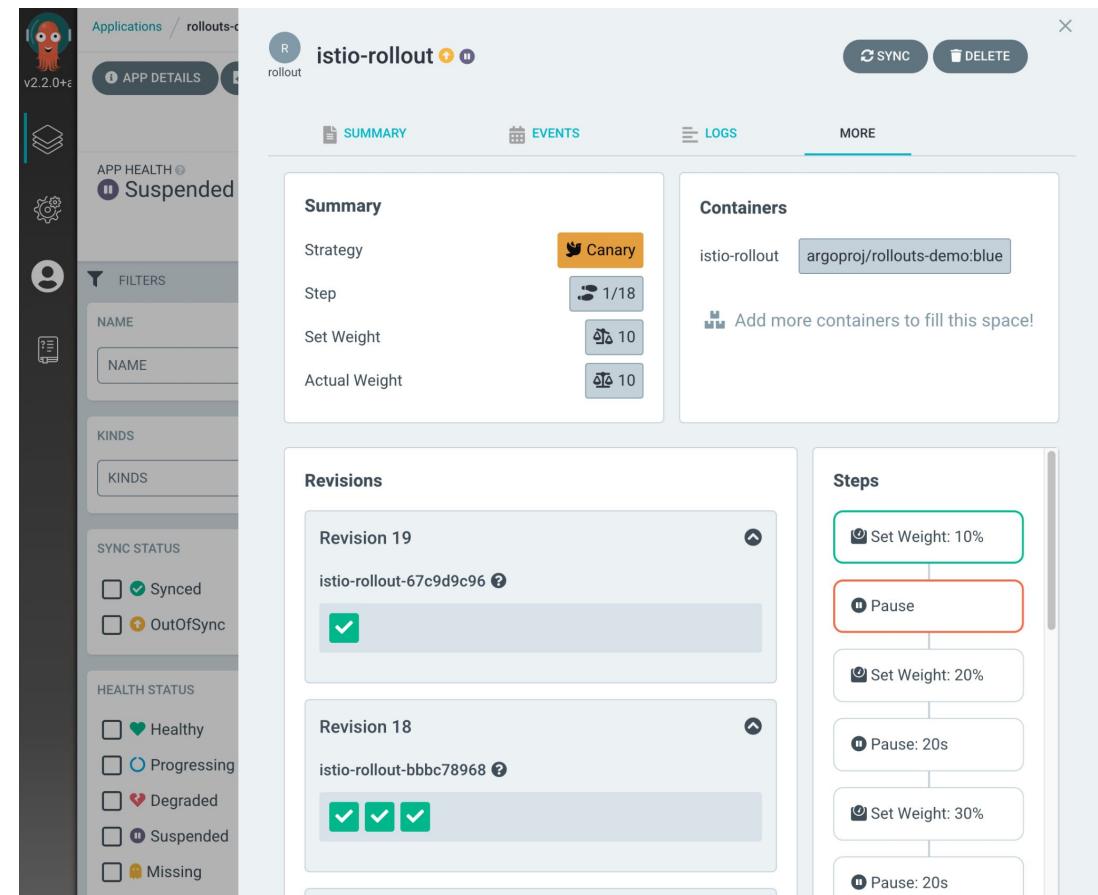


Argo CD Extensions

🐱 ⭐ 10 <https://github.com/argoproj-labs/argocd-extensions>

The Argo CD Extensions allows packaging resource-specific Argo CD customizations including health checks, actions, and custom visualization in Web UI.

```
1 apiVersion: argoproj.io/v1alpha1
2 kind: ArgoCDExtension
3 metadata:
4   finalizers:
5     - extensions-finalizer.argocd.argoproj.io
6   name: argo-rollouts
7 spec:
8   sources:
9     - web:
10       url: https://github.com/argoproj-labs/
11         rollout-extension/releases/download/v0.1.0/
12           extension.tar
```



DEMO



Create Your First Extension

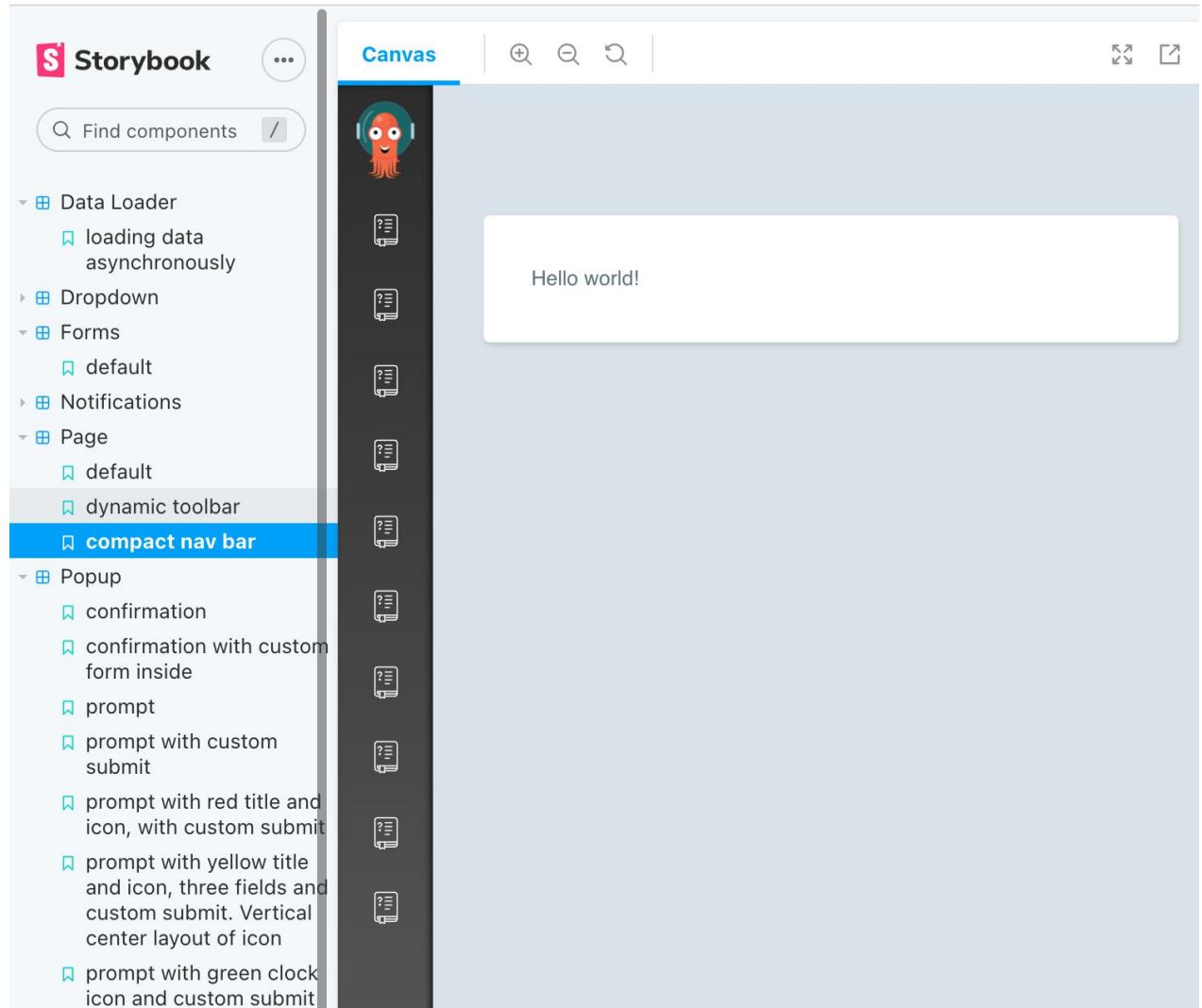
- Install extensions controller:
<https://github.com/argoproj-labs/argocd-extensions>
- Fork example extension:
<https://github.com/argoproj-labs/argocd-example-extension>
- Use Argo UI Library:
<https://github.com/argoproj/argo-ui>



Argo UI Library

131 <https://github.com/argoproj/argo-ui>

- React components library
- Powers Argoproj Web UI
- Useful to build Argo CD extensions



Future direction: More extensibility!

- Sidebar and Application-level UI extensions
 - Allow deeper integration with other tools
- Config Management Plugins v2 ([proposal](#))
 - Bring your own config management tool



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Thank you!

Questions?