

## DESAFÍO 13

**Institución:** Educación IT

**Alumno:** Becchero Mariano

**Objetivo:** El objetivo de este desafío es guiar la instalación y configuración de ArgoCD en un entorno de Minikube. ArgoCD es una herramienta de GitOps utilizada para gestionar despliegues en Kubernetes de manera declarativa.

### GUÍA DE PASOS

- 1- Como requisitos previos, ya tengo instalado Minikube y kubectl para interactuar con el clúster de Kubernetes en Minikube.

- 2- Inicio Minikube

```
Mana Informatica@DESKTOP-K0UA0G8 MINGW64 /f/Documents/WorkspaceVSC
$ minikube start
minikube v1.34.0 on Microsoft Windows 10 Pro 10.0.19045.4894 Build 19045.4894
Using the docker driver based on existing profile
Starting "minikube" primary control-plane node in "minikube" cluster
Pulling base image v0.0.45 ...
Restarting existing docker container for "minikube" ...
! Failing to connect to https://registry.k8s.io/ from both inside the minikube container and host machine
To pull new external images, you may need to configure a proxy: https://minikube.sigs.k8s.io/docs/reference/networking/proxy/
Preparing Kubernetes v1.31.0 on Docker 27.2.0 ...
Verifying Kubernetes components...
  Using image gcr.io/k8s-minikube/storage-provisioner:v5
  Enabled addons: storage-provisioner, default-storageclass

! C:\Program Files\Docker\Docker\resources\bin\kubectl.exe is version 1.29.2, which may have incompatibilities with Kubernetes 1.31.0
.
  * Want kubectl v1.31.0? Try 'minikube kubectl -- get pods -A'
Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
```

- 3- Instalo el namespace de ArgoCD

```
Mana Informatica@DESKTOP-K0UA0G8 MINGW64 /f/Documents/WorkspaceVSC
$ kubectl create namespace argocd
namespace/argocd created
```

- 4- Despliego los recursos de ArgoCD en Minikube

```
Mana Informatica@DESKTOP-K0UA0G8 MINGW64 /f/Documents/WorkspaceVSC
$ kubectl apply -n argocd -f https://raw.githubusercontent.com/argoproj/argo-cd/stable/manifests/install.yaml
customresourcedefinition.apiextensions.k8s.io/applications.argoproj.io created
customresourcedefinition.apiextensions.k8s.io/applicationsets.argoproj.io created
customresourcedefinition.apiextensions.k8s.io/appprojects.argoproj.io created
serviceaccount/argocd-application-controller created
serviceaccount/argocd-applicationset-controller created
serviceaccount/argocd-dex-server created
serviceaccount/argocd-notifications-controller created
serviceaccount/argocd-redis created
serviceaccount/argocd-repo-server created
serviceaccount/argocd-server created
role.rbac.authorization.k8s.io/argocd-application-controller created
role.rbac.authorization.k8s.io/argocd-applicationset-controller created
role.rbac.authorization.k8s.io/argocd-dex-server created
role.rbac.authorization.k8s.io/argocd-notifications-controller created
role.rbac.authorization.k8s.io/argocd-redis created
role.rbac.authorization.k8s.io/argocd-server created
clusterrole.rbac.authorization.k8s.io/argocd-application-controller created
clusterrole.rbac.authorization.k8s.io/argocd-applicationset-controller created
clusterrole.rbac.authorization.k8s.io/argocd-server created
rolebinding.rbac.authorization.k8s.io/argocd-application-controller created
rolebinding.rbac.authorization.k8s.io/argocd-applicationset-controller created
rolebinding.rbac.authorization.k8s.io/argocd-dex-server created
rolebinding.rbac.authorization.k8s.io/argocd-notifications-controller created
rolebinding.rbac.authorization.k8s.io/argocd-redis created
rolebinding.rbac.authorization.k8s.io/argocd-server created
clusterrolebinding.rbac.authorization.k8s.io/argocd-application-controller created
clusterrolebinding.rbac.authorization.k8s.io/argocd-applicationset-controller created
clusterrolebinding.rbac.authorization.k8s.io/argocd-server created
configmap/argocd-cm created
configmap/argocd-cmd-params-cm created
```

- 5- Expongo el servicio ArgoCD Server para acceder al dashboard

```
Mana Informatica@DESKTOP-K0UA0G8 MINGW64 /f/Documents/WorkspaceVSC
$ kubectl port-forward svc/argocd-server -n argocd 8080:443
Forwarding from 127.0.0.1:8080 -> 8080
Forwarding from [::1]:8080 -> 8080
Handling connection for 8080
Handling connection for 8080
Handling connection for 8080
```

- 6- Obtengo la contraseña inicial del usuario admin

```
Mana Informatica@DESKTOP-K0UA0G8 MINGW64 /f/Documents/WorkspaceVSC
$ kubectl get secret argocd-initial-admin-secret -n argocd -o jsonpath="{.data.password}" |
  > base64 --decode
JpIYyJ3JHuQA1yYa
```

- 7- Inicio sesión en el dashboard y despliego la aplicación desarrollada en el desafío 11, mostrando su ejecución exitosa

GENERAL

Application Name  
desafio13

Project Name  
default

SYNC POLICY  
Manual

☐ SET DELETION FINALIZER

SYNC OPTIONS

☐ SKIP SCHEMA VALIDATION☐ AUTO-CREATE NAMESPACE

☐ PRUNE LAST☐ APPLY OUT OF SYNC ONLY

SOURCE

Repository URL  
https://github.com/marianobecchero/reposGIT

Revision  
HEADBranches

Path  
desafio11/educacionit-app/k8s

## DESTINATION


Cluster URL

https://kubernetes.default.svc

URL ▼

Namespace

default



v2.12.3+6b9cd82

Applications

Settings

User Info

Documentation

NAME

NAME

KINDS

KINDS

SYNC STATUS

☐ Synced 4

☐ OutOfSync 0

Applications / desafio13

APPLICATION DETAILS TREE

DETAILS

DIFF

SYNC

SYNC STATUS

HISTORY AND ROLLBACK

DELETE

REFRESH

APP HEALTH

SYNC STATUS

LAST SYNC

Progressing

Synced to HEAD (4757f6e)

Auto sync is not enabled.

Author: marianobecchero <marianobecchero@gmail...>

Comment: change folder desafio 11

Sync OK to 4757f6e

Succeeded a few seconds ago (Sun Oct 06 2024 13:21:06 GMT+0300)

Author: marianobecchero <marianobecchero@gmail...>

Comment: change folder desafio 11

