

Docker Jenkins

Building Dockerfile, Running Dockerimage, Generate Dockercontainer Using Jenkinsfile.

Step - 1 : Launch 1 instance, in AWS EC2.

Instances (1) [Info](#)

Instance state = running

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 a...	Elastic IP	IPv6 IPs
<input checked="" type="checkbox"/>	Docker	i-02ac1a549a727af16	running	t2.micro	2/2 checks passed	No alarms	us-east-1b	ec2-52-55-254-86.comp...	52.55.254.86	-	-

Step – 2 : Connect to instance, which we have created.

[illegible]

Step -3 : Install required apps, here I installed ([Git](#), [Docker](#), [Jenkins](#)) using [bash script](#).

```
#!/bin/bash

sudo yum update
sudo yum install git -y
sudo yum install java-17-amazon-corretto-devel -y
sudo wget -O /etc/yum.repos.d/jenkins.repo \
    https://pkg.jenkins.io/redhat-stable/jenkins.repo
sudo rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io-2023.key
sudo yum upgrade
sudo yum install jenkins -y
sudo systemctl enable jenkins
sudo systemctl start jenkins
sudo systemctl status jenkins
sudo yum install docker -y
sudo systemctl enable docker
sudo systemctl start docker
```

- Note : check all apps version whether installed or not.

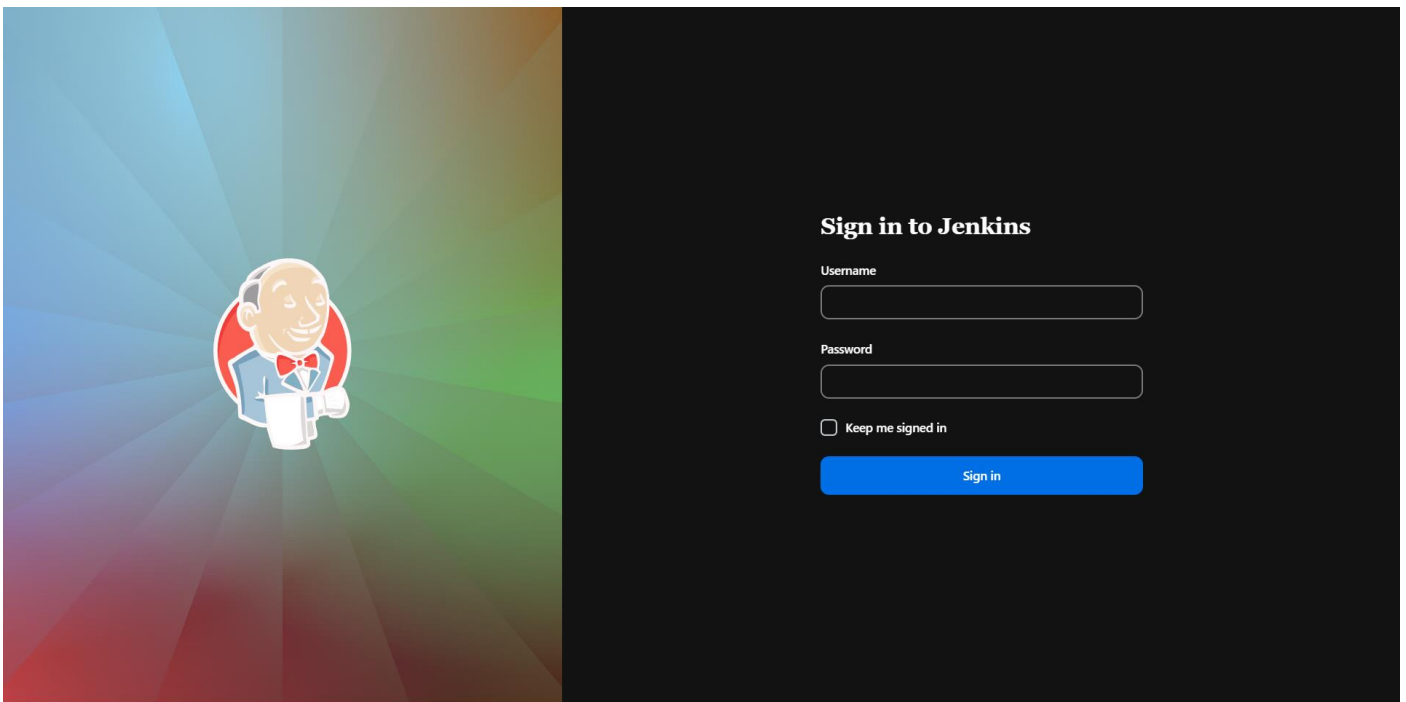
To check

GIT : git --version

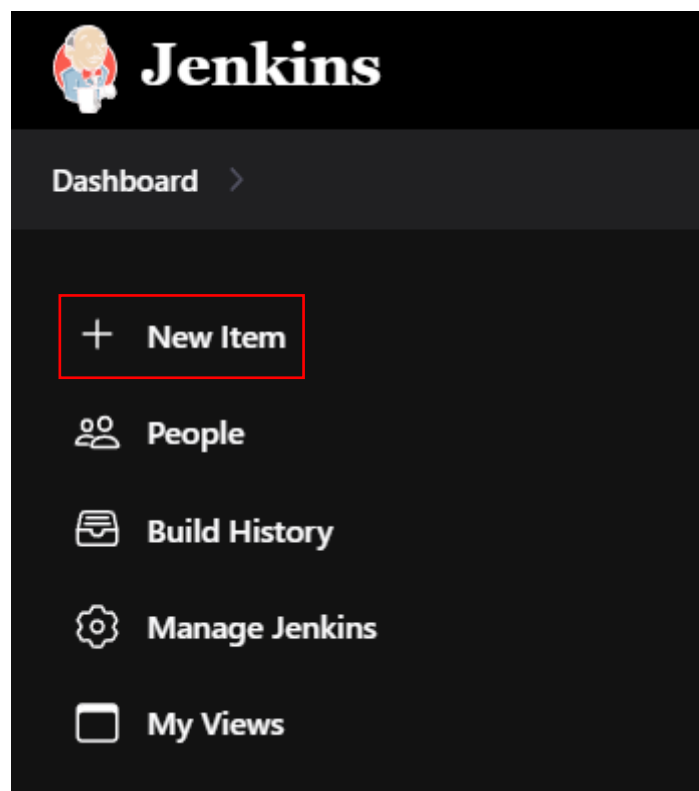
Docker: `docker --version`

```
Jenkins : Jenkins --versions
```

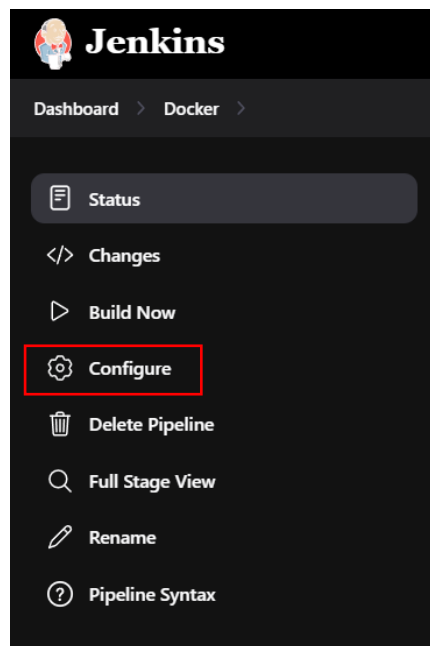
Step - 4 : Connect to **Jenkins** (with instance ip:8080)



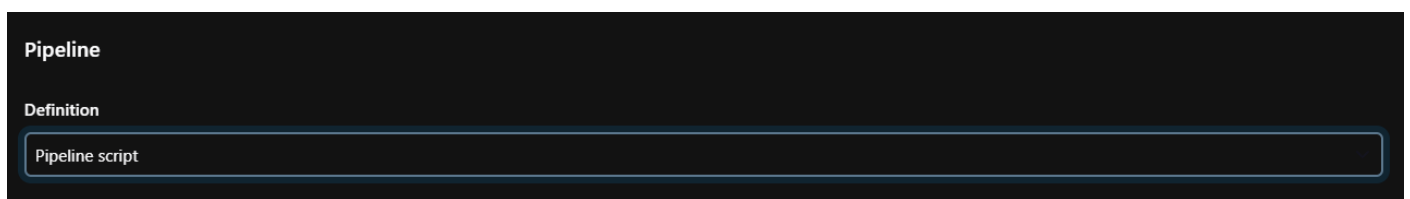
Step - 5 : Create one pipeline project in **Jenkins**.



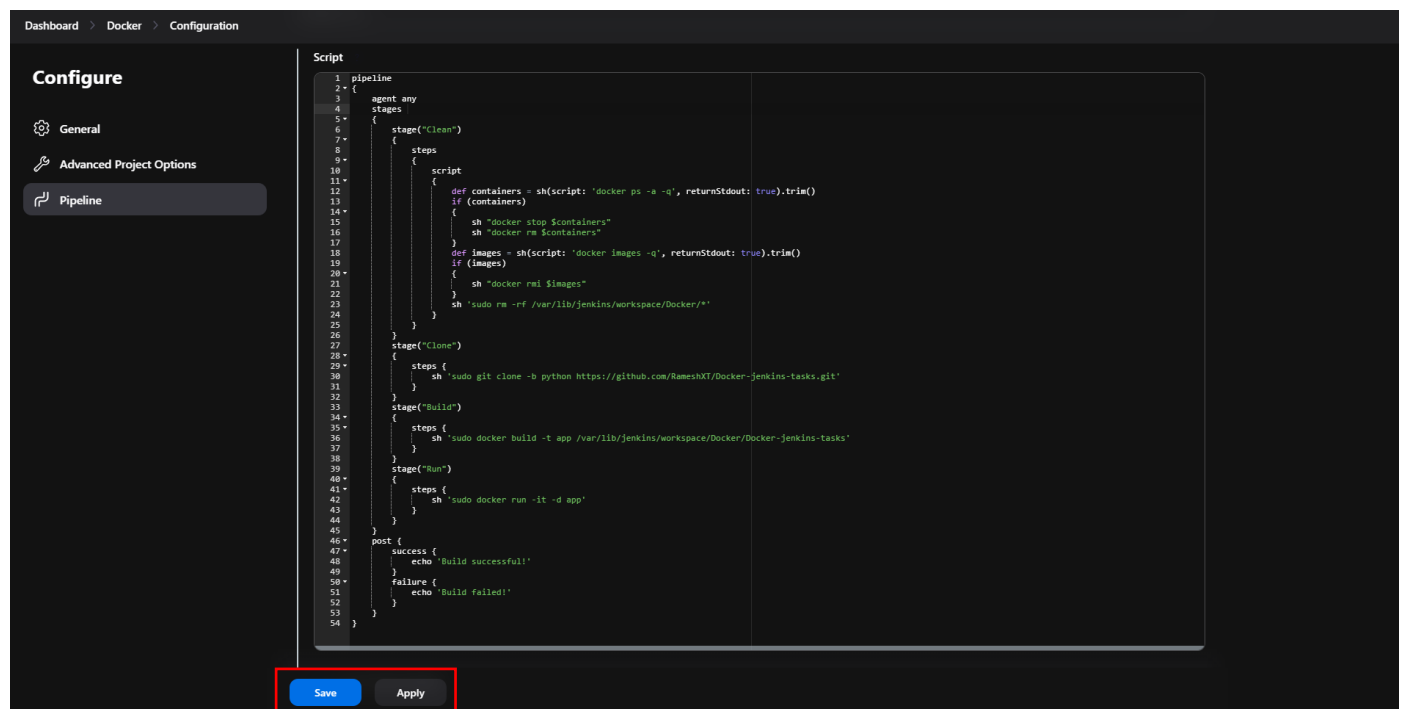
Step - 6 : Configure that project



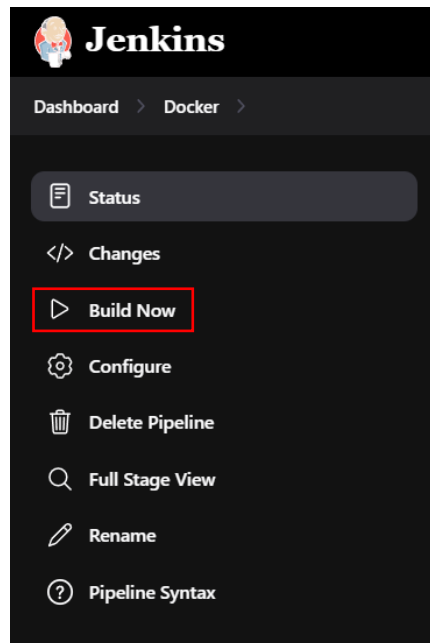
Step – 7 : Select pipeline script



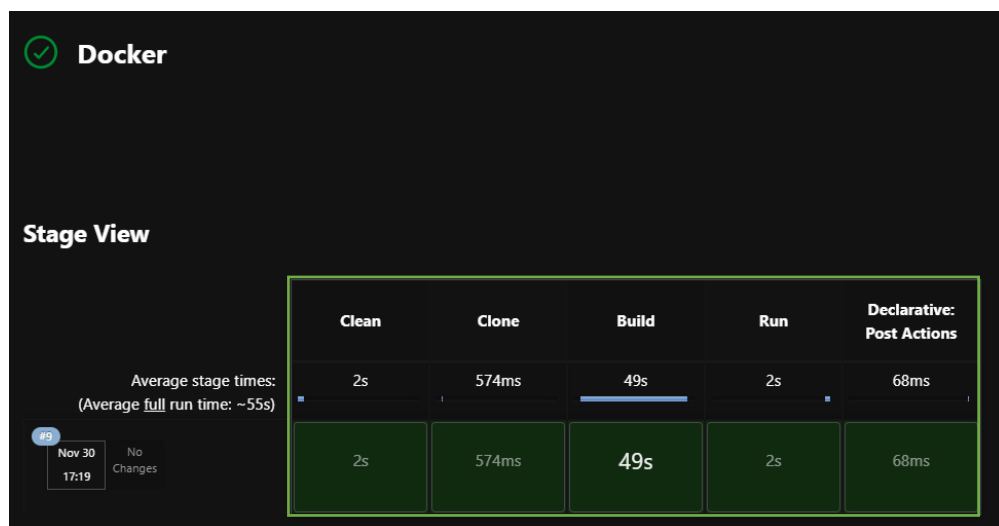
Step – 8 : adding pipeline script to automate the build process.



Step – 9 : build now



- If our script is perfect it will go to **Success**.



- Once build **Success**, go to **EC2** instance and connect it.
- Check **Dockerimage** is created and **Dockercontainer** is created.

```
[root@ip-172-31-43-198 ec2-user]# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
app           latest   976896dfa699   7 hours ago   480MB
[root@ip-172-31-43-198 ec2-user]# docker ps -a
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS      PORTS          NAMES
c2e2d6c4f593   app      "python3 app.py"        7 hours ago   Exited (0) 7 hours ago           jolly_dijkstra
[root@ip-172-31-43-198 ec2-user]#
```

Jenkins Build Is **Successfully** Build by Executing **Jenkins** Pipeline script.