

DEPLOY TO KUBANETES

Create three machines as follows

JENKINS MACHINE

1. Open/create a file with nano editor
nano jenks.sh
2. Copy the commands below and past in jenks.sh file and save
#!/bin/bash
sudo apt update
sudo apt install openjdk-11-jdk -y
sudo apt install -y git maven
wget <https://get.jenkins.io/war-stable/2.401.2/jenkins.war>
java -jar jenkins.war
3. run jenks.sh file to install jenkins with the command **sh jenks.sh**
4. Install **ssh agent** plugin

ANSIBLE MACHINE

1. Open/create a file with nano editor
i. nano ansible.sh
2. Copy the commands below and past in jenks.sh file and save
i. #!/bin/bash
ii. sudo apt-add-repository ppa:ansible/ansible -y
iii. sudo apt update -y
iv. sudo apt install ansible -y
3. run ansible.sh file to install ansible with the command **sh ansible.sh**

KUBANETES MACHINE

install **kubernetes ubuntu 22.04**: create a file **minikub.sh** and past the commands bellow inside

sudo su

sudo apt update -y

sudo apt upgrade -y

sudo apt install curl

sudo apt install apt-transport-https

sudo apt install docker.io -y

curl -LO [https://dl.k8s.io/release/\\$\(curl -L -s https://dl.k8s.io/release/stable.txt\)/bin/linux/amd64/kubectl](https://dl.k8s.io/release/$(curl -L -s https://dl.k8s.io/release/stable.txt)/bin/linux/amd64/kubectl)

curl -LO [https://dl.k8s.io/\\$\(curl -L -s https://dl.k8s.io/release/stable.txt\)/bin/linux/amd64/kubectl.sha256](https://dl.k8s.io/$(curl -L -s https://dl.k8s.io/release/stable.txt)/bin/linux/amd64/kubectl.sha256)

echo "\$(cat kubectl.sha256) kubectl" | sha256sum -check

sudo install -o root -g root -m 0755 kubectl /usr/local/bin/kubectl

curl -LO <https://storage.googleapis.com/minikube/releases/latest/minikube-linux-amd64>

sudo install minikube-linux-amd64 /usr/local/bin/minikube

CI CD pipeline infrastructure by: ONEIL KIMBI email: oneilkimbi1@gmail.com