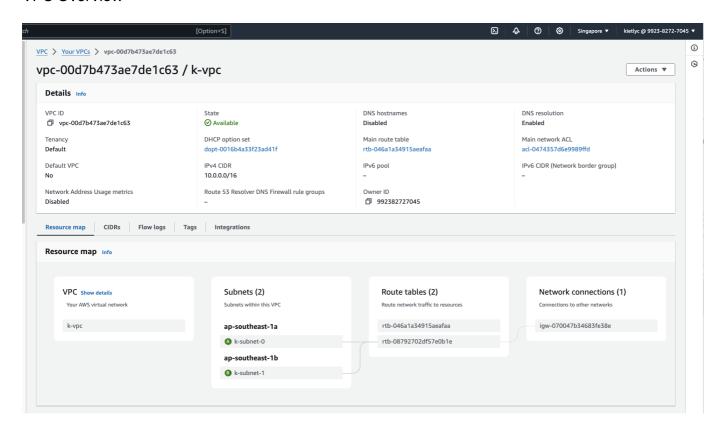
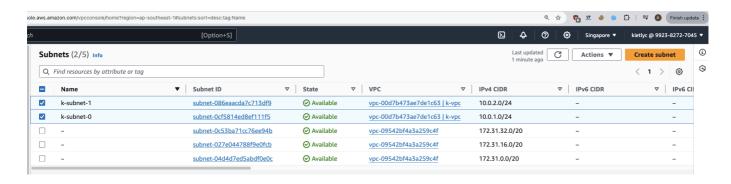
Terraform

Check Components on UI

VPC Overview

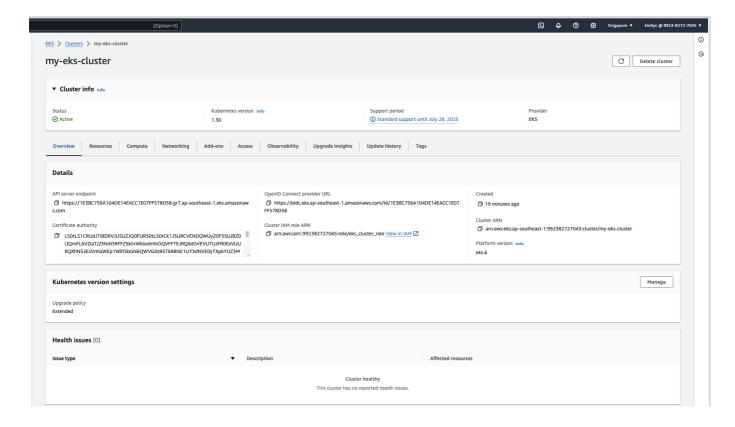


Subnets

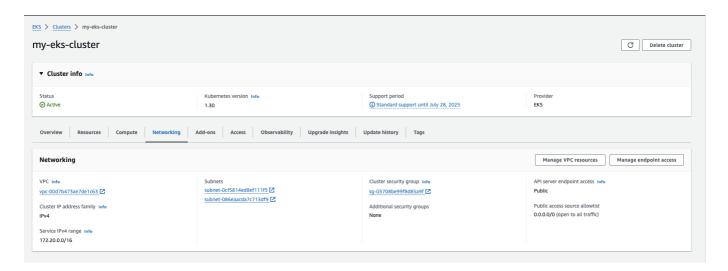


EKS Clusters

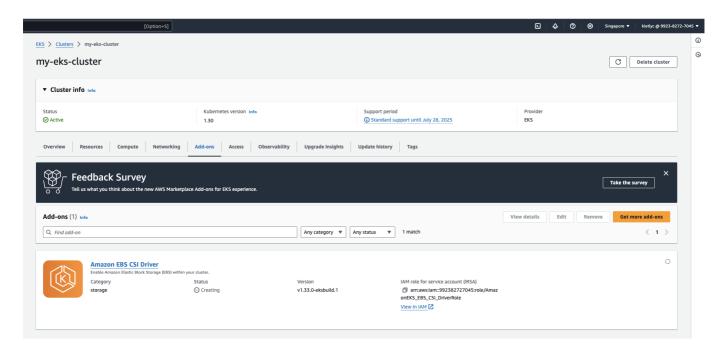
EKS Overviews



EKS VPC

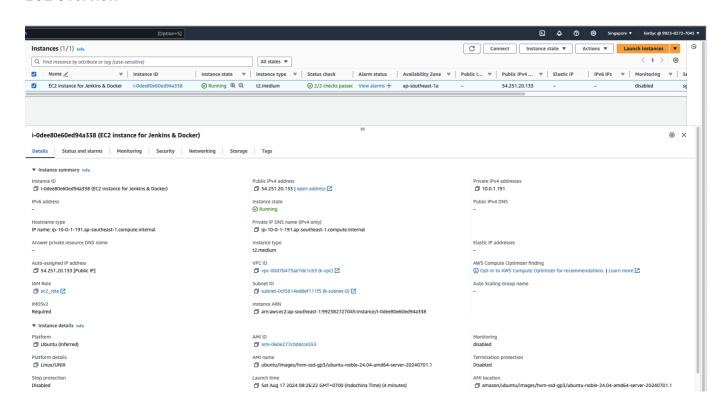


EKS Plugin



EC2 instance for Jenkins

EC2 Overview



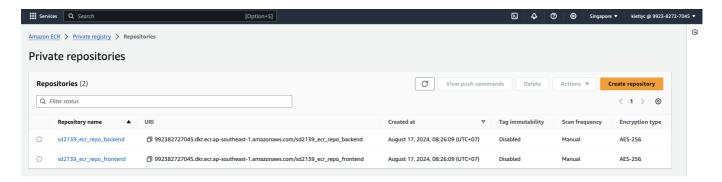
Docker CLI, AWS CLI and Kubectl installed

```
ubuntu@ip-10-0-1-191:~$ aws --version
aws-cli/2.17.32 Python/3.11.9 Linux/6.8.0-1009-aws exe/x86_64.ubuntu.24
ubuntu@ip-10-0-1-191:~$ docker --version
Docker version 27.1.2, build d01f264
ubuntu@ip-10-0-1-191:~$ kubectl version
Client Version: v1.31.0
Kustomize Version: v5.4.2
```

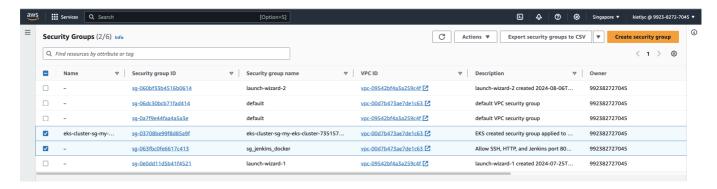
Jenkins installed and running



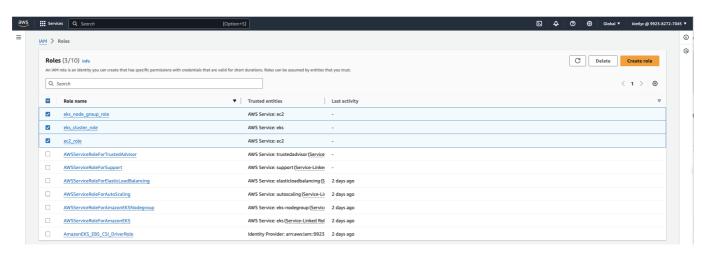
ECR



Security Group



IAM Roles



Jenkins

Secrets confignfiguration



Continuous Integration

Frontend

Check for unit test

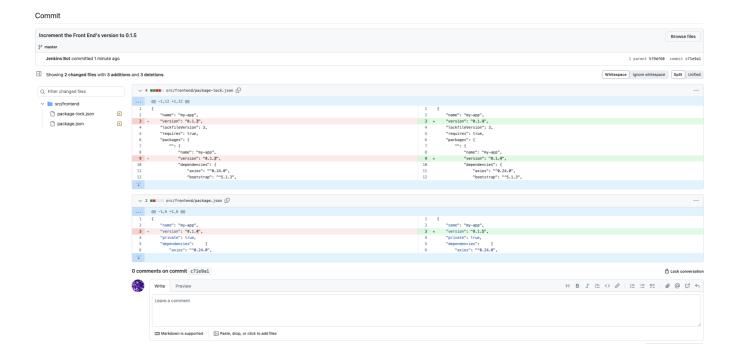
```
[Pipeline] sh
+ npm test

> my-app@0.1.4 test
> react-scripts test

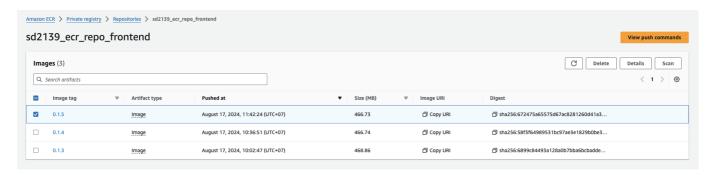
Browserslist: caniuse-lite is outdated. Please run:
    npx browserslist@latest --update-db
    Why you should do it regularly: https://github.com/browserslist/browserslist#browsers-data-updating
PASS src/App.test.js
    renders without crashing (78 ms)

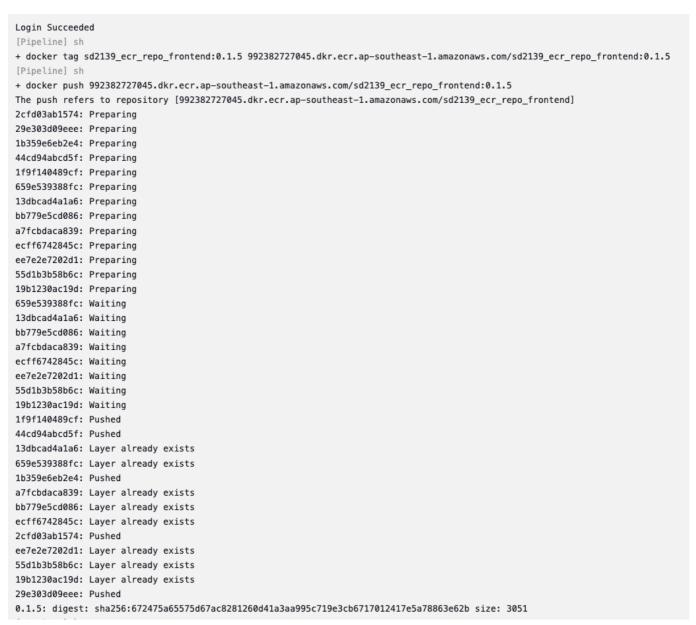
Test Suites: 1 passed, 1 total
Tests: 1 passed, 1 total
Snapshots: 0 total
Time: 1.406 s
Ran all test suites.
```

New version indicator pushed to the repository



New Docker image pushed to the ECR





Continuous Delivery

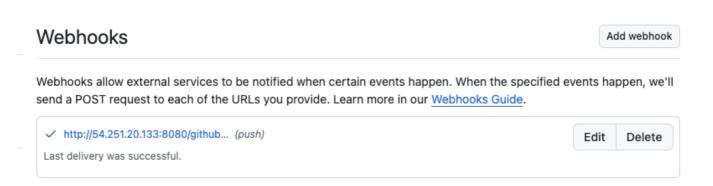
Using Jenkins

Jenkins - Githook apply the K8S deployment when code pushed to master branch

Before deployment



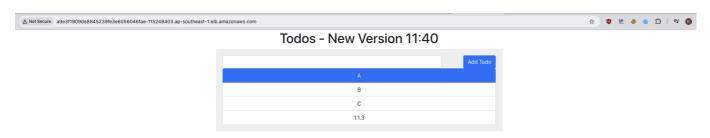
Setup Git Hook



Jenkins trigger to deploy after push to master branch

```
+ kubectl apply -f ./k8s/frontend.yaml
service/frontend unchanged
deployment.apps/frontend configured
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] // stage
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] // mode
[Pipeline] End of Pipeline
Finished: SUCCESS
```

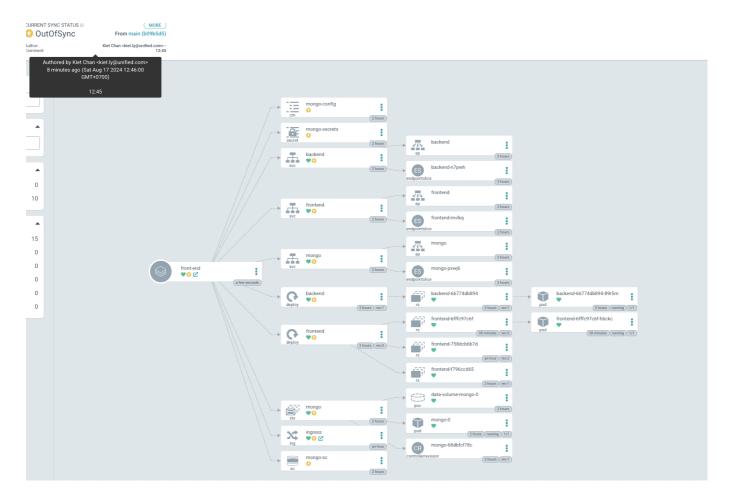
Test on UI, header is changed



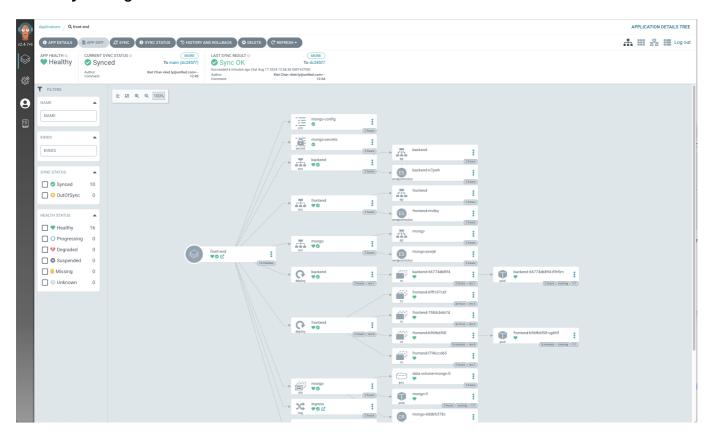
Using Argo CD

Apply the K8S when code pushed to master branch

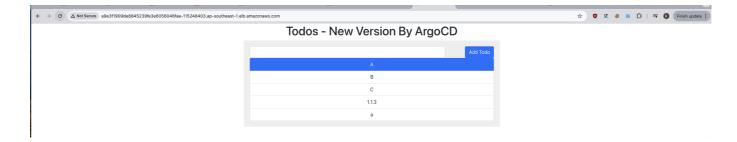
Change deployment file and push new code, now it's out of sync. Wait for deployment



Status synced again

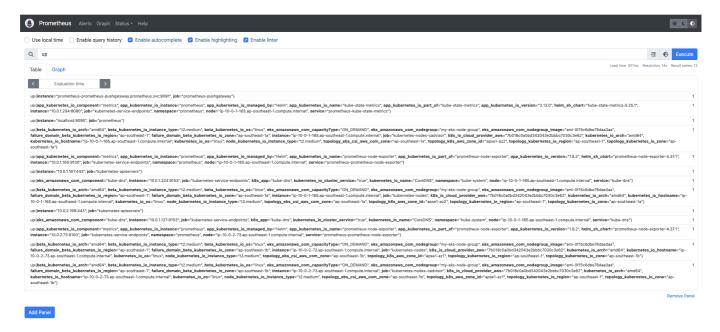


Test on UI, header is changed



Prometheus & Grafana (Using Community Helms)

Prometheus



Grafana

