CI/CD Pipeline for Deploying apps on Kubernetes built on AWS using Infra as Code

Checkout Source Code — Build — Test — Build Docker Image — Deploy to Staging Kubernetes — Deploy to Prod Kubernetes
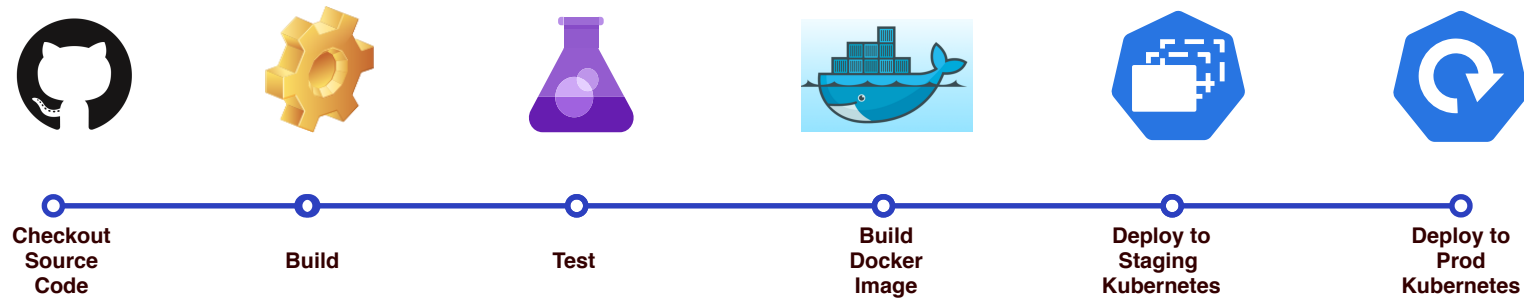
thedevopsplatform.com

How I Deploy it

- Deploy the Infra on AWS
  https://github.com/thedevopsplatform/k8sonAWS

- Application Code and Jenkins File
  https://github.com/thedevopsplatform/pyredisapp

- Changes pushed to github get deployed in to staging first

- Upon Approval it gets deployed in to production

- This process also lends itself to Canary deployments

Architecture of Kubernetes Deployed in AWS

aws VPC

aws AvailabilityZone-A

LB for External Traffic

aws AvailabilityZone-B

ASG for Deploy Infra

Public Subnet-a — **Bastion/Jenkins**

Public Subnet-b — **Bastion/Jenkins**

ASG for Kube Master

Private Subnet-1a — **Master Node**

Private Subnet-1b — **Master Node**

ASG for Worker Nodes

Private Subnet-2a — **Worker Nodes**

Private Subnet-2b — **Worker Nodes**