

ArgoCD

February 20, 2025



1 What?

2 How?

3 Why?



What?

ArgoCD is a **declarative**, **GitOps**-based continuous delivery tool for Kubernetes.



How?

- 1 Monitors Git repo for changes



How?

- 1 Monitors Git repo for changes
- 2 Compare against current state

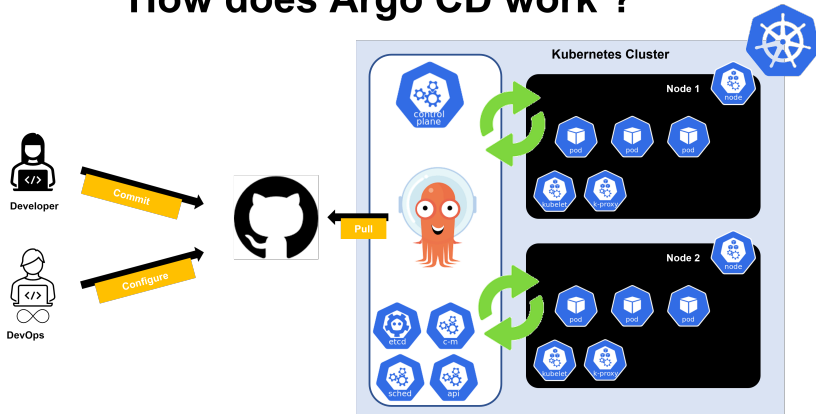


How?

- 1 Monitors Git repo for changes
- 2 Compare against current state
- 3 If difference → drift



How does Argo CD work ?



UI: <https://argocd.justwatch.com>

The screenshot displays the ArgoCD web interface. The top navigation bar includes the Argo logo, version 'v2.9.1+38b04e5', and a left arrow. Below this is a secondary bar with buttons for '+ NEW APP', 'SYNC APPS', and 'REFRESH APPS', along with a search bar and a 'Log out' link. The left sidebar contains a menu with 'Applications', 'Settings', 'User Info', and 'Documentation'. Below the menu are sections for 'Favorites Only', 'SYNC STATUS' (with a 'CLEAR' button), 'HEALTH STATUS', 'LABELS', and 'PROJECTS'. The main content area, titled 'Applications', shows a grid of application cards. Each card displays the application name, project, labels, status, repository, target revision, path, destination, namespace, creation and last sync times, and action buttons (SYNC, REFRESH, DELETE). The applications listed are: 'argocd-applications', 'prod.1password.operator', 'prod.elasticsearch-8.cluster', 'prod.infra.gcp-quota-exporter', 'prod.infra.github-actions-exporter', and 'prod.infra.jw-steward'. The status of each application is indicated by a heart icon (Healthy) and a yellow circle with a dot (OutOfSync).

Applications

APPLICATIONS TILES

+ NEW APP SYNC APPS REFRESH APPS Search applications...

Log out

Sort: name Items per page: all

argocd-applications

Project: default
Labels: app.kubernetes.io/managed-by=argocd, app.ku...
Status: Healthy OutOfSync
Repository: git@github.com:justwatch/jw-k8s.git
Target Revi... HEAD
Path: clusters/jw-k8s-prod-eu-2/applications/
Destination: in-cluster
Namespace: argocd
Created At: 03/21/2024 11:06:27 (a year ago)
Last Sync: 01/22/2025 01:00:42 (a month ago)

SYNC REFRESH DELETE

prod.1password.operator

Project: default
Labels: argocd.argoproj.io/instance=argocd-applications
Status: Healthy OutOfSync
Repository: git@github.com:justwatch/jw-k8s.git
Target Revi... HEAD
Path: prod/1password
Destination: in-cluster
Namespace: 1password
Created At: 03/19/2024 12:06:58 (a year ago)
Last Sync: 03/28/2024 09:20:50 (a year ago)

SYNC REFRESH DELETE

prod.elasticsearch-8.cluster

Project: default
Labels: managed-by=argocd
Status: Healthy OutOfSync
Repository: git@github.com:justwatch/jw-k8s.git
Target Revi... HEAD
Path: prod/elasticsearch-8/cluster
Destination: in-cluster
Namespace: elasticsearch-8
Created At: 03/19/2024 12:46:59 (a year ago)
Last Sync: 10/04/2024 12:31:50 (4 months ago)

SYNC REFRESH DELETE

prod.infra.gcp-quota-exporter

Project: default
Labels: managed-by=argocd
Status: Healthy OutOfSync
Repository: git@github.com:justwatch/jw-k8s.git
Target Revi... HEAD
Path: prod/infra/gcp-quota-exporter
Destination: in-cluster
Namespace: infra
Created At: 03/25/2024 12:05:03 (a year ago)
Last Sync: 03/25/2024 12:06:02 (a year ago)

SYNC REFRESH DELETE

prod.infra.github-actions-exporter

Project: default
Labels: managed-by=argocd
Status: Healthy OutOfSync
Repository: git@github.com:justwatch/jw-k8s.git
Target Revi... HEAD
Path: prod/infra/github-actions-exporter
Destination: in-cluster
Namespace: infra
Created At: 03/25/2024 12:05:03 (a year ago)
Last Sync: 03/25/2024 12:06:04 (a year ago)

SYNC REFRESH DELETE

prod.infra.jw-steward

Project: default
Labels: managed-by=argocd
Status: Healthy OutOfSync
Repository: git@github.com:justwatch/jw-k8s.git
Target Revi... HEAD
Path: prod/infra/jw-steward
Destination: in-cluster
Namespace: infra
Created At: 03/25/2024 13:10:59 (a year ago)
Last Sync: 03/25/2024 13:17:46 (a year ago)

SYNC REFRESH DELETE

Collection of resources that are managed together

```
● ● ● appset-infra-chatops.yaml
apiVersion: argoproj.io/v1alpha1
kind: ApplicationSet
metadata:
  annotations:
    argocd.argoproj.io/sync-wave: "4"
  name: infra-chatops
  namespace: argocd
spec:
  generators:
    - git:
        repoURL: git@github.com:justwatch/jw-k8s.git
        revision: HEAD
        directories:
          - path: prod/infra/jeeves
          - path: prod/infra/jw-bob
          - path: prod/infra/jw-steward
          - path: prod/infra/jw-slack-automation-worker
          - path: prod/infra/jw-automation-worker
          - path: prod/infra/jw-automation-worker-receiver
          - path: prod/infra/jw-automation-worker-cron
          - path: prod/infra/jw-automation-worker-beta
          - path: prod/infra/jw-automation-worker-receiver-beta
          - path: prod/infra/jw-automation-worker-cron-beta
```



Why?

- Keep up with changes



Why?

- Keep up with changes
- Track changes in git history



Why?

- Keep up with changes
- Track changes in git history
- Prevent undesired side effects



Why?

- Keep up with changes
- Track changes in git history
- Prevent undesired side effects
- Reproducible environments

