

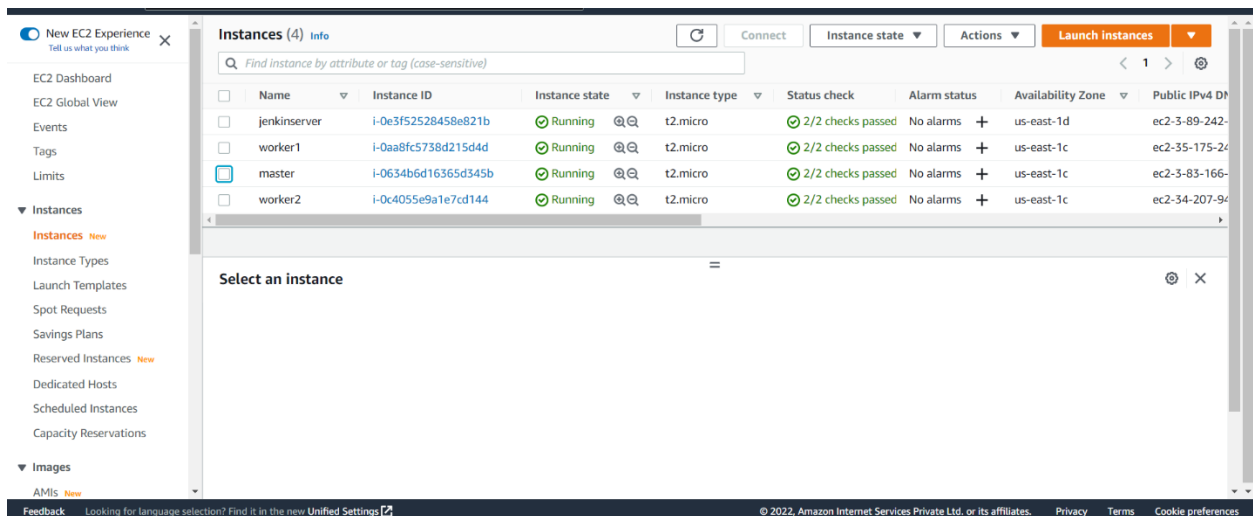
PHASE 5

PRACTICE PROJECT

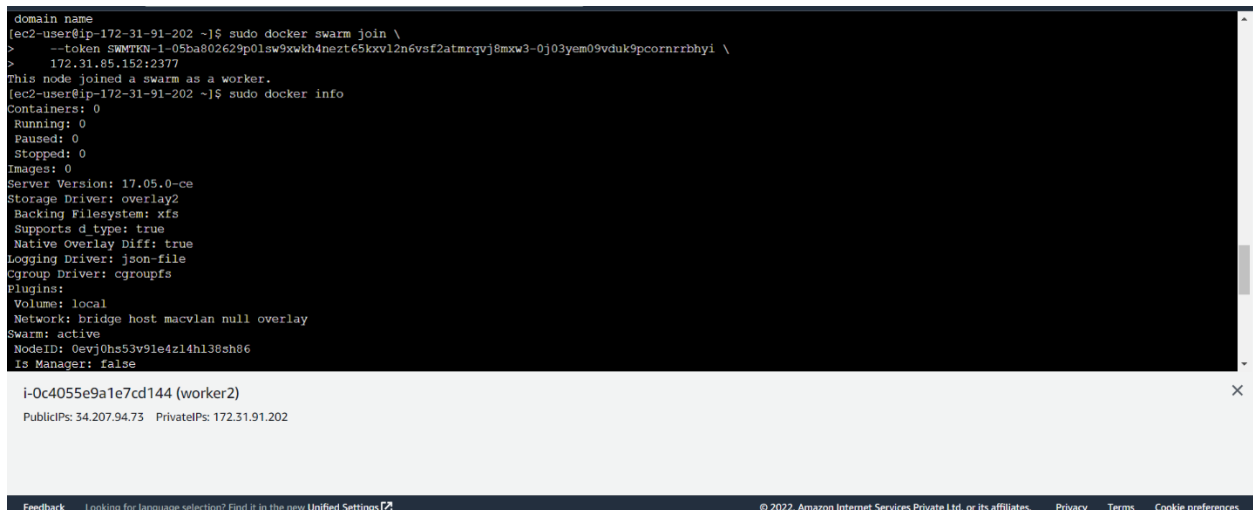
SETTING UP JENKIN PIPELINE TO DEPLOY DOCKER SWARM

OUTPUT

CREATING INSTANCES



WORKER 2



WORKER 1

```
Redirecting to /bin/systemctl start docker.service
[ec2-user@ip-172-31-81-166 ~]$ docker swarm join --token SWMTKN-1-05ba802629p0ls9xwkh4nezt65kxvl2n6vsf2atmrqvj8mxw3-0j03yem09vduk9pccornrrbhyi 172.31.85.152:2377
Got permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Post http://172.31.85.152:2377/v1.29/swarm/join: dial unix /var/run/docker.sock: connect: permission denied
[ec2-user@ip-172-31-81-166 ~]$ sudo docker swarm join \
--token SWMTKN-1-05ba802629p0ls9xwkh4nezt65kxvl2n6vsf2atmrqvj8mxw3-0j03yem09vduk9pccornrrbhyi \
172.31.85.152:2377
This node joined a swarm as a worker.
[ec2-user@ip-172-31-81-166 ~]$ sudo docker info
Containers: 0
Running: 0
Paused: 0
Stopped: 0
Images: 0
Server Version: 17.05.0-ce
Storage Driver: overlay2
Backing Filesystem: xfs
Supports d_type: true
Native Overlay Diff: true
Logging Driver: json-file
Cgroup Driver: cgroupfs
Plugins:
Volume: local
Network: bridge host macvlan null overlay
i-0aa8fc5738d215d4d (worker1)
PublicIPs: 35.175.247.140 PrivateIPs: 172.31.81.166
```

MASTER

```
docker: docker-17.05.0-ce.tgz
[ec2-user@ip-172-31-85-152 ~]$ sudo docker swarm init --advertise-addr 172.31.85.152
Swarm initialized: current node (n3ollschd34frm70y74yo8ymv) is now a manager.

To add a worker to this swarm, run the following command:

    docker swarm join \
    --token SWMTKN-1-05ba802629p0ls9xwkh4nezt65kxvl2n6vsf2atmrqvj8mxw3-0j03yem09vduk9pccornrrbhyi \
    172.31.85.152:2377

To add a manager to this swarm, run 'docker swarm join-token manager' and follow the instructions.

[ec2-user@ip-172-31-85-152 ~]$ sudo docker node ls
ID                HOSTNAME                STATUS    AVAILABILITY    MANAGER STATUS
n3ollschd34frm70y74yo8ymv * ip-172-31-85-152.ec2.internal Ready      Active           Leader
[ec2-user@ip-172-31-85-152 ~]$ sudo docker node ls
ID                HOSTNAME                STATUS    AVAILABILITY    MANAGER STATUS
n3ollschd34frm70y74yo8ymv * ip-172-31-85-152.ec2.internal Ready      Active           Leader
[ec2-user@ip-172-31-85-152 ~]$ ls
docker-17.05.0-ce.tgz
[ec2-user@ip-172-31-85-152 ~]$ ls
docker-17.05.0-ce.tgz
[ec2-user@ip-172-31-85-152 ~]$ sudo docker node ls
ID                HOSTNAME                STATUS    AVAILABILITY    MANAGER STATUS
i-0634b6d16365d345b (master)
PublicIPs: 3.83.166.36 PrivateIPs: 172.31.85.152
```

```
--mode=global \
--name jenkins-swarm-agent \
-e LABELS=docker-prod \
--mount "type=bind,source=/var/run/docker.sock,target=/var/run/docker.sock" \
--mount "type=bind,source=/tmp/,target=/tmp/" \
--secret source=jenkins-v1,target=jenkins \
vfabric/jenkins-swarm-agent

^C
[ec2-user@ip-172-31-85-152 ~]$ ls
docker-17.05.0-ce.tgz
[ec2-user@ip-172-31-85-152 ~]$ sudo docker node ls
ID                HOSTNAME                STATUS    AVAILABILITY    MANAGER STATUS
0evj0hs53v91e4z14h138sh86 ip-172-31-81-202.ec2.internal Ready      Active
6sm70xzb02iwepekelak08230 ip-172-31-81-166.ec2.internal Ready      Active
n3ollschd34frm70y74yo8ymv * ip-172-31-85-152.ec2.internal Ready      Active           Leader
[ec2-user@ip-172-31-85-152 ~]$
i-0634b6d16365d345b (master)
PublicIPs: 3.83.166.36 PrivateIPs: 172.31.85.152
```

JENKIN SERVER

```
[ec2-user@ip-172-31-16-109 ~]$
[ec2-user@ip-172-31-16-109 ~]$ sudo systemctl status jenkins
● jenkins.service - Jenkins Continuous Integration Server
   Loaded: loaded (/usr/lib/systemd/system/jenkins.service; enabled; vendor preset: disabled)
   Active: active (running) since Sun 2022-10-09 09:17:05 UTC; 13s ago
     Main PID: 4198 (java)
    CGroup: /system.slice/jenkins.service
            └─4198 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=%C/jenkins/war --httpPort=8080

Oct 09 09:16:34 ip-172-31-16-109.ec2.internal jenkins[4198]: This may also be found at: /var/lib/jenkins/secrets/initialAdminPassword
Oct 09 09:16:34 ip-172-31-16-109.ec2.internal jenkins[4198]: *****
Oct 09 09:16:34 ip-172-31-16-109.ec2.internal jenkins[4198]: *****
Oct 09 09:16:34 ip-172-31-16-109.ec2.internal jenkins[4198]: *****
Oct 09 09:17:05 ip-172-31-16-109.ec2.internal jenkins[4198]: 2022-10-09 09:17:05.349+0000 [id=29] INFO jenkins.InitReactorRunner$1onAttained: Com...alization
Oct 09 09:17:05 ip-172-31-16-109.ec2.internal jenkins[4198]: 2022-10-09 09:17:05.383+0000 [id=23] INFO hudson.lifecycle.Lifecycle#onReady: Jenkins...d running
Oct 09 09:17:05 ip-172-31-16-109.ec2.internal systemd[1]: Started Jenkins Continuous Integration Server.
Oct 09 09:17:05 ip-172-31-16-109.ec2.internal jenkins[4198]: 2022-10-09 09:17:05.484+0000 [id=45] INFO h.m.DownloadService$Downloadable#load: Obtai...Installer
Oct 09 09:17:05 ip-172-31-16-109.ec2.internal jenkins[4198]: 2022-10-09 09:17:05.484+0000 [id=45] INFO hudson.util.Retrier#start: Performed the ac...ttempt #1
Oct 09 09:17:05 ip-172-31-16-109.ec2.internal jenkins[4198]: 2022-10-09 09:17:05.488+0000 [id=45] INFO hudson.model.AsyncPeriodicWork#lambda$doRun...32,065 ms
Hint: Some lines were ellipsized, use -l to show in full.
[ec2-user@ip-172-31-16-109 ~]$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword
0974a067dc7b45d28050e06954f86988
[ec2-user@ip-172-31-16-109 ~]$
```

i-Oe3f52528458e821b (jenkinsserver)

PublicIPs: 3.89.242.229 PrivateIPs: 172.31.16.109

CREATING A PIPELINE IN JENKINS

Jenkins

Search (CTRL+K)

admin

log out

Dashboard

+ New Item

People

Build History

Manage Jenkins

My Views

Build Queue

Build Executor Status

All

S	W	Name	Last Success	Last Failure	Last Duration
✓	🔄	Git File	11 min #5	N/A	0.17 sec

Icon legend

Atom feed for all

Atom feed for failures

Atom feed for just latest builds

REST API Jenkins 2.361.2

Jenkins on x Instances x EC2 Instan x EC2 Instan x EC2 Instan x EC2 Instan x hridoyasut x Build C/CD x Git File Co x hridoyasut x + -

Not secure | http://3.89.242.229:8080/job/Git%20File/configure

Dashboard > Git File >

Configuration

- General
- Advanced Project Options
- Pipeline

Pipeline

Definition

Pipeline script

Script ?

```
1 pipeline {
2
3   stage( 'git clone' ) {
4     // Get some code from a GitHub repository
5     git 'https://github.com/VarshaRengarajan/Setting-Up-Jenkins-Pipeline-to-Deploy-Docker-Swarm.git'
6   }
7
8 }
9
10
11
12
13
```

☒ Use Groovy Sandbox ?

Save Apply

Jenkins on x Instances x EC2 Instan x EC2 Instan x EC2 Instan x EC2 Instan x hridoyasut x Build C/CD x Git File x Pipeline x hridoyasut x + -

Not secure | http://3.89.242.229:8080/job/Git%20File/

Dashboard > Git File >

Pipeline Git File

[Add description](#)

[Disable Project](#)

Stage View

Average stage times:
(Average full run time: ~179ms)

Stage	Time
git clone	24ms

Oct 09 12:29 No Changes

Permalinks

- Last build (#5), 1 min 46 sec ago
- Last stable build (#5), 1 min 46 sec ago
- Last successful build (#5), 1 min 46 sec ago
- Last completed build (#5), 1 min 46 sec ago

Build History

trend

Filter builds...

Oct 9, 2022, 12:29 PM

Atom feed for all Atom feed for failures

Jenkins

Search (CTRL+K)

admin

log out

Dashboard > Git File > #5

- Status
- Changes
- Console Output
 - View as plain text
 - Edit Build Information
 - Delete build '#5'
 - Replay
 - Pipeline Steps
 - Workspaces

Console Output

```
Started by user admin
[Pipeline] Start of Pipeline
[Pipeline] node
Running on Jenkins in /var/lib/jenkins/workspace/Git File
[Pipeline] {
[Pipeline] stage
[Pipeline] { (git clone)
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

REST API Jenkins 2.361.2

Jenkins

Search (CTRL+K)

admin

log out

Dashboard > Git File > #5 > Pipeline Steps

- Status
- Changes
- Console Output
- Edit Build Information
- Delete build '#5'
- Replay
- Pipeline Steps
- Workspaces

Step	Arguments	Status
Start of Pipeline - (0.12 sec in block)		✓
node - (98 ms in block)		✓
node block - (44 ms in block)		✓
stage - (27 ms in block)	git clone	✓
stage block (git clone) - (13 ms in block)		✓

Jenkins 2.361.2