**Jenkins Installation**

https://pkg.jenkins.io/debian-stable/

1. **Install Java**

sudo apt-get update -y

sudo apt-get install openjdk-11-jre -y

curl -fsSL<https://pkg.jenkins.io/debian-stable/jenkins.io.key> | sudo tee \

/usr/share/keyrings/jenkins-keyring.asc > /dev/null

echo deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] \

https://pkg.jenkins.io/debian-stable binary/ | sudo tee \

/etc/apt/sources.list.d/jenkins.list > /dev/null

sudo apt update -y

sudo apt install jenkins -y

sudo systemctl start jenkins

sudo systemctl enable jenkins

sudo systemctl status jenkins

sudo cat /var/lib/jenkins/secrets/initialAdminPassword

Docker Installation

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sudo usermod jenkins -G docker

sudo systemctl restart jenkins

Docker Plugin

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Manage Jenkins > Available Plugins > Cloudbees docker build and publish

K8 Intergration with Jenkins

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1. sudo curl -fsSLo /usr/share/keyrings/kubernetes-archive-keyring.gpg <https://packages.cloud.google.com/apt/doc/apt-key.gpg>
2. echo "deb [signed-by=/usr/share/keyrings/kubernetes-archive-keyring.gpg] https://apt.kubernetes.io/ kubernetes-xenial main" | sudo tee /etc/apt/sources.list.d/kubernetes.list
3. sudo apt update -y
4. sudo apt install kubectl

**http://3.139.74.162:8080/**

Username - demo

Password - redhat

Shell scripting - <https://www.digitalocean.com/community/tutorials/if-else-in-shell-scripts>

status=$(kubectl get deploy | grep mydeployment | wc -l)

if [ $status -eq 1 ]

then

echo "Deployment exists in the cluster"

kubectl set image deployment/mydeployment myweb=gauravdemo06/appimage:$image\_version

else

echo "Deployment Doesn't exists"

kubectl create -f k8/deployment.yaml

fi

<https://github.com/devopstraining97/demo-app>

**Github Webhook URL**

http://jenkins\_server\_ip:8080/github-webhook/

**Maven Intergration with Jenkins**

1. sudo apt update -y
2. sudo apt install maven -y

Manage Jenkins > Available Plugins > Maven Intergration

<https://github.com/devopstraining97/demo-tomcat>

Jenkins Pipeline

Manage Jenkins > Available Plugins > Build Pipeline

HTTP Status Code

https://developer.mozilla.org/en-US/docs/Web/HTTP/Status#client\_error\_responses