**ASSIGNMENT 2: AWS INFRASTRUCTURE WITH ARGO CD**

1. Keep AWS resources and CI flow as in ASSIGNMENT 1
2. Install argo CD

RUN COMMAND

* Create namespace:

kubectl create namespace argocd

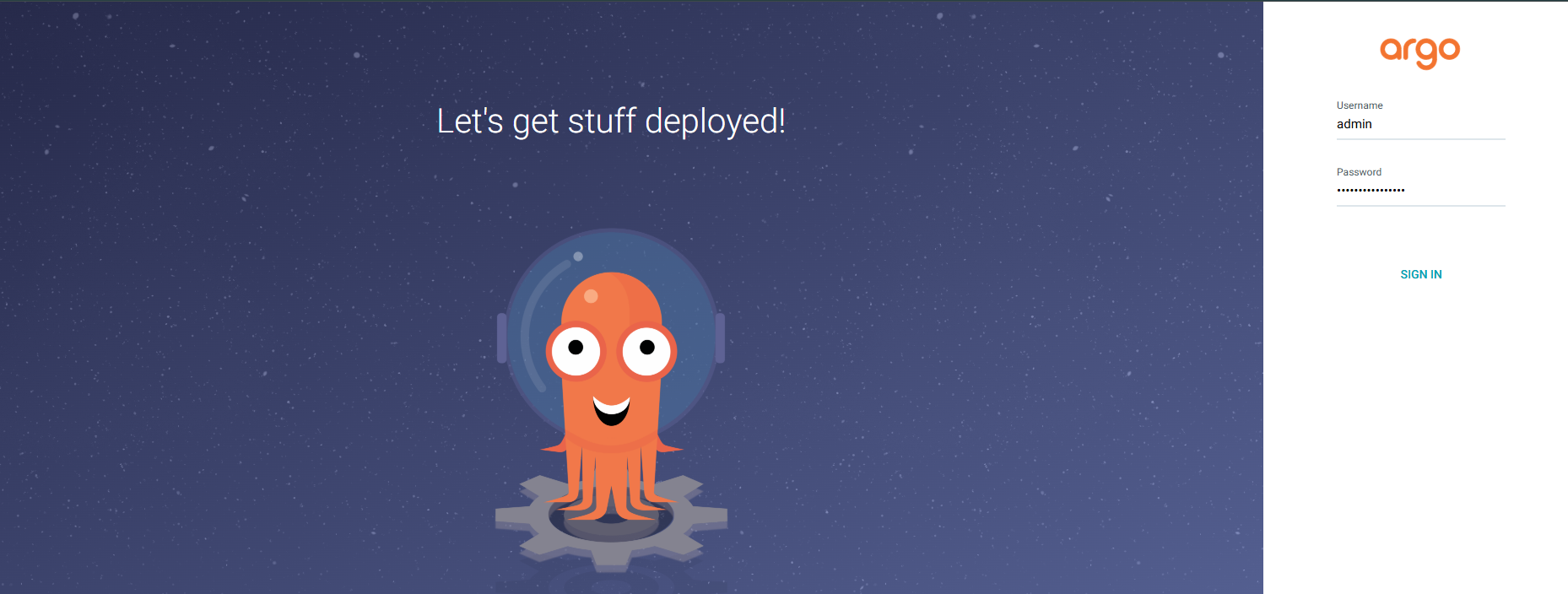
* Apply argocd

kubectl apply -n argocd -f https://raw.githubusercontent.com/argoproj/argo-cd/stable/manifests/install.yaml

* Use Load Balancer to view argo UI

kubectl patch svc argocd-server -n argocd -p '{"spec": {"type": "LoadBalancer"}}'

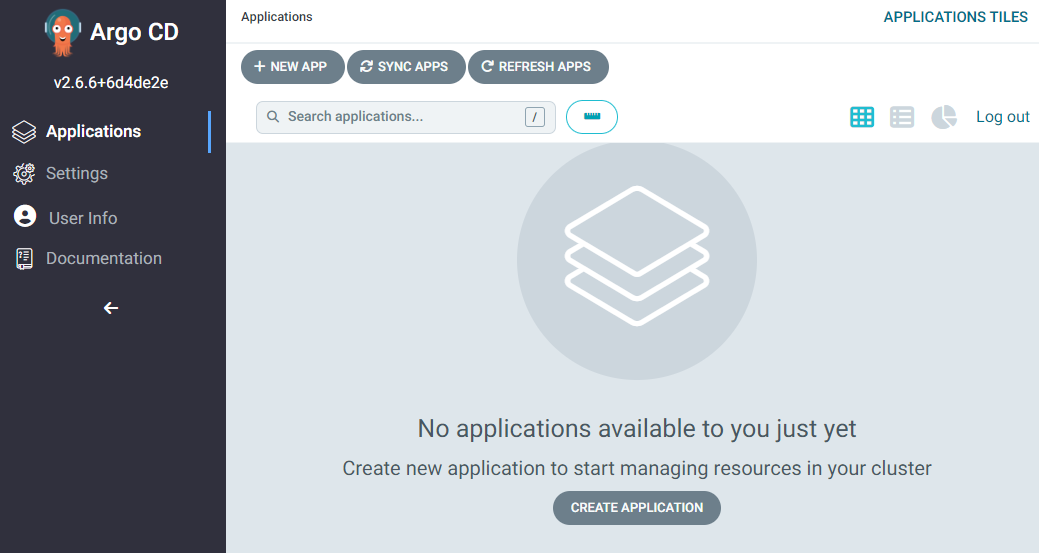
Go to url “[a3a5ae5c786374ed5acedaf1c5b61702-520099965.ap-southeast-1.elb.amazonaws.com](http://a3a5ae5c786374ed5acedaf1c5b61702-520099965.ap-southeast-1.elb.amazonaws.com)”



* Run command to get password

kubectl get secret -n argocd argocd-initial-admin-secret -o jsonpath="{.data.password}" | base64 -d

* Type username=”admin” and password=”8rjs6YrUw6qz9S2U” -> Sign in

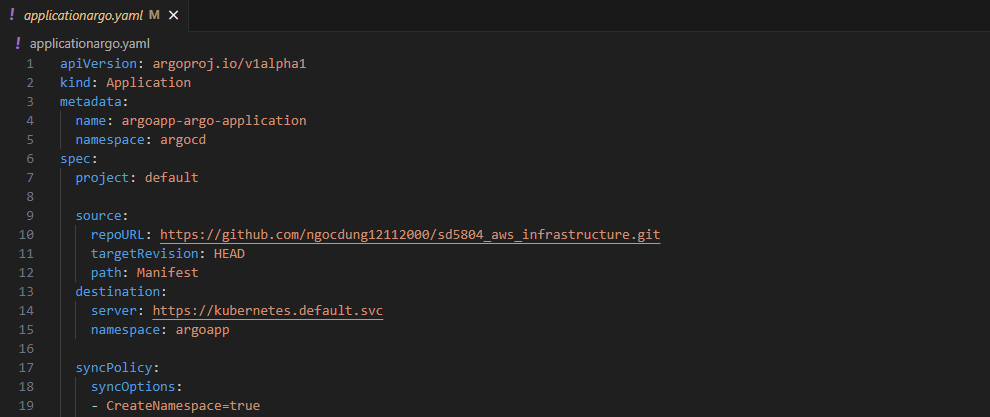


1. Create argo application

* Create a file “applicationargo.yaml”

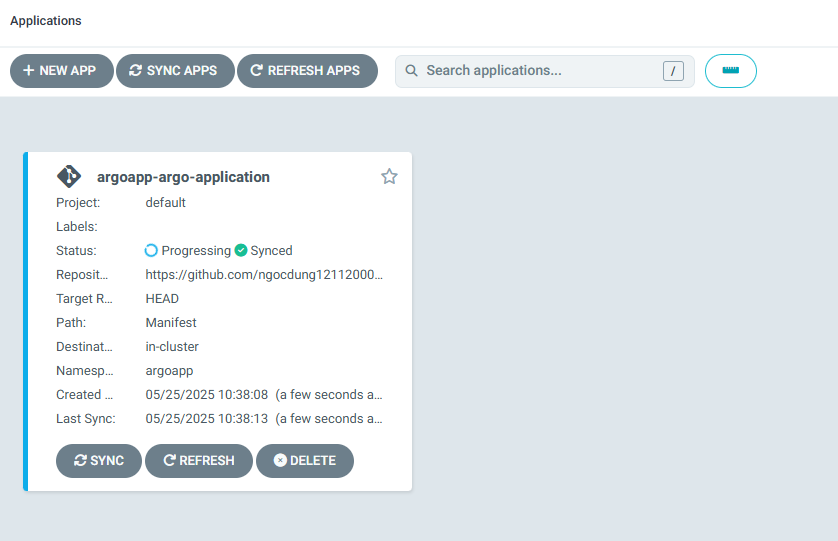
repoURL: <https://github.com/ngocdung12112000/sd5804_aws_infrastructure.git>

path: Manifest (Folder contains all yml files)

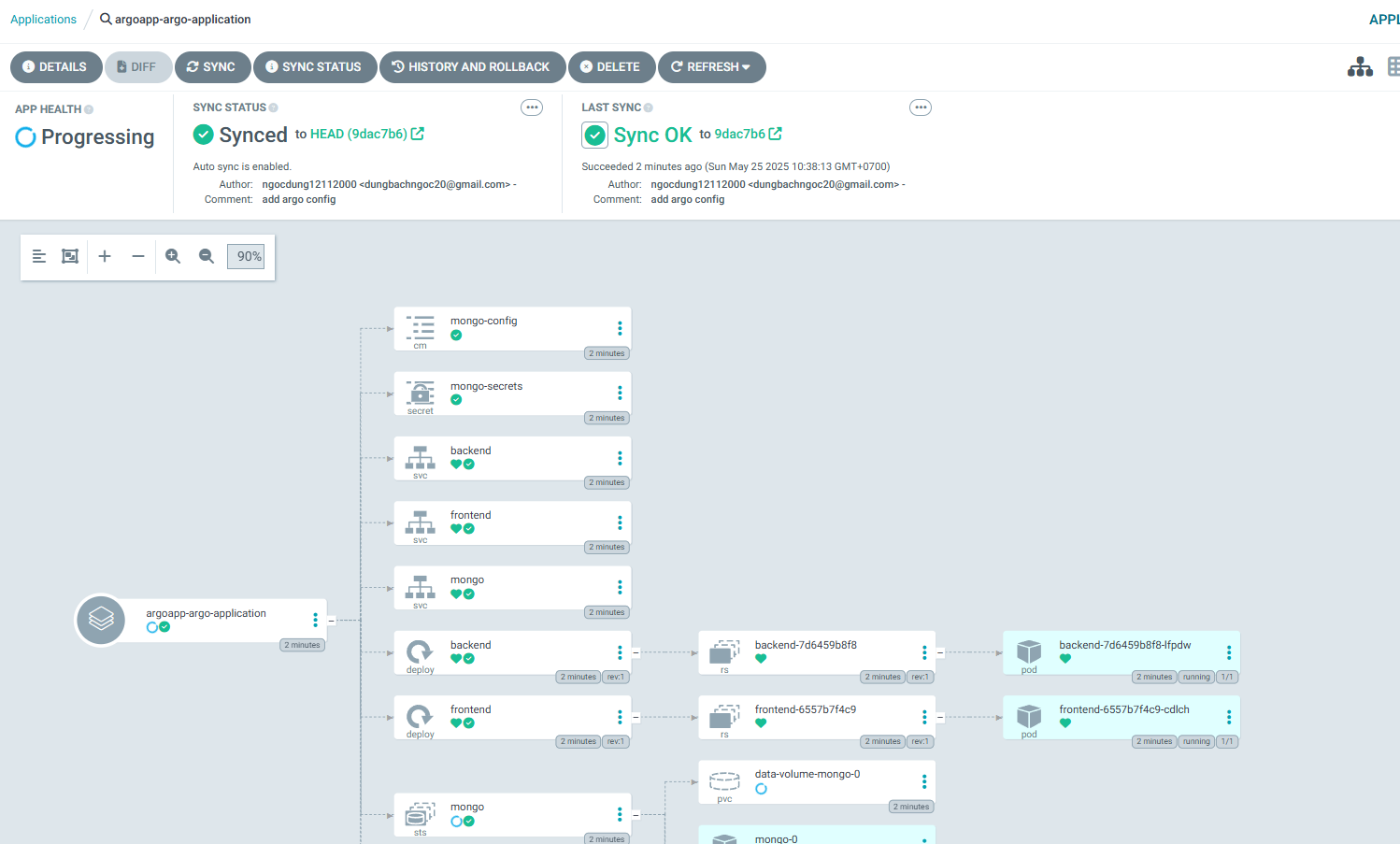


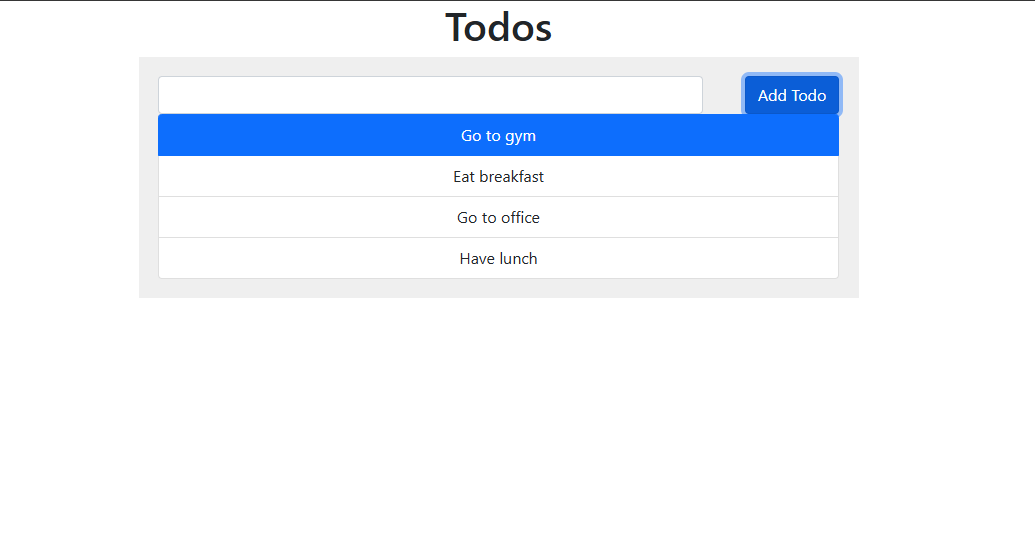
* Run command to create argo application

kubectl apply -f applicationargo.yaml



* Click to **argo app-argo-application** and click **Sync**

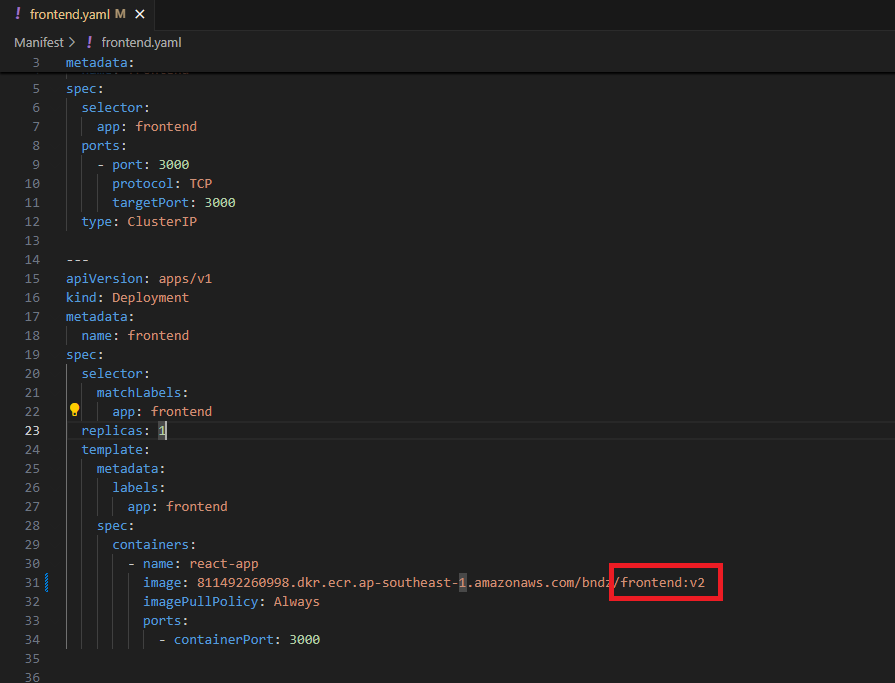




1. Update image frontend

Change from frontend:v1 -> frontend:v2

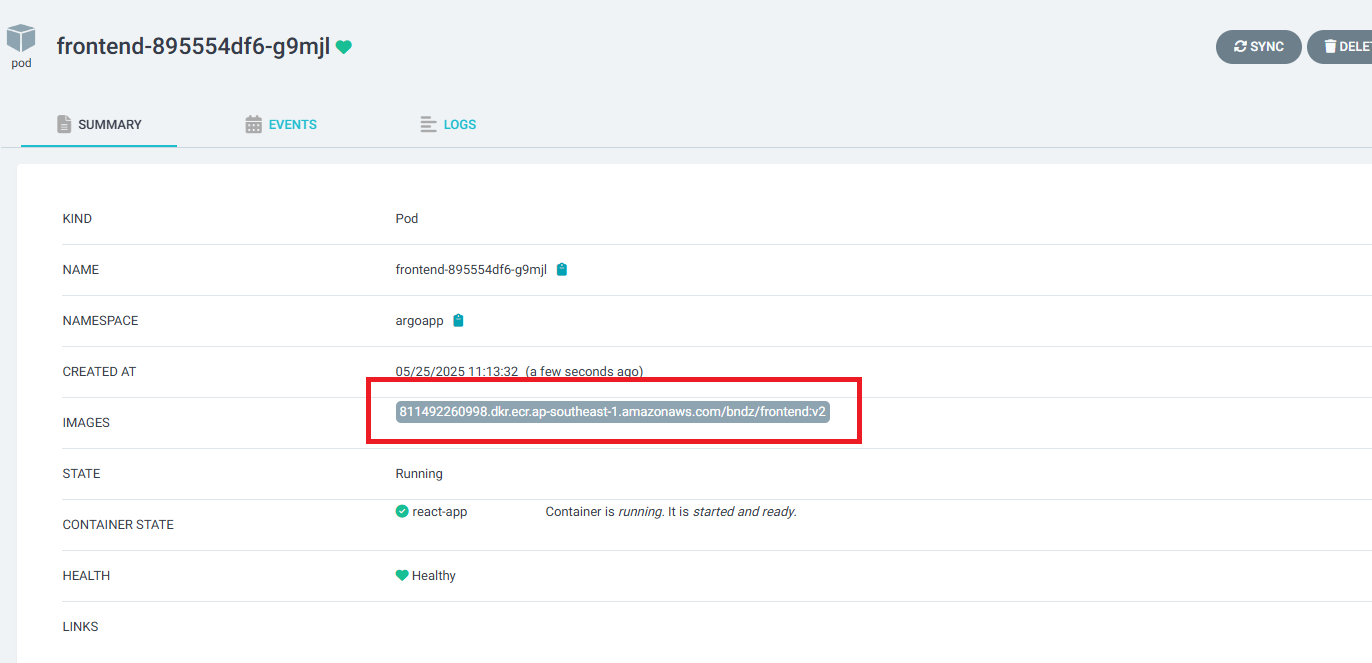
Then commit change and push



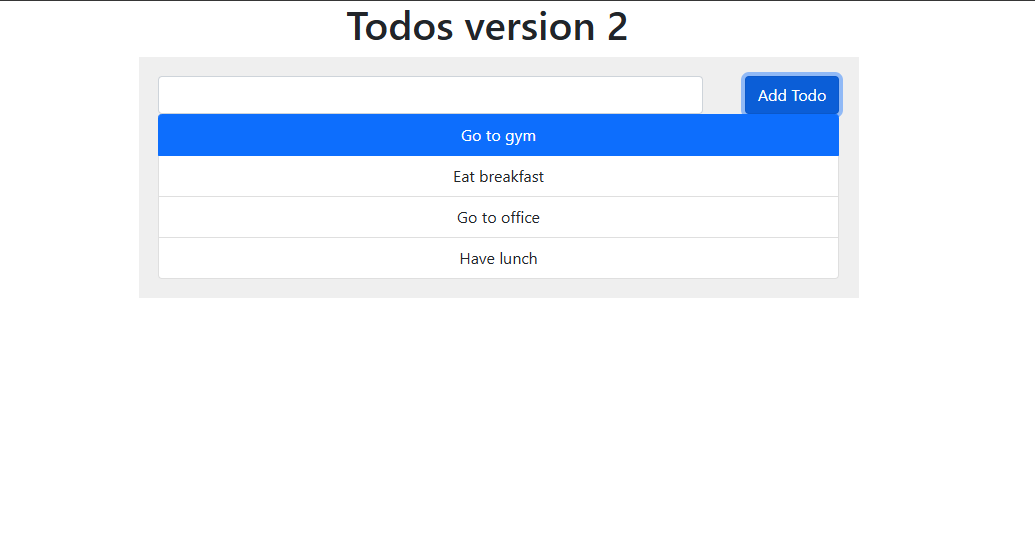
In argo UI, it show Sync status: Out of sync

-> Click **Sync** button -> **Synchronize**

Check frontend pods



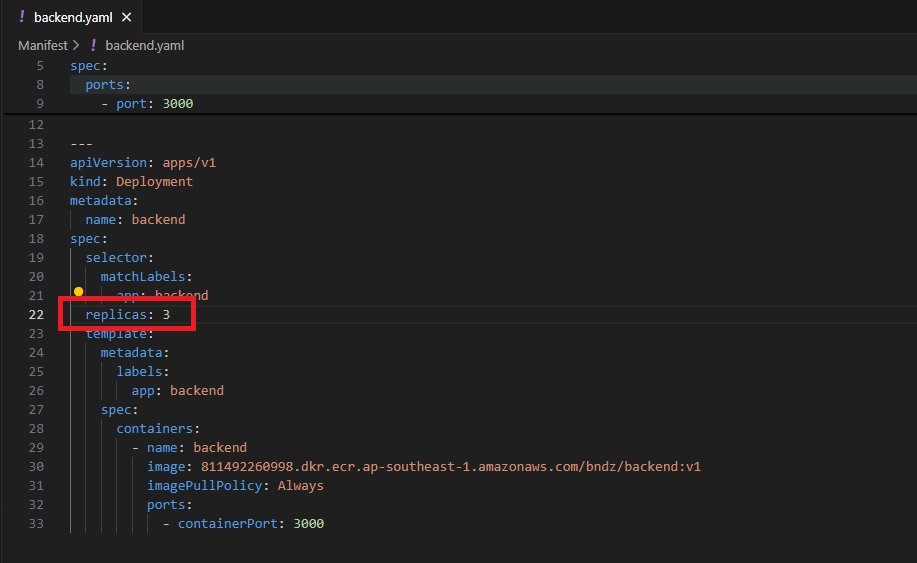
Check UI



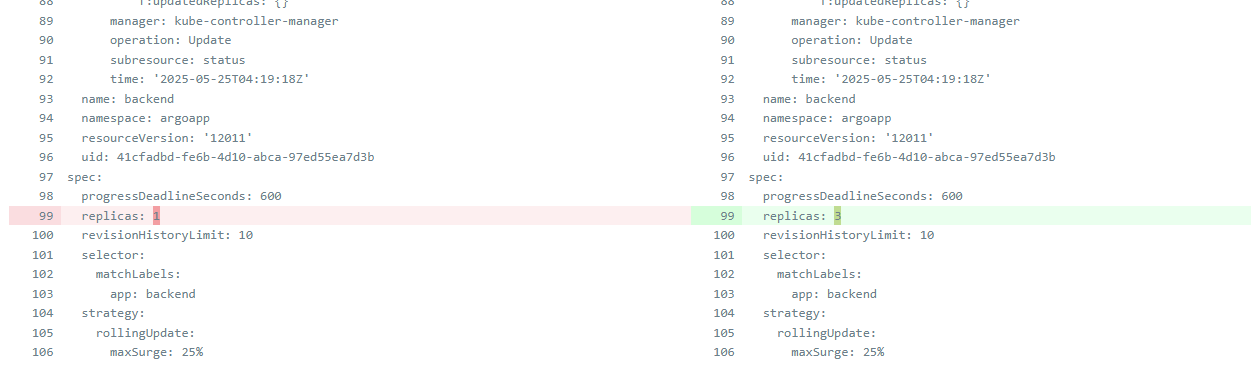
1. Update backend replicas

Change replicas: 1 -> replicas: 3

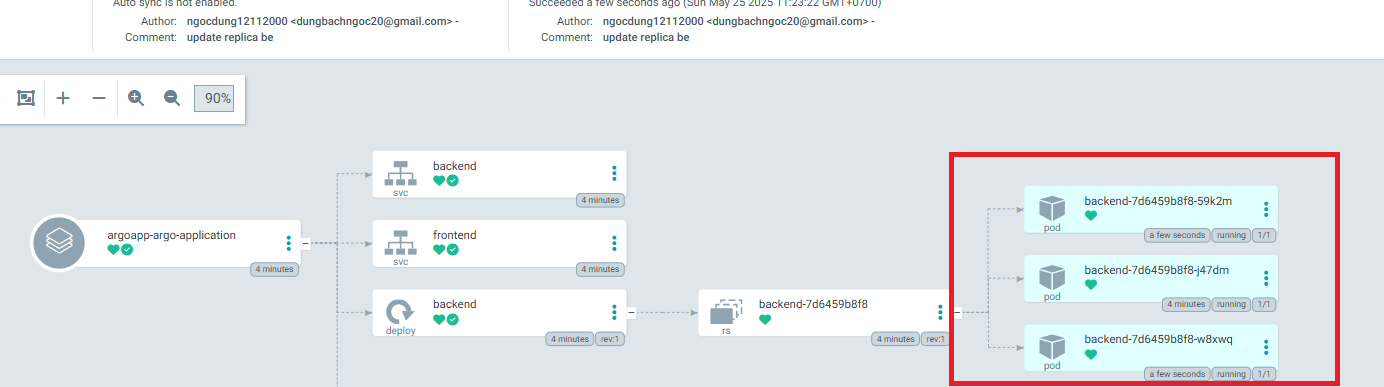
Commit change and push



In argo UI, Click **Diff** button



Then click **Sync** button -> **Synchronize**

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Now there are 3 pods for backend