

Personal

Proj2 #3 Console

Instances | EC2 | us

EC2 Instance Conn

EC2 Instance Conn

dockerhub - Search

ppagilla/proj2 Tag

←

↺

https://us-east-2.console.aws.amazon.com/ec2/home?region=us-east-2#Instances:v=3;\$case=tags:true%5C,client:false;\$regex=tags:false%5C,client:false

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aws

Services

Search

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⚙️

Ohio

Pagilla_Pavan_root

EC2

Route 53

S3

CloudWatch

VPC

RDS

DynamoDB

CloudFormation

Database Migration Service

AWS Organizations

Lambda

Elastic Beanstalk

IAM

EC2 Dashboard

EC2 Global View

Events

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

New

Images

AMIs

AMI Catalog

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

Instances (4) Info

🔄

Connect

Instance state

Actions

Launch instances

Find Instance by attribute or tag (case-sensitive)

Any state

< 1 >

⚙️

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IP
<input type="checkbox"/>	m4	i-02a4a81d04037fcc	Running	t2.micro	2/2 checks passed	View alarms	us-east-2a	ec2-3-142
<input type="checkbox"/>	m2	i-0019a16093719d589	Running	t2.micro	2/2 checks passed	View alarms	us-east-2a	ec2-18-11
<input type="checkbox"/>	m3	i-0eb36eadd86a6ffb7	Running	t2.small	2/2 checks passed	View alarms	us-east-2a	ec2-3-135
<input type="checkbox"/>	m1	i-0825d1e07004e9d2e	Running	t2.micro	2/2 checks passed	View alarms	us-east-2a	ec2-3-17-

Select an instance

CloudShell

Feedback

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PRE

Personal

Proj2 #3 Console

Instances | EC2 | us

EC2 Instance Conn

EC2 Instance Conn

dockerhub - Search

ppagilla/proj2 Tag

https://us-east-2.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-2&connType=standard&instanceId=i-0825d1e07004e9d2e&osUser=ubuntu&s...

aws Services Search [Alt+S]

EC2Route 53S3CloudWatchVPCRDSDynamoDBCloudFormationDatabase Migration ServiceAWS OrganizationsLambdaElastic BeanstalkIAM

ubuntu@ip-172-31-0-240:~\$ ls -ltr

total 92

-rw-r--r-- 1 ubuntu ubuntu 39585 Feb 27 15:07 ansible.cfg

-rw-rw-r-- 1 ubuntu ubuntu 173 Feb 27 15:08 m1-pb.yaml

-rw-rw-r-- 1 ubuntu ubuntu 1024 Feb 27 15:08 m1.sh

-rw-rw-r-- 1 ubuntu ubuntu 713 Feb 27 15:14 resources.tf

-rw-rw-r-- 1 ubuntu ubuntu 13989 Feb 27 15:18 terraform.tfstate

-rw-rw-r-- 1 ubuntu ubuntu 159 Feb 27 15:18 m3-pb.yaml

-rw-rw-r-- 1 ubuntu ubuntu 49 Feb 27 15:21 invF

-r----- 1 ubuntu ubuntu 1675 Feb 27 15:21 tfs.pem

-rw-rw-r-- 1 ubuntu ubuntu 1305 Feb 27 15:29 m3.sh

-rw-rw-r-- 1 ubuntu ubuntu 171 Feb 27 15:51 m24-pb.yaml

-rw-rw-r-- 1 ubuntu ubuntu 1098 Feb 27 15:52 m24.sh

ubuntu@ip-172-31-0-240:~\$ cat invF

[m3]

172.31.3.123

[m24]

172.31.4.93

172.31.2.12

ubuntu@ip-172-31-0-240:~\$ terraform state list

aws_instance.instance2

aws_instance.instance3

aws_instance.instance4

ubuntu@ip-172-31-0-240:~\$ ansible --version

ansible [core 2.15.9]

config file = /home/ubuntu/ansible.cfg

configured module search path = ['/home/ubuntu/.ansible/plugins/modules', '/usr/share/ansible/plugins/modules']

i-0825d1e07004e9d2e (m1)

PublicIPs: 3.17.81.198 PrivateIPs: 172.31.0.240

CloudShell Feedback

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```
ubuntu@ip-172-31-0-240:~$ cat m1.sh
#!/bin/bash
echo "deleting if exists and creating a log file to track the process"
rm -rf /tmp/m1.log
touch /tmp/m1.log

echo "pvn installing java" >> /tmp/m1.log
sudo add-apt-repository ppa:openjdk-r/ppa >> /tmp/m1.log
sudo apt-get update >> /tmp/m1.log
sudo apt-get install -y fontconfig openjdk-17-jre openjdk-17-jdk >> /tmp/m1.log

echo "pvn installing jenkins" >> /tmp/m1.log
sudo wget -O /usr/share/keyrings/jenkins-keyring.asc https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key >> /tmp/m1.log
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 >> /tmp/m1.log
sudo apt-get update >> /tmp/m1.log
sudo apt-get install jenkins -y >> /tmp/m1.log

echo "installing terraform" >> /tmp/m1.log
sudo wget https://raw.githubusercontent.com/lerndevops/labs/master/scripts/installTerraform.sh -P /tmp >> /tmp/m1.log
sudo chmod 755 /tmp/installTerraform.sh >> /tmp/m1.log
sudo bash /tmp/installTerraform.sh >> /tmp/m1.log
ubuntu@ip-172-31-0-240:~$
ubuntu@ip-172-31-0-240:~$ cat m1-pb.yaml
- name: Installing java jenkins and terraform in Machine-1
  hosts: localhost
  become: true
  become_user: root
  tasks:
    - name: executing m1.sh script
      script: m1.sh
ubuntu@ip-172-31-0-240:~$
ubuntu@ip-172-31-0-240:~$ ls /tmp/m1.log
/tmp/m1.log
```

```
ubuntu@ip-172-31-0-240:~$ cat resources.tf
provider "aws" {
  region = "us-east-2"
  access_key = "AKIAI44QH8DHBGTQJUAON"
  secret_key = "wJalrXUdfjKOzYbq3sWJ9PYUlrgV3nMD6/10KJjl"
}

resource "aws_instance" "instance2" {
  ami = "ami-05fb0b8c1424f266b"
  instance_type = "t2.micro"
  key_name = "tfs"
  tags = {
    Name = "m2"
  }
}

resource "aws_instance" "instance3" {
  ami = "ami-05fb0b8c1424f266b"
  instance_type = "t2.small"
  key_name = "tfs"
  tags = {
    Name = "m3"
  }
}

resource "aws_instance" "instance4" {
  ami = "ami-05fb0b8c1424f266b"
  instance_type = "t2.micro"
  key_name = "tfs"
  tags = {
    Name = "m4"
  }
}

ubuntu@ip-172-31-0-240:~$ terraform --version
Terraform v1.7.4
on linux_amd64
+ provider registry.terraform.io/hashicorp/aws v5.38.0
```


Treats all input as plain text. HTML unsafe characters like < and & are escaped to their respective character entities.

Agents

TCP port for inbound agents ?

☐ Fixed

☒ Random

☐ Disable



Agent protocols ▾

CSRF Protection

Crumb Issuer

Default Crumb Issuer ▾

☐ Enable proxy compatibility ?

Save

Apply

Personal

Instances | EC2 | us-east-2

EC2 Instance Connect | us-east-2

m3-j-slave-k8s-m

Not secure | 3.17.81.198:8080/computer/m3-j-slave-k8s-master/configure

Dashboard > Nodes > m3-j-slave-k8s-master > Configure

Load Statistics

Script Console

Log

System Information

Disconnect

Build Executor Status

1 Idle

acts as jenkins slave and k8s master

Plain text [Preview](#)

Number of executors ?

1

Remote root directory ?

/home/ubuntu/jenkins

Labels ?

k8s-master

Usage ?

Use this node as much as possible

Launch method ?

Launch agents via SSH

Save

Personal

m3-j-sl

Not secure | 3.17.81.198:8080/co...

Dashboard > Nodes > m3-j-slave-k8s-master > Configure

Launch method ?

Launch agents via SSH

Host ?

172.31.3.123

Credentials ?

ubuntu (ssh-via-pem)

+ Add

Host Key Verification Strategy ?

Non verifying Verification Strategy

Advanced Edited

Availability ?

Keep this agent online as much as possible

Node Properties

Save



Global credentials (unrestricted)

+ Add Credentials

Credentials that should be available irrespective of domain specification to requirements matching.

ID	Name	Kind	Description
login-pem	ubuntu (ssh-via-pem)	SSH Username with private key	ssh-via-pem
17881d5b-283c-41a9-b51e-6fe5ddaa10c6	ppagilla/***** (dockerhub cred)	<u>Username with password</u>	dockerhub cred

Icon: S M L

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Proj2 #3 Console

Instances | EC2 | us

EC2 Instance Conn

EC2 Instance Conn

dockerhub - Search

ppagilla/proj2 Tag

https://us-east-2.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-2&connType=standard&instanceId=i-0825d1e07004e9d2e&osUser=ubuntu&s...

aws

Services

Search

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Ohio

Pagilla_Pavan_root

EC2

Route 53

S3

CloudWatch

VPC

RDS

DynamoDB

CloudFormation

Database Migration Service

AWS Organizations

Lambda

Elastic Beanstalk

IAM

echo "pvn installing java" >> /tmp/m3.log

sudo add-apt-repository ppa:openjdk-r/ppa -y >> /tmp/m3.log

sudo apt-get update >> /tmp/m3.log

sudo apt-get install -y fontconfig openjdk-17-jre openjdk-17-jdk >> /tmp/m3.log

Install Docker

echo "pvn installing docker" >> /tmp/m3.log

sudo wget https://raw.githubusercontent.com/lerndevops/labs/master/scripts/installDocker.sh -P /tmp >> /tmp/m3.log

sudo chmod 755 /tmp/installDocker.sh >> /tmp/m3.log

sudo bash /tmp/installDocker.sh >> /tmp/m3.log

sudo systemctl restart docker.service >> /tmp/m3.log

Install CRI-Docker

echo "pvn installing cri" >> /tmp/m3.log

sudo wget https://raw.githubusercontent.com/lerndevops/labs/master/scripts/installCRIDockerd.sh -P /tmp >> /tmp/m3.log

sudo chmod 755 /tmp/installCRIDockerd.sh >> /tmp/m3.log

sudo bash /tmp/installCRIDockerd.sh >> /tmp/m3.log

sudo systemctl restart cri-docker.service >> /tmp/m3.log

Install kubeadm,kubelet,kubectl

echo "pvn installing k8s related" >> /tmp/m3.log

sudo wget https://raw.githubusercontent.com/lerndevops/labs/master/scripts/installK8S.sh -P /tmp >> /tmp/m3.log

sudo chmod 755 /tmp/installK8S.sh >> /tmp/m3.log

sudo bash /tmp/installK8S.sh >> /tmp/m3.log

ubuntu@ip-172-31-0-240:~\$ cat m3-pb.yaml

- name: Installing java docker and k8s in Machine-3

hosts: m3

become: true

become_user: root

tasks:

- name: executing m3.sh script

script: m3.sh

ubuntu@ip-172-31-0-240:~\$

CloudShell

Feedback

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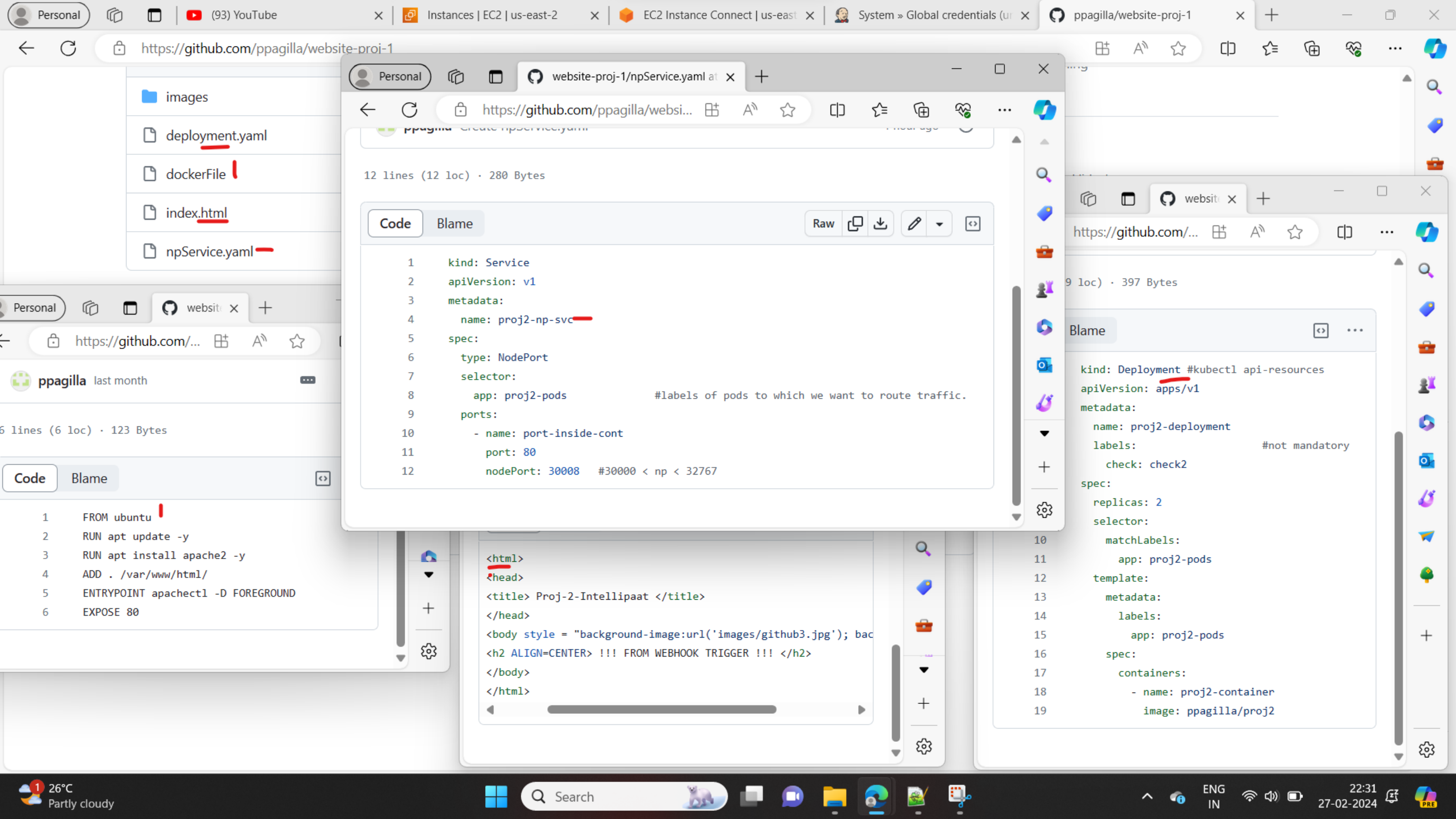
27-02-2024


```
ubuntu@ip-172-31-0-240:~$ cat m24.sh
#!/bin/bash
echo "deleting if exists and creating a log file to track the process"
rm -rf /tmp/m24.log
touch /tmp/m24.log

## Install Docker
echo "pv installing docker" >> /tmp/m24.log
sudo wget https://raw.githubusercontent.com/lerndevops/labs/master/scripts/installDocker.sh -P /tmp >> /tmp/m24.log
sudo chmod 755 /tmp/installDocker.sh >> /tmp/m24.log
sudo bash /tmp/installDocker.sh >> /tmp/m24.log
sudo systemctl restart docker.service >> /tmp/m24.log

## Install CRI-Docker
echo "pv installing cri" >> /tmp/m24.log
sudo wget https://raw.githubusercontent.com/lerndevops/labs/master/scripts/installCRIDockerd.sh -P /tmp >> /tmp/m24.log
sudo chmod 755 /tmp/installCRIDockerd.sh >> /tmp/m24.log
sudo bash /tmp/installCRIDockerd.sh >> /tmp/m24.log
sudo systemctl restart cri-docker.service >> /tmp/m24.log

## Install kubeadm, kubelet, kubectl
echo "pv installing docker" >> /tmp/m24.log
sudo wget https://raw.githubusercontent.com/lerndevops/labs/master/scripts/installK8S.sh -P /tmp >> /tmp/m24.log
sudo chmod 755 /tmp/installK8S.sh >> /tmp/m24.log
sudo bash /tmp/installK8S.sh >> /tmp/m24.log
ubuntu@ip-172-31-0-240:~$
ubuntu@ip-172-31-0-240:~$ cat m24-pb.yaml
- name: Installing docker and k8s in Machine-2 and Machine-4
  hosts: m24
  become: true
  become_user: root
  tasks:
    - name: executing m24.sh script
      script: m24.sh
```



Jenkins Pipeline as a Code:

```
pipeline {
  agent any
  environment {
    DOCKERHUB_CREDENTIALS = credentials("17881d5b-283c-41a9-b51e-6fe5ddaa10c6")
  }
  stages {
    stage('Git') {
      agent {
        label 'k8s-master'
      }
      steps {
        script {
          git 'https://github.com/ppagilla/website-proj-1.git'
        }
      }
    }
    stage('Docker') {
      agent {
        label 'k8s-master'
      }
      steps {
        script {
          sh 'sudo docker build -f /home/ubuntu/jenkins/workspace/Proj2/dockerFile -t ppagilla/proj2 /home/ubuntu/jenkins/workspace/Proj2/'
          sh 'sudo docker login -u ${DOCKERHUB_CREDENTIALS_USR} -p ${DOCKERHUB_CREDENTIALS_PSW}'
          sh 'sudo docker push ppagilla/proj2'
        }
      }
    }
    stage('Kubernetes') {
      agent {
        label 'k8s-master'
      }
      steps {
        script {
          sh 'kubectl delete deployment proj2-deployment'
          sh 'kubectl apply -f /home/ubuntu/jenkins/workspace/Proj2/deployment.yaml'
          sh 'kubectl delete service proj2-np-svc'
          sh 'kubectl apply -f /home/ubuntu/jenkins/workspace/Proj2/npService.yaml'
        }
      }
    }
  }
}
```



- Status
- Changes
- Console Output
- View as plain text
- Edit Build Information
- Delete build '#3'
- Polling Log
- Git Build Data
- Restart from Stage
- Replay
- Pipeline Steps
- Workspaces
- Previous Build

```
Started by GitHub push by ppagilla
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/Pro
[Pipeline] {
[Pipeline] withCredentials
Masking supported pattern matches of $DOCKERHUB_CRED
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Git)
[Pipeline] node
Running on m3-j-slave-k8s-master in /home/ubuntu/jen
[Pipeline] {
[Pipeline] script
[Pipeline] {
[Pipeline] git
The recommended git tool is: NONE
No credentials specified
Fetching changes from the remote Git repository
Checking out Revision 11e63eac10130c8c574ea24fdfea29
Commit message: "Update index.html"
> git rev-parse --resolve-git-dir /home/ubuntu/jen
> git config remote.origin.url https://github.com/pp
Fetching upstream changes from https://github.com/pp
```

triggers pull git repo action, builds docker image, pushes to git repo, updates(deletes existing and creates newly) the deployment and npservice with new image by pulling it via docker hub.

Dashboard > Proj2 >

☐ Build periodically ?

☒ GitHub hook trigger for GITScm polling ?

Save **Apply**

Personal

Instances | EC2 | us-east-2

EC2 Instance Connect | us-east-2

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https://us-east-2.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-2&connType=standard&instanceId=i-0eb36eadd86a6f

aws

Services

Search

[Alt+S]

EC2

Route 53

S3

CloudWatch

VPC

RDS

DynamoDB

CloudFormation

Database Migration Service

AWS Orga

ubuntu@ip-172-31-3-123:~\$ kubectl get nodes

NAME	STATUS	ROLES	AGE	VERSION
ip-172-31-2-12	Ready	<none>	74m	v1.29.2
ip-172-31-3-123	Ready	control-plane	81m	v1.29.2
ip-172-31-4-93	Ready	<none>	74m	v1.29.2

ubuntu@ip-172-31-3-123:~\$ kubectl get deployments

NAME	READY	UP-TO-DATE	AVAILABLE	AGE
proj2-deployment	2/2	2	2	41m

ubuntu@ip-172-31-3-123:~\$ kubectl get services

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
kubernetes	ClusterIP	10.96.0.1	<none>	443/TCP	82m
proj2-np-svc	NodePort	10.108.84.231	<none>	80:30008/TCP	41m

ubuntu@ip-172-31-3-123:~\$ ls -ltr /home/ubuntu/jenkins/workspace/

total 8

drwxrwxr-x 4 ubuntu ubuntu 4096 Feb 27 16:30 Proj2

drwxrwxr-x 2 ubuntu ubuntu 4096 Feb 27 16:30 Proj2@tmp

ubuntu@ip-172-31-3-123:~\$ ls -ltr /home/ubuntu/jenkins/workspace/Proj2

total 20

-rw-rw-r-- 1 ubuntu ubuntu 397 Feb 27 16:14 deployment.yaml

-rw-rw-r-- 1 ubuntu ubuntu 280 Feb 27 16:14 npService.yaml

drwxrwxr-x 2 ubuntu ubuntu 4096 Feb 27 16:14 images

-rw-rw-r-- 1 ubuntu ubuntu 123 Feb 27 16:14 dockerFile

-rw-rw-r-- 1 ubuntu ubuntu 218 Feb 27 16:30 index.html

ubuntu@ip-172-31-3-123:~\$

i-0eb36eadd86a6ffb7 (m3)

PublicIPs: 3.135.249.90 PrivateIPs: 172.31.3.123

CloudShell

Feedback

Personal

Proj-2-Intellipaat

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Not secure | 3.142.166.94:30008

!!! FROM WEBH

Personal


Proj-2-Intellipaat

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Not secure | 18.118.30.226:30008

!!! FROM WEBHOOK TRIGGER !!!



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Proj-2-Intellipaat

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Not secure | 3.135.249.90:30008

!!! FROM WEBHOOK TRIGGER !!!



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