

Manual Step verification before automating CICD pipeline

Ref:

Complete CICD DevOps project | Git, Dockerhub, Dockerhost,Jenkins|Deploying container on web-server

https://www.youtube.com/watch?v=ct_ZkMG7S8g&list=PLLu1bCv5AByHRrefBHKLDItkFK8MHGgwz

Deploy web -app - <https://www.youtube.com/watch?v=t9U3ffFX7iM>

Setup Jenkins in AWS - <https://www.youtube.com/watch?v=lRpS2CovMrs>

Deploy container on Docker using Jenkins

https://www.youtube.com/watch?v=ct_ZkMG7S8g&list=PLLu1bCv5AByHRrefBHKLDItkFK8MHGgwz

I-Install Jenkins on EC2 AWS Instance

Prerequisites:

- **Install Java on EC2 instance**
- **Download Jenkins package**

Instance Id: i-0d8585b5ccb2e61c6

ec2-44-203-118-28.compute-1.amazonaws.com

ssh -i "keypair-tf.pem" <ubuntu@ec2-44-203-118-28.compute-1.amazonaws.com>

IP: 44.203.118.28

Connection established

i-0d8585b5ccb2e61c6 (Jenkins)
PublicIPs: 44.203.118.28 PrivateIPs: 172.31.84.176

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7°C Mostly sunny

Run “Sudo apt update”

```
ubuntu@ip-172-31-84-176:~$ sudo apt update  
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease  
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease  
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease  
Hit:4 http://security.ubuntu.com/ubuntu noble-security InRelease  
Reading package lists... 6%
```

i-0d8585b5ccb2e61c6 (Jenkins)
PublicIPs: 44.203.118.28 PrivateIPs: 172.31.84.176

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7°C Mostly sunny

Run command to install java
“sudo apt install openjdk-21jdk”

```
ubuntu@ip-172-31-84-176:~$ java -version
openjdk version "21.0.6" 2025-01-21
OpenJDK Runtime Environment (build 21.0.6+7-Ubuntu-124.04.1)
OpenJDK 64-Bit Server VM (build 21.0.6+7-Ubuntu-124.04.1, mixed mode, sharing)
```

Download Jenkins package

1. Use the link below to install Jenkins package

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

Add key to the EC2 instance

2. sudo wget -O /usr/share/keyrings/jenkins-keyring.asc \

<https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key>

3. Add Jenkins repository entry

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

4. Update package and install Jenkins

sudo apt-get update

sudo apt-get install fontconfig openjdk-17-jre

sudo apt-get install jenkins

Cmd to verify and select specific java versions as default

sudo update-alternatives --config java

```
ubuntu@ip-172-31-84-176:~$ sudo update-alternatives --config java
There are 2 choices for the alternative java (providing /usr/bin/java).

```

Selection	Path	Priority	Status
*	/usr/lib/jvm/java-21-openjdk-amd64/bin/java	2111	auto mode
1	/usr/lib/jvm/java-17-openjdk-amd64/bin/java	1711	manual mode
2	/usr/lib/jvm/java-21-openjdk-amd64/bin/java	2111	manual mode

Press <enter> to keep the current choice[*], or type selection number: █

```
ubuntu@ip-172-31-84-176:~$ sudo update-alternatives --config java
There are 2 choices for the alternative java (providing /usr/bin/java).

Selection    Path
-----
```

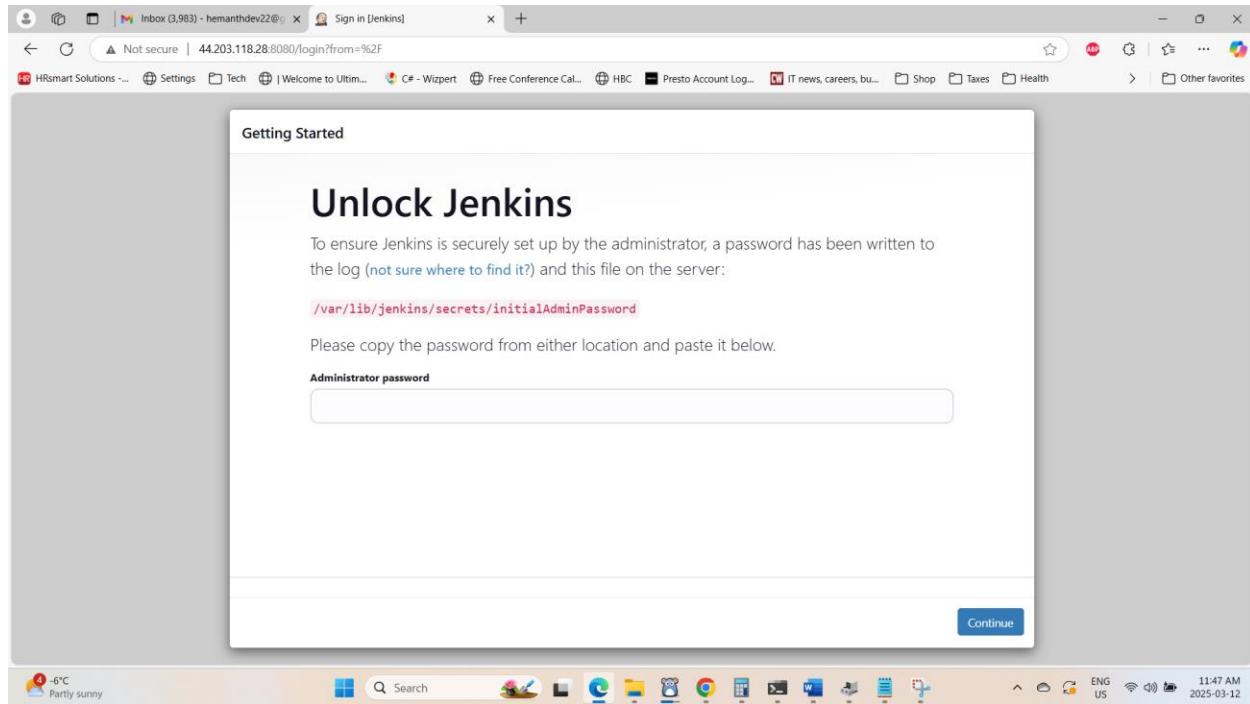
Selection	Path	Priority	Status
0	/usr/lib/jvm/java-21-openjdk-amd64/bin/java	2111	auto mode
* 1	/usr/lib/jvm/java-17-openjdk-amd64/bin/java	1711	manual mode
2	/usr/lib/jvm/java-21-openjdk-amd64/bin/java	2111	manual mode

Press <enter> to keep the current choice[*], or type selection number: □

5. Update inbound rules under security to allow traffic on 8080 port

Name	Security group rule ID	IP version	Type	Protocol	Port range
sgr-08bdedc6768fc9f10	IPv4	HTTPS	TCP	443	
sgr-03205fab6be1016f7	IPv4	SSH	TCP	22	
sgr-0b0b4794c6e85000c	IPv4	Custom TCP	TCP	8080	
sgr-0a72a6096dd9407d8	IPv4	HTTP	TCP	80	

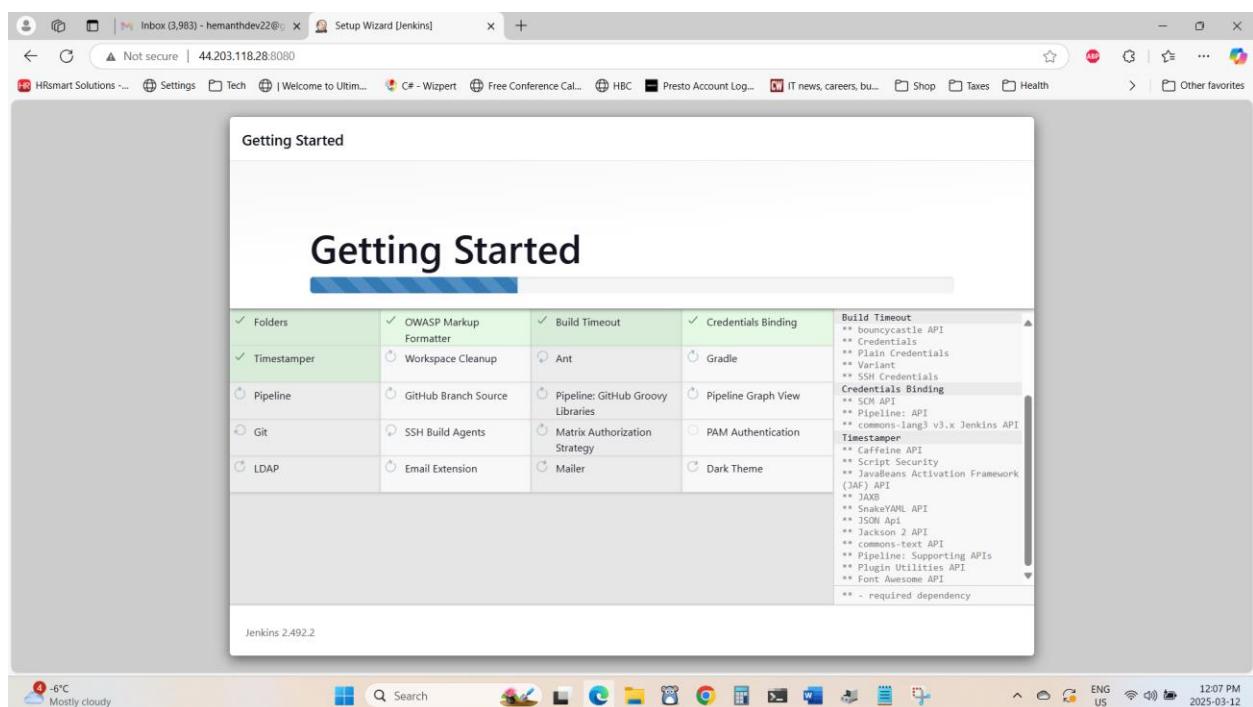
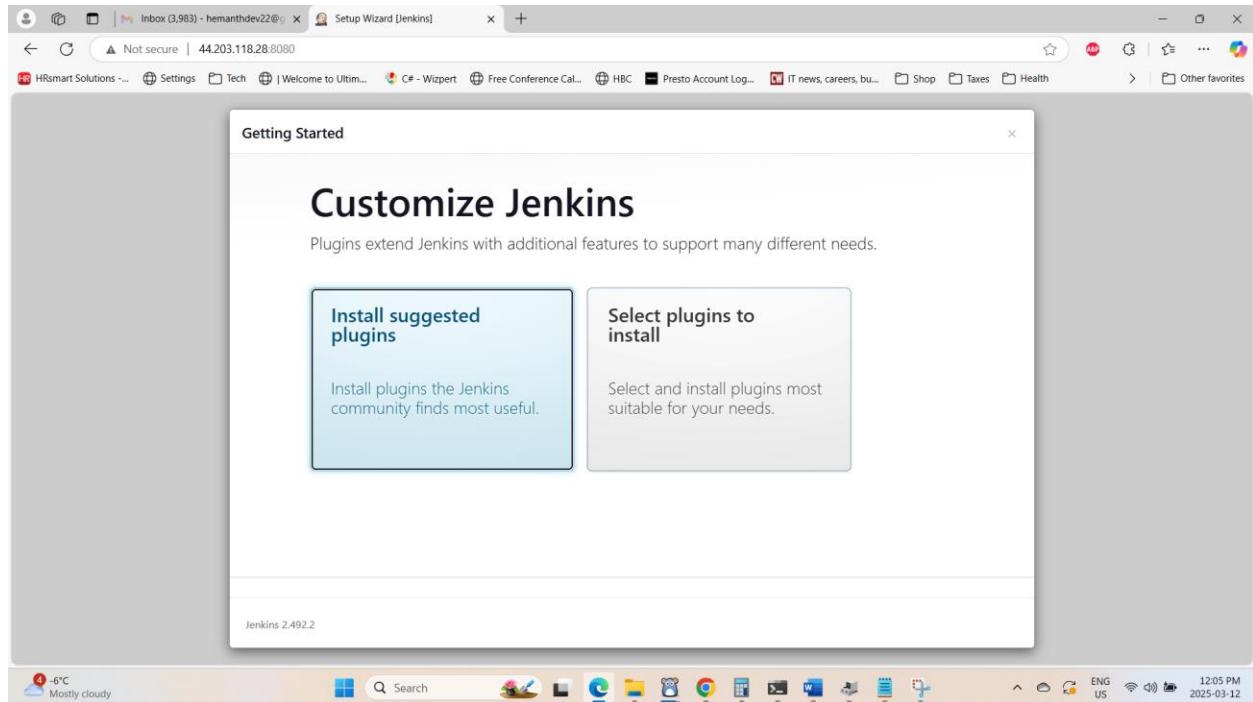
6. Launch the Jenkins now



7. Capture the password for Jenkins under the mentioned path

```
initialAdminPassword jenkins.model.Jenkins.crumbSalt master.key
root@ip-172-31-84-176:/var/lib/jenkins/secrets# cat initialAdminPassword
0d6cc8c5e55f4aa288a4239cc81b9440
root@ip-172-31-84-176:/var/lib/jenkins/secrets# 
```

8. Customize Jenkins by Installing suggested plugins (Jenkins 2.492)



<http://44.203.118.28:8080/>

Jenkins User ID: admin

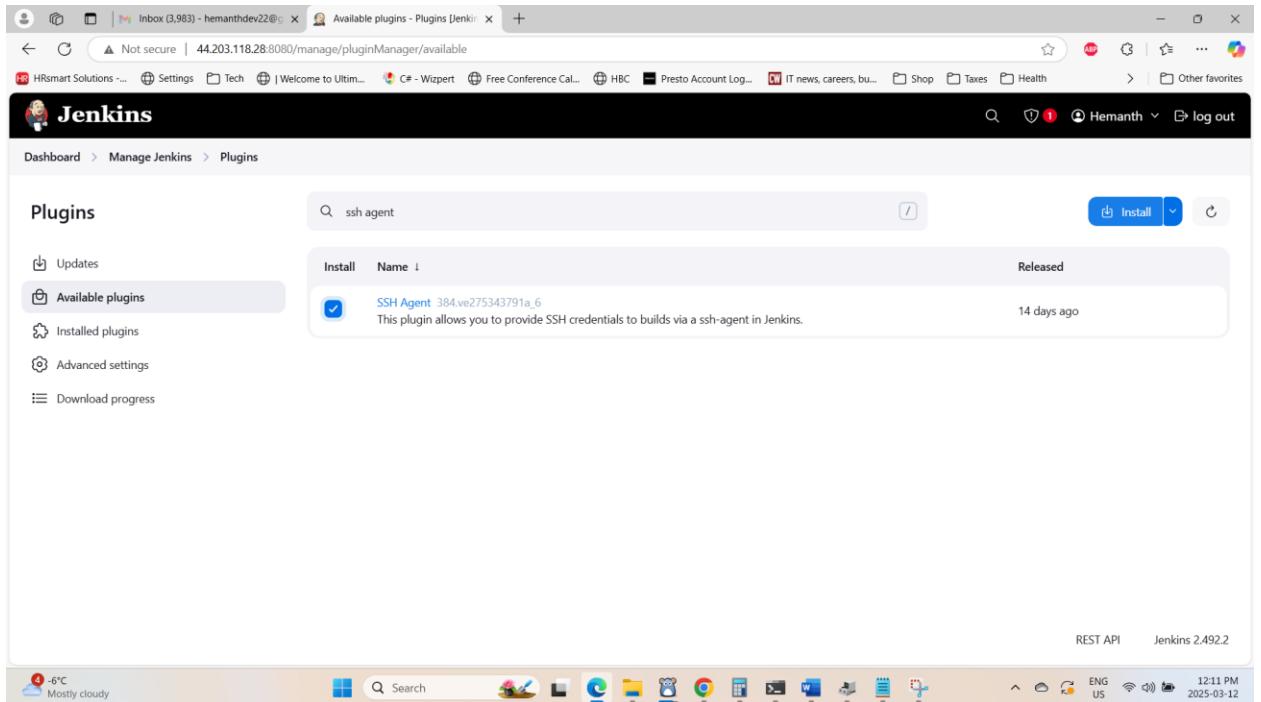
II-Install required plugins under “Manage Jenkins -> plugins”

1. SSH

The screenshot shows the Jenkins interface with the title "Installed plugins - Plugins [Jenkins]". The left sidebar has "Installed plugins" selected. The main area lists several installed plugins with their names, versions, descriptions, and status checkboxes:

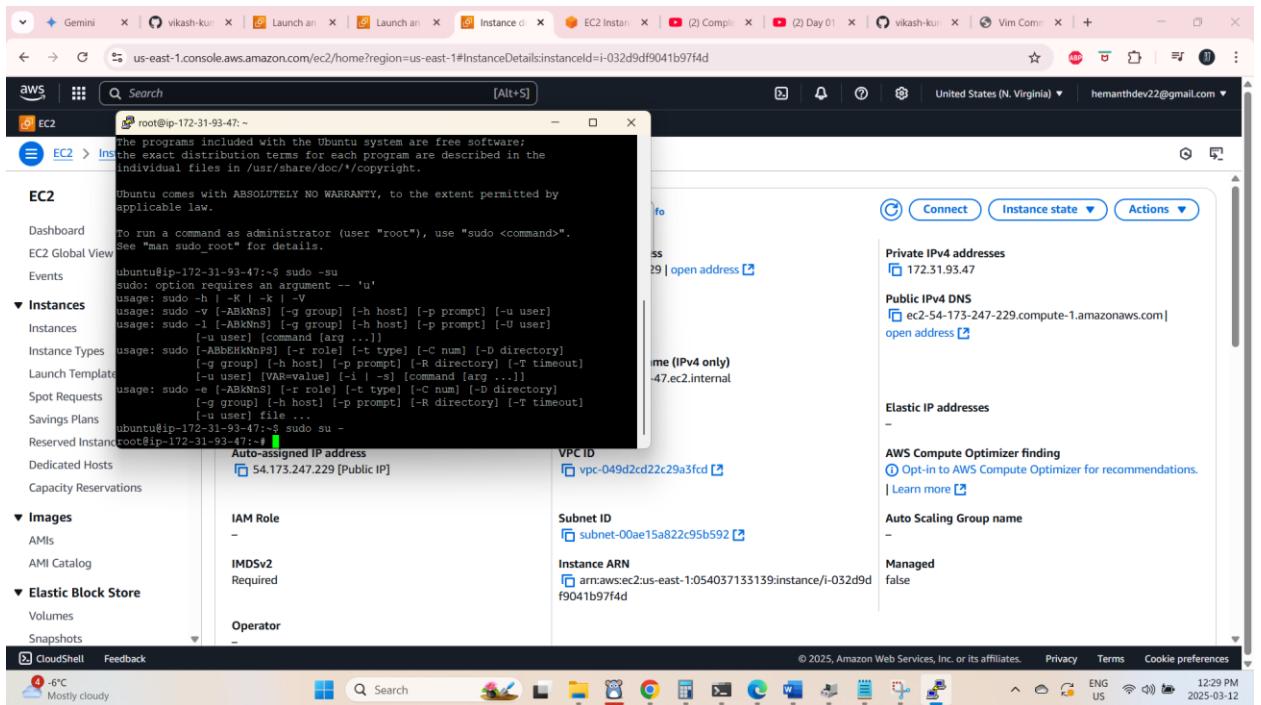
- SCM API Plugin 704.v3ce5c542825a... (Status: Enabled)
- Script Security Plugin 1373.vb_b_4a_a_c26fa_00 (Status: Enabled)
- SnakeYAML API Plugin 2.3-123.v13484c65210a... (Status: Enabled)
- SSH Agent Plugin 384.ve275343791a_6 (Status: Enabled)
- SSH Build Agents plugin 3.1031.v72c6b_883b_869 (Status: Enabled)
- SSH Credentials Plugin 355.v9b_e5b_cde5003 (Status: Enabled)
- Structs Plugin 343.vdcf37b_a_c81d5 (Status: Enabled)

The status checkboxes for all listed plugins are checked (blue). The Jenkins status bar at the bottom shows "12:23 PM 2025-03-12" and various system icons.



III – Create Web app in EC2 Instance

1. WebApp Ec2 instance created
2. connect to the ubuntu instance as root



3.run Sudo apt update

```
root@ip-172-31-93-47:~  
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted a  
md64 Components [812 B]  
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse a  
md64 Packages [30.1 kB]  
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse T  
ranslation-en [5884 B]  
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse a  
md64 Components [940 B]  
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse a  
md64 c-n-f Metadata [552 B]  
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64  
Components [208 B]  
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64  
c-n-f Metadata [112 B]  
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe a  
md64 Packages [14.2 kB]  
Get:31 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe T  
ranslation-en [12.1 kB]  
Get:32 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe a  
md64 Components [19.9 kB]  
Get:33 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe a  
md64 c-n-f Metadata [1104 B]  
Get:34 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted  
amd64 Components [216 B]  
Get:35 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted  
amd64 c-n-f Metadata [116 B]  
Get:36 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse  
amd64 Components [116 B]  
Get:37 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse  
amd64 c-n-f Metadata [116 B]  
Get:38 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [128 kB]  
Get:39 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [8990 B]  
Get:40 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [823 kB]  
Get:41 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [177 kB]  
Get:42 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [52.0 kB]  
Get:43 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [13.5 kB]  
Get:44 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Packages [719 kB]  
Get:45 http://security.ubuntu.com/ubuntu noble-security/restricted Translation-en [143 kB]  
Get:46 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]  
Get:47 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Packages [26.2 kB]  
Get:48 http://security.ubuntu.com/ubuntu noble-security/multiverse Translation-en [4892 B]  
Get:49 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]  
Get:50 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [356 B]  
Fetched 32.7 MB in 10s (3272 kB/s)  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
139 packages can be upgraded. Run 'apt list --upgradable' to see them.  
root@ip-172-31-93-47:~#
```

The screenshot shows a Windows desktop environment with a terminal window open. The terminal window displays the output of the 'apt update' command. The desktop taskbar at the bottom shows various application icons, and the system tray indicates it's 12:31 PM on March 12, 2025, with the language set to English (US). The desktop background is a standard Windows theme.

4. Run “apt install apache2”

```
root@ip-172-31-93-47:~  
Translation-en [12.1 kB]  
Get:32 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe a  
md64 Components [19.9 kB]  
Get:33 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe a  
md64 c-n-f Metadata [1104 B]  
Get:34 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted  
amd64 Components [216 B]  
Get:35 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted  
amd64 c-n-f Metadata [116 B]  
Get:36 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse  
amd64 Components [212 B]  
Get:37 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse  
amd64 c-n-f Metadata [116 B]  
Get:38 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [128 kB]  
Get:39 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [8990 B]  
Get:40 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [823 kB]  
Get:41 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [177 kB]  
Get:42 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [52.0 kB]  
Get:43 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [13.5 kB]  
Get:44 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Packages [719 kB]  
Get:45 http://security.ubuntu.com/ubuntu noble-security/restricted Translation-en [143 kB]  
Get:46 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 B]  
Get:47 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Packages [26.2 kB]  
Get:48 http://security.ubuntu.com/ubuntu noble-security/multiverse Translation-en [4892 B]  
Get:49 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [212 B]  
Get:50 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 c-n-f Metadata [356 B]  
Fetched 32.7 MB in 10s (3272 kB/s)  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
139 packages can be upgraded. Run 'apt list --upgradable' to see them.  
root@ip-172-31-93-47:~# apt install httpd  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
httpd is already the highest version  
You should explicitly select one to install.  
E: Package 'httpd' has no installation candidate  
root@ip-172-31-93-47:~#
```

The screenshot shows a Windows desktop environment with a terminal window open. The terminal window displays the output of the 'apt install apache2' command. It shows that 'httpd' has no installation candidate. The desktop taskbar at the bottom shows various application icons, and the system tray indicates it's 12:32 PM on March 12, 2025, with the language set to English (US). The desktop background is a standard Windows theme.

5. select apache2

```

root@ip-172-31-93-47:~#
micro-httpd 20140814-2.1
lighttpd 1.4.74-lubuntu3
You should explicitly select one to install.

E: Package 'httpd' has no installation candidate
root@ip-172-31-93-47:~# apt install apache2
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  apache2-bin apache2-data apache2-utils libapriltl1 libaprutil1-dbd-sqlite3 libaprutil1-ldap libaprutil1t64 liblubua5.4-0 ssl-cert
Suggested packages:
  apache2-doc apache2-suexec-pristine | apache2-suexec-custom www-browser
The following previously unselected packages will be installed:
  apache2 apache2-bin apache2-data apache2-utils libapriltl1 libaprutil1-dbd-sqlite3 libaprutil1-ldap libaprutil1t64 liblubua5.4-0 ssl-cert
0 upgraded, 10 newly installed, 0 to remove and 139 not upgraded.
Need to get 2084 kB of archives.
After this operation, 8094 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 libapriltl1 libapriltl1-dbd-sqlite3 libaprutil1-ldap libaprutil1t64 liblubua5.4-0 ssl-cert [108 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libaprutil1-dbd-sqlite3 amd64 1.6.3-1.lubuntu7 [91.9 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/main amd64 libaprutil1-dbd-sqlite3 amd64 1.6.3-1.lubuntu7 [11.2 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu/noble/main amd64 libaprutil1-ldap amd64 1.6.3-1.lubuntu7 [9116 B]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu/noble/main amd64 liblubua5.4-0 amd64 5.4-6-3build2 [166 kB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu/noble-updates/main amd64 apache2-bin amd64 2.4.58-lubuntu8.5 [1329 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu/noble-updates/main amd64 apache2-data all 2.4.58-lubuntu8.5 [163 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu/noble-updates/main amd64 apache2-utils amd64 2.4.58-lubuntu8.5 [97.1 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu/noble-updates/main amd64 apache2 amd64 2.4.58-lubuntu8.5 [90.2 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu/noble/main amd64 ssl-cert all 1.1.2ubuntu1 [17.8 kB]
Fetched 2084 kB in 0s (49.3 kB/s)
Preconfiguring packages...
Selecting previously unselected package libapriltl1-amd64.
(Reading database ... 70610 files and directories currently installed.)
Preparing to unpack .../0-libapriltl1_1.7.2-3.lubuntu11_amd64.deb ...
Unpacking libapriltl1-amd64 (1.7.2-3.lubuntu11) ...
Selecting previously unselected package libaprutil1t64-amd64.
Preparing to unpack .../1-libapriltl1t64_1.6.3-1.lubuntu7_amd64.deb ...
Unpacking libaprutil1t64-amd64 (1.6.3-1.lubuntu7) ...
Selecting previously unselected package libaprutil1-dbd-sqlite3-amd64.
Preparing to unpack .../2-libaprutil1-dbd-sqlite3_1.6.3-1.lubuntu7_amd64.deb ...
Unpacking libaprutil1-dbd-sqlite3-amd64 (1.6.3-1.lubuntu7) ...
Selecting previously unselected package libaprutil1-ldap-amd64.
Preparing to unpack .../3-libaprutil1-ldap_1.6.3-1.lubuntu7_amd64.deb ...
Unpacking libaprutil1-ldap-amd64 (1.6.3-1.lubuntu7) ...
Selecting previously unselected package liblubua5.4-0-amd64.
Preparing to unpack .../4-liblubua5.4-0_5.4.6-3build2_amd64.deb ...
Unpacking liblubua5.4-0-amd64 (5.4.6-3build2) ...
[Progress: 124% [=====|.....]]
```

6. download the zip file for website template using wget

<https://www.free-css.com/assets/files/free-css-templates/download/page296/neogym.zip>

```

root@ip-172-31-93-47:~/template# wget https://www.free-css.com/assets/files/free-css-templates/download/page296/neogym.zip
--2025-03-12 16:41:04-- https://www.free-css.com/assets/files/free-css-templates/download/page296/neogym.zip
Resolving www.free-css.com (www.free-css.com)... 217.160.0.242, 2001:8d8:100f:0:0:0:0:28f
Connecting to www.free-css.com (www.free-css.com)|217.160.0.242|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 724954 (708K) [application/zip]
Saving to: 'neogym.zip'

neogym.zip          100%[=====] 707.96K   381KB/s   in 1.9s

2025-03-12 16:41:06 (381 KB/s) - 'neogym.zip' saved [724954/724954]
root@ip-172-31-93-47:~/template#
```

7. Verify if the /var/www/html/ path is created after installing apache2

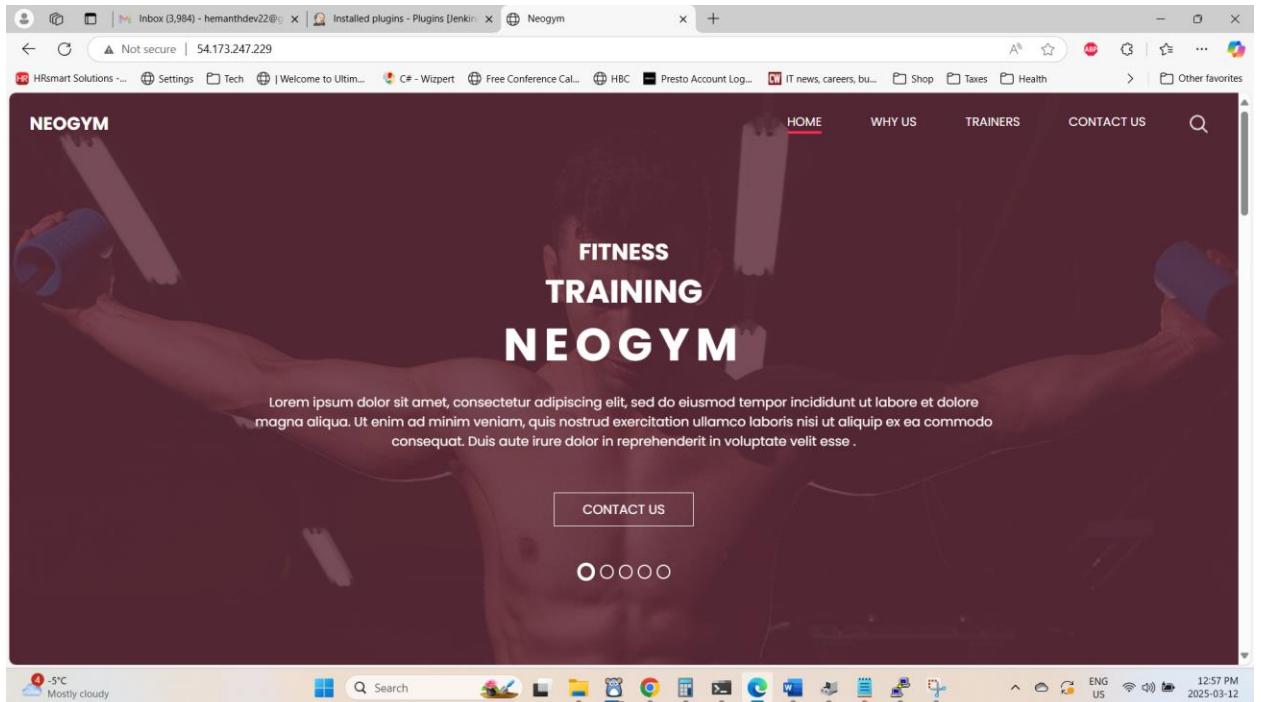
```
initiating: neogym-html/why.html
root@ip-172-31-93-47:~/template# ls
neogym-html  neogym.zip
root@ip-172-31-93-47:~/template# cd neogym-html/
root@ip-172-31-93-47:~/template/neogym-html# ls
contact.html  css  images  index.html  js  trainer.html  why.html
root@ip-172-31-93-47:~/template/neogym-html# ls -ltr
total 56
-rw-r--r-- 1 root root 6738 Sep 15 2020 why.html
-rw-r--r-- 1 root root 6842 Sep 15 2020 trainer.html
-rw-r--r-- 1 root root 17875 Sep 15 2020 index.html
-rw-r--r-- 1 root root 5649 Sep 15 2020 contact.html
drwxr-xr-x 2 root root 4096 Sep 15 2020 js
drwxr-xr-x 2 root root 4096 Sep 15 2020 images
drwxr-xr-x 2 root root 4096 Sep 15 2020 css
root@ip-172-31-93-47:~/template/neogym-html# cd /var/www/html/
root@ip-172-31-93-47:/var/www/html# ls
index.html
root@ip-172-31-93-47:/var/www/html# mv index.html oldindex.html
root@ip-172-31-93-47:/var/www/html# ls
oldindex.html
root@ip-172-31-93-47:/var/www/html# cd
```

8. unzip the file and move the content from template folder to webserver folder

/var/www/html/

```
root@ip-172-31-93-47:~/template# ls
root@ip-172-31-93-47:~/template# cd neogym-html/
root@ip-172-31-93-47:~/template/neogym-html# ls
contact.html  css  images  index.html  js  trainer.html  why.html
root@ip-172-31-93-47:~/template/neogym-html# mv * /var/www/html/
root@ip-172-31-93-47:~/template/neogym-html# ls
root@ip-172-31-93-47:~/template/neogym-html# ls -lRt /var/www/html
total 68
-rw-r--r-- 1 root root 6738 Sep 15 2020 why.html
-rw-r--r-- 1 root root 6842 Sep 15 2020 trainer.html
-rw-r--r-- 1 root root 17875 Sep 15 2020 index.html
-rw-r--r-- 1 root root 5649 Sep 15 2020 contact.html
drwxr-xr-x 2 root root 4096 Sep 15 2020 js
drwxr-xr-x 2 root root 4096 Sep 15 2020 images
drwxr-xr-x 2 root root 4096 Sep 15 2020 css
-rw-r--r-- 1 root root 10671 Mar 12 16:33 oldindex.html
root@ip-172-31-93-47:~/template/neogym-html#
```

9. Website launch successful



10. Enable the application to start after restart

```
-rw-r--r-- 1 root root 10671 Mar 12 16:33 oldindex.html
root@ip-172-31-93-47:~/template/neogym-html# systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable apache2
root@ip-172-31-93-47:~/template/neogym-html#
```

III – CI/CD Docker based application using Jenkins pipeline

1. Launch EC2 instance 1 for Jenkins , 1 for web app – **Done**
2. Install docker on both servers
Installed Docker using the apt repositories
<https://docs.docker.com/engine/install/ubuntu/>
Docker is installed on Jenkins server

```
ubuntu@ip-172-31-84-176: ~
Setting up slirp4netns (1.2.1-1build2) ...
Setting up docker-ce (5:28.0.1-1~ubuntu24.04-noble) ...
Created symlink /etc/systemd/system/multi-user.target.wants/docker.service → /usr/r/lib/systemd/system/docker.service.
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /usr/li/b/systemd/system/docker.socket.
Processing triggers for man-db (2.12.0-4build2) ...
Processing triggers for libc-bin (2.39-0ubuntu8.3) ...
Scanning processes...
Scanning linux images...
Running kernel seems to be up-to-date.
No services need to be restarted.
No containers need to be restarted.
No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-84-176: ~$ sudo docker run hello-world
Unreachable: failed to connect to hello-world:latest locally
listest: Pulling from library/hello-world
e659034ab4la: Pull complete
Digest: sha256:bfb9c0c14f13f9ed1aa86cab2b9ff11181dc50d779807ed3a3c5e55a6936dbdd5
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
   (amd64)
3. The Docker daemon created a new container from that image which runs the
   executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it
   to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/

ubuntu@ip-172-31-84-176: ~$
```

Docker installed on Web app server

```
ubuntu@ip-172-31-93-47: ~
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
   (amd64)
3. The Docker daemon created a new container from that image which runs the
   executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it
   to your terminal.

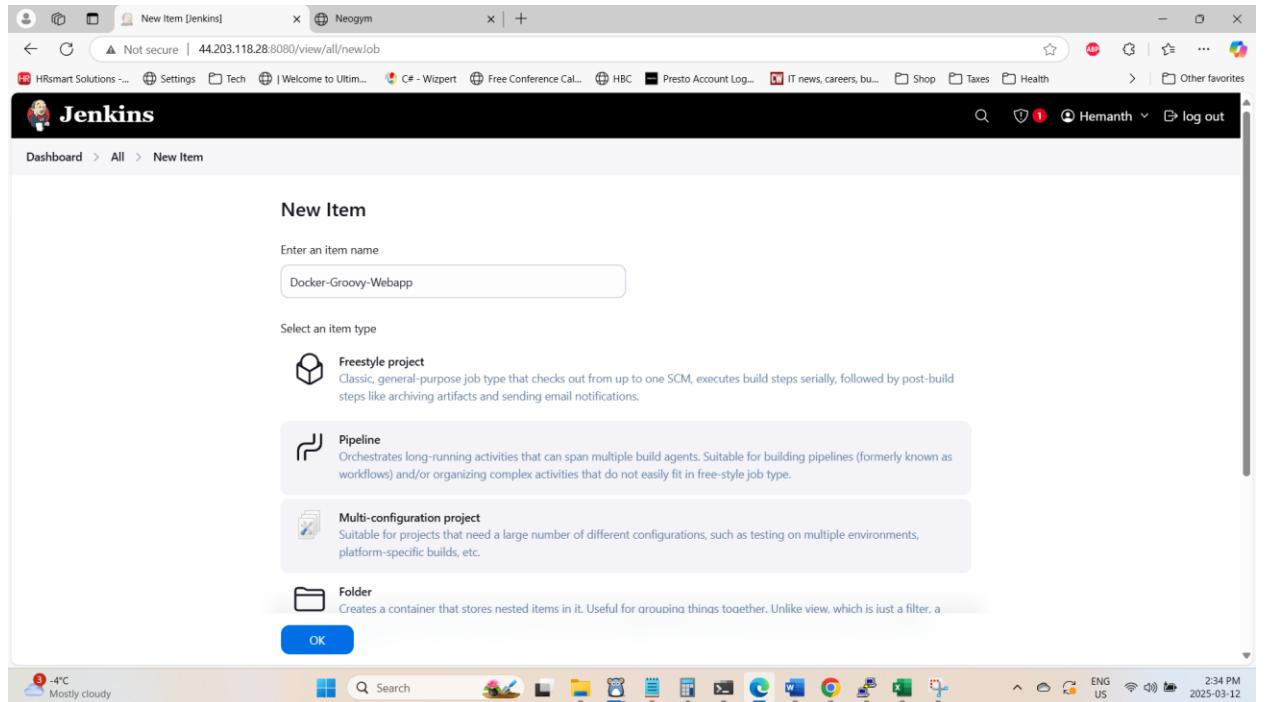
To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/

For more examples and ideas, visit:
https://docs.docker.com/get-started/

ubuntu@ip-172-31-93-47: ~$
```

3. Install Jenkins on Jenkins server - done
4. Create a pipeline in Jenkins



Generate groovy pipeline script for Git

<https://github.com/hemanthSel/Jenkins-Docker-Project.git>

- Verify workspace has the new pipeline and the docker file

```
ubuntu@ip-172-31-84-176:~$ pwd
/home/ubuntu
ubuntu@ip-172-31-84-176:~$ ls
ubuntu@ip-172-31-84-176:~$ cd /var/
ubuntu@ip-172-31-84-176:/var$ ls
backups  cache  cron  lib  local  lock  log  mail  opt  run  snap  spool  tmp
ubuntu@ip-172-31-84-176:/var$ cd lib/jenkins/
ubuntu@ip-172-31-84-176:/var/lib/jenkins$ ls
config.xml  jenkins.install.InstallUtil.lastExecVersion  jobs
hudson.model.UpdateCenter.xml  jenkins.install.UpgradeWizard.state  logs
hudson.plugins.git.GitTool.xml  jenkins.model.JenkinsLocationConfiguration.xml  nodeMonitors.xml
Identity.key.enc  jenkins.telemetry.Correlator.xml  org.jenkinsci.plugins.workflow.flow.FlowExecutionList.xml
ubuntu@ip-172-31-84-176:/var/lib/jenkins$ cd workspace/
ubuntu@ip-172-31-84-176:/var/lib/jenkins/workspace$ ls
Docker-Groovy-Webapp
ubuntu@ip-172-31-84-176:/var/lib/jenkins/workspace$
```

- Create another start to use the dockerfile to create docker image

Find Jenkins variable list

<https://devopsqa.wordpress.com/2019/11/19/list-of-available-jenkins-environment-variables/>

BUILD_ID , BUILD_NUMBER , BUILD_DISPLAY_NAME , BUILD_TAG

- Tag the user name to the docker image
- Save and build the pipeline

Pipeline script

```
Script ?  
1 * node {  
2 *   stage('git checkout'){  
3 |     git 'https://github.com/hemanthSel/Jenkins-Docker-Project.git'  
4 |   }  
5 *   stage('docker build image'){  
6 |     sh 'docker image build -t $JOB_NAME:v1.$BUILD_ID .'  
7 |     sh 'docker image tag $JOB_NAME:v1.$BUILD_ID Hemanth/$JOB_NAME:v1.$BUILD_ID'  
8 |     sh 'docker image tag $JOB_NAME:v1.$BUILD_ID Hemanth/$JOB_NAME:latest'  
9 |   }  
10 }  
11 }
```

Throws permission denied error

```
[Pipeline] sh  
+ docker image build -t Docker-Groovy-Webapp:v1.3 .  
ERROR: permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Head  
"http://%2Fvar%2Frun%2Fdocker.sock/_ping": dial unix /var/run/docker.sock: connect: permission denied  
[Pipeline] }  
[Pipeline] // stage  
[Pipeline] }  
[Pipeline] // node  
[Pipeline] End of Pipeline  
ERROR: script returned exit code 1  
Finished: FAILURE
```

9. Grant all permissions to the Jenkins using chmod command

```
ubuntu@ip-172-31-84-176:/var/lib/jenkins/workspace/Docker-Groovy-Webapp$ sudo su  
root@ip-172-31-84-176:/var/lib/jenkins/workspace/Docker-Groovy-Webapp# chmod 777 /var/run/docker.sock/  
chmod: cannot access '/var/run/docker.sock/': Not a directory  
root@ip-172-31-84-176:/var/lib/jenkins/workspace/Docker-Groovy-Webapp# chmod 777 /var/run/docker.sock  
root@ip-172-31-84-176:/var/lib/jenkins/workspace/Docker-Groovy-Webapp#
```

10. Error 2 – repo name must be all lower

```
+ docker image build -t Docker-Groovy-Webapp:v1.4 .  
ERROR: invalid tag "Docker-Groovy-Webapp:v1.4": repository name must be lowercase  
[Pipeline] }
```

Error 3- invalid refer format

```
ERROR: failed to solve: failed to parse stage name "Ubuntu:latest": invalid reference format: repository name (library/Ubuntu) must be  
lowercase  
[Pipeline] }  
[Pipeline] // stage
```

Error 4 – unable to locate package

```

#5 [3/7] ADD https://www.free-css.com/assets/files/free-css-templates/download/page296/neogym.zip /var/www/html/
#5 DONE 2.5s

#6 [2/7] RUN apt install apache2 zip unzip
#6 1.294
#6 1.294 WARNING: apt does not have a stable CLI interface. Use with caution in scripts.
#6 1.294
#6 1.317 Reading package lists...
#6 1.328 Building dependency tree...
#6 1.328 Reading state information...
#6 1.330 E: Unable to locate package apache2
#6 1.330 E: Unable to locate package zip
#6 1.331 E: Unable to locate package unzip
#6 ERROR: process "/bin/sh -c apt install apache2 zip unzip" did not complete successfully: exit code: 100
-----
> [2/7] RUN apt install apache2 zip unzip:
1.294
1.294 WARNING: apt does not have a stable CLI interface. Use with caution in scripts.
1.294
1.317 Reading package lists...
1.328 Building dependency tree...
1.328 Reading state information...
1.330 E: Unable to locate package apache2
1.330 E: Unable to locate package zip
1.331 E: Unable to locate package unzip

```

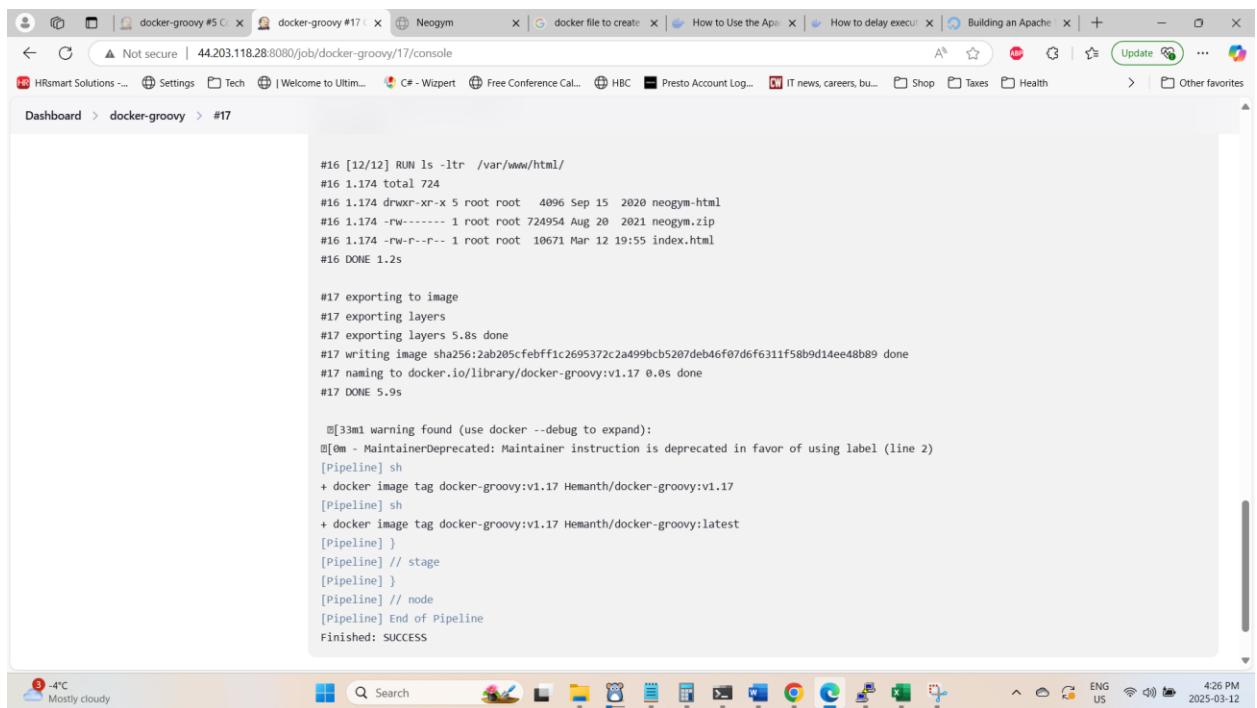
11. Build success and image created



```

ubuntu@ip-172-31-84-176:~$ cd lib/
ubuntu@ip-172-31-84-176:~$ ls
PackageKit      cloud      dhcpcd  git      jenkins  man-db    plymouth  sgml-base  sudo      ubuntu-advantage  unattended-upgrades  vim
amazon          boldt     command-not-found  docker  grub      landscape  misc      polkit-1  shells.state  ubuntu-release-upgrader  update-manager   xml-core
appimage        cs-certificates-java  containerd  dpkg      hibinit-agent libuidb2  os-prober  private  shim-signed  systemd  ucf      update-notifier
apt            chrony      fuppd    isee-data  logrotate  pam      python    snapd      tpm      udisks2  usb_modeswitch
ubuntu@ip-172-31-84-176:~$ docker images
REPOSITORY          TAG      IMAGE ID      CREATED             SIZE
docke...roovy       v1.17   2ab205cfefbf  14 minutes ago   249MB
Hemanth/docker-groovy  latest  2ab205cfefbf  14 minutes ago   249MB
Hemanth/docker-groovy  v1.17   2ab205cfefbf  14 minutes ago   249MB
hello-world        latest  74cc54e27dc4  7 weeks ago      10.1kB
ubuntu@ip-172-31-84-176:~$ 

```



The screenshot shows a browser window displaying the Docker pipeline results for a job named 'docker-groovy'. The logs output by the pipeline are as follows:

```

#16 [12/12] RUN ls -ltr /var/www/html/
#16 1.174 total 724
#16 1.174 drwxr-xr-x 5 root root  4096 Sep 15 2020 neogym-html
#16 1.174 -rw----- 1 root root 724954 Aug 20 2021 neogym.zip
#16 1.174 -rw-r--r-- 1 root root 104671 Mar 12 19:55 index.html
#16 DONE 1.2s

#17 exporting to image
#17 exporting layers
#17 exporting layers 5.8s done
#17 writing image sha256:2ab205cfefbf1c2a499bc5207deb46f07d6f6311f58b9d14ee48b89 done
#17 naming to docker.io/library/docker-groovy:v1.17 0.0s done
#17 DONE 5.9s

#[33m1 warning found (use docker --debug to expand):
#[33m0m - MaintainerDeprecated: Maintainer instruction is deprecated in favor of using label (line 2)
[Pipeline] sh
+ docker image tag docker-groovy:v1.17 Hemanth/docker-groovy:v1.17
[Pipeline] sh
+ docker image tag docker-groovy:v1.17 Hemanth/docker-groovy:latest
[Pipeline] 
[Pipeline] // stage
[Pipeline] 
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS

```

Enable Stage view in Jenkins

The screenshot shows the Jenkins Plugin Manager interface. The left sidebar has tabs for 'Updates', 'Available plugins' (which is selected), 'Installed plugins', and 'Advanced settings'. The main area displays a list of available plugins. The 'Pipeline: Stage View' plugin is listed with a version of 2.37, categorized under 'User Interface' and 'Pipeline Stage View Plugin'. It was last updated 26 days ago. An 'Install' button is visible at the top right of the plugin card.

12. Create another stage to push the images to dockerhub

Generate token

Token1 11bd782319c1f3cadc32844582afa9b92f

Installed Credentials plugins

The screenshot shows the Jenkins Manage Jenkins > Plugins page. It lists two installed plugins: 'Credentials Binding Plugin' and 'Credentials Plugin'. Both plugins have their status checkboxes checked. The 'Credentials Binding Plugin' is version 687.v619cb_15e923f and allows credentials to be bound to environment variables. The 'Credentials Plugin' is version 1408.va_622a_b_f5b_1b_1 and allows storing credentials in Jenkins. Both have 'Report an issue with this plugin' links below them.

Following article to add secret

[Inject secrets into builds](#)

Credentials

T	P	Store ↓	Domain	ID	Name
Stores scoped to User: Hemanth					
P	Store ↓	Domains			
		User: Hemanth	(global)		
Stores from parent					
P	Store ↓	Domains			
		System	(global) ▾		
Icon:	S	M	L		

13. Created a pipeline syntax to use secret text for logging into docker hub

Configure

Pipeline

Define your Pipeline using Groovy directly or pull it from source control.

Definition

Pipeline script

```

1+ node {
2+   stage('git checkout'){
3+     git 'https://github.com/hemanth509/Jenkins-Docker-Project.git'
4+   }
5+   stage('docker build image'){
6+     sh 'docker image build -t $JOB_NAME:v1.$BUILD_ID .'
7+     sh 'docker image tag $JOB_NAME:v1.$BUILD_ID Hemanth/$JOB_NAME:v1.$BUILD_ID'
8+     sh 'docker image tag $JOB_NAME:v1.$BUILD_ID Hemanth/$JOB_NAME:latest'
9+   }
10+  stage('push Images to dockerhub'){
11+    withCredentials([string(credentialsId: 'HemanthSecretText', variable: 'DockerPwd')]) {
12+      //double quotes to fetch value
13+      sh "docker login hemanth509 -p ${DockerPwd}"
14+      sh "docker image push Hemanth/$JOB_NAME:v1.$BUILD_ID"
15+      sh "docker image push Hemanth/$JOB_NAME:latest"
16+    }
17+  }
}

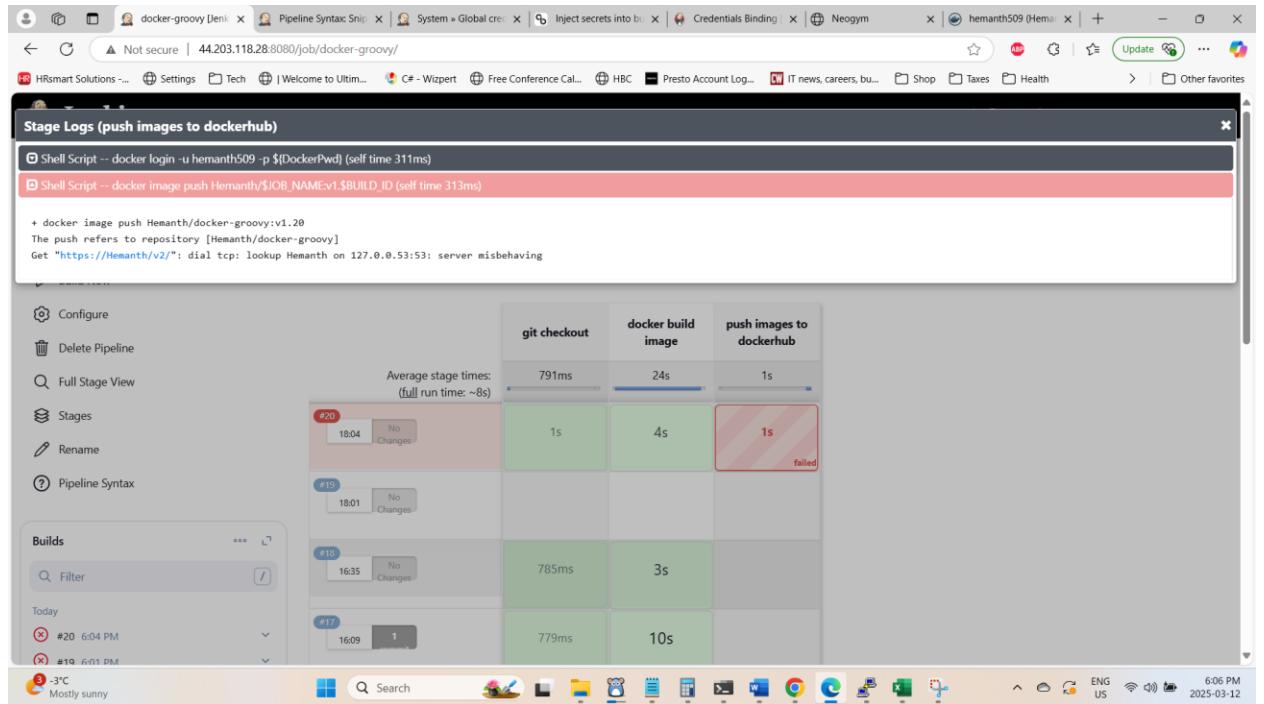
```

Use Groovy Sandbox

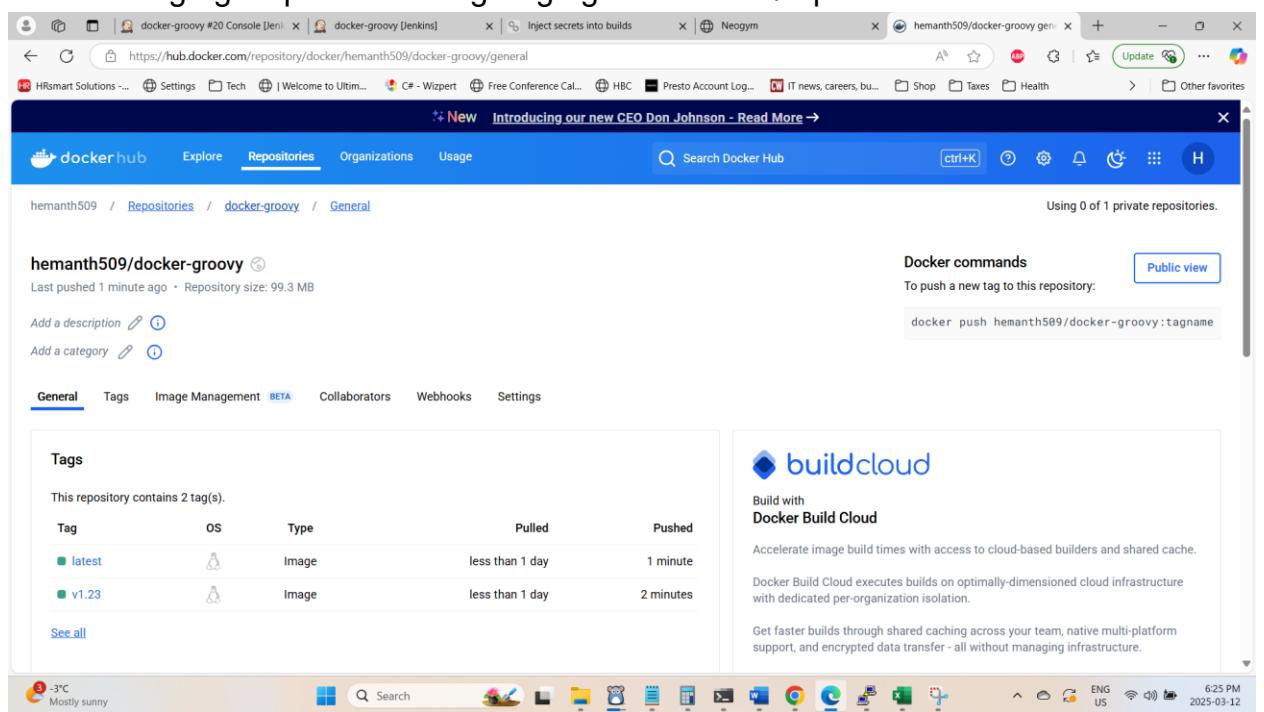
Pipeline Syntax

Save **Apply**

14. Build failed asking for repo info



15. Docker image gets pushed after giving right username/repo name



16.

```

ubuntu@ip-172-31-84-176:/var/lib$ cd ..
ubuntu@ip-172-31-84-176:/var$ cd ..
ubuntu@ip-172-31-84-176:$ ls
bin bin usr-is-merged boot dev etc home lib lib usr-is-merged lib64 lost+found media mnt opt proc root run sbin sbin usr-is-merged snap srv sys tmp usr var
ubuntu@ip-172-31-84-176:$ cd root
-bash: cd: root: Permission denied
ubuntu@ip-172-31-84-176:$ cd var
ubuntu@ip-172-31-84-176:/var$ ls
backups cache crash lib local lock log mail opt run snap spool temp
ubuntu@ip-172-31-84-176:/var$ pmcd
/var
ubuntu@ip-172-31-84-176:$ cd ..
ubuntu@ip-172-31-84-176:$ ls
bin bin usr-is-merged boot dev etc home lib lib usr-is-merged lib64 lost+found media mnt opt proc root run sbin sbin usr-is-merged snap srv sys temp usr var
ubuntu@ip-172-31-84-176:$ cd var
ubuntu@ip-172-31-84-176:$ ls
backups cache crash lib local lock log mail opt run snap spool temp
ubuntu@ip-172-31-84-176:$ cd lib/
ubuntu@ip-172-31-84-176:$ ls
PackageList apt cloud dhcpcd git jenkins man-db plymouth sudo ubuntu-advantage unattended-upgrades vim
amazon boldt command-not-found docker grub landscape misc polkit-1 shells.state sucatalog ubuntu-release-upgrader update-manager xml-core
apparmor ca-certificates-java containerd dpgk hibinit-agent libuidock os-prober private shin-signed systemd ucf update-notifier
apt-transport-https chrony docker fwupd ieee-data logrotate pam python snapd tpm udisks2 usb_modeswitch
ubuntu@ip-172-31-84-176:$ docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
docker-groovy v1.17 2ab205cfefbf 14 minutes ago 249MB
Hemanth/docker-groovy latest 2ab205cfefbf 14 minutes ago 249MB
Hemanth/docker-groovy v1.17 2ab205cfefbf 14 minutes ago 249MB
hello-world latest 74cc54e27dc4 7 weeks ago 16.1kB
ubuntu@ip-172-31-84-176:$ docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
Hemanth/docker-groovy v1.17 2ab205cfefbf 2 hours ago 249MB
Hemanth/docker-groovy v1.18 2ab205cfefbf 2 hours ago 249MB
Hemanth/docker-groovy v1.20 2ab205cfefbf 2 hours ago 249MB
Hemanth/docker-groovy v1.21 2ab205cfefbf 2 hours ago 249MB
Hemanth/docker-groovy v1.22 2ab205cfefbf 2 hours ago 249MB
hemanth599/docker-groovy latest 2ab205cfefbf 2 hours ago 249MB
hemanth599/docker-groovy v1.23 2ab205cfefbf 2 hours ago 249MB
docker-groovy v1.17 2ab205cfefbf 2 hours ago 249MB
docker-groovy v1.18 2ab205cfefbf 2 hours ago 249MB
docker-groovy v1.20 2ab205cfefbf 2 hours ago 249MB
docker-groovy v1.21 2ab205cfefbf 2 hours ago 249MB
docker-groovy v1.22 2ab205cfefbf 2 hours ago 249MB
hello-world latest 74cc54e27dc4 7 weeks ago 16.1kB
ubuntu@ip-172-31-84-176:$ docker image rm Hemanth/docker-groovy:v1.17
Error response from daemon: invalid reference format
ubuntu@ip-172-31-84-176:$ docker image rm Hemanth/docker-groovy
Error response from daemon: No such image: Hemanth/docker-groovy:latest
ubuntu@ip-172-31-84-176:$

```

Error after restarting

sudo: a terminal is required to read the password; either use the -S option to read from standard input or configure an askpass helper

S

terminal is required to read the password;

Instances | EC2 | us-east-1 docker-groovy [Jenkins] jenkins error terminal is required terminal is required to read the

Stage Logs (docker build image)

Shell Script -- sudo chmod 777 /var/run/docker.sock/ (self time 291ms)

```
+ sudo chmod 777 /var/run/docker.sock/
sudo: a terminal is required to read the password; either use the -S option to read from standard input or configure an askpass helper
sudo: a password is required
```

Stage View

	git checkout	docker build image	push images to dockerhub
Average stage times: (full run time: ~8s)	764ms	3s	7s
#27 09:47 No Changes	275ms	366ms failed	
#26 09:43 No Changes	318ms	372ms failed	
#25 09:43 No Changes	637ms	380ms failed	
#24 09:29 No Changes	1s	1s failed	

Builds

Build #	Timestamp	Changes
#27	09:47	No Changes
#26	09:43	No Changes

-5°C Partly sunny

Search

10:00 AM 2025-03-14

Not a directory error

Instances | EC2 | us-east-1 docker-groovy [Jenkins] jenkins error terminal is required terminal is required to read the

Stage Logs (docker build image)

Shell Script -- sudo chmod 777 /var/run/docker.sock/ (self time 365ms)

```
+ sudo chmod 777 /var/run/docker.sock/
chmod: cannot access '/var/run/docker.sock/': Not a directory
```

Changes

Stage View

	git checkout	docker build image	push images to dockerhub
Average stage times: (full run time: ~8s)	901ms	2s	7s
#28 10:01 No Changes	2s	458ms failed	
#27 09:47 No Changes	275ms	366ms failed	
#26 09:43 No Changes	318ms	372ms failed	
#25 09:43 No Changes	637ms	380ms failed	

Builds

Build #	Timestamp	Changes
#28	10:01	No Changes
#27	09:47	No Changes

-5°C Partly sunny

Search

10:02 AM 2025-03-14

```

/home/ubuntu
ubuntu@ip-172-31-84-176:~$ docker images
REPOSITORY          TAG      IMAGE ID      CREATED       SIZE
Hemanth/docker-groovy    v1.17    2ab205cfebff  43 hours ago  249MB
Hemanth/docker-groovy    v1.18    2ab205cfebff  43 hours ago  249MB
Hemanth/docker-groovy    v1.20    2ab205cfebff  43 hours ago  249MB
Hemanth/docker-groovy    v1.21    2ab205cfebff  43 hours ago  249MB
Hemanth/docker-groovy    v1.22    2ab205cfebff  43 hours ago  249MB
hemanth509/docker-groovy latest   2ab205cfebff  43 hours ago  249MB
hemanth509/docker-groovy v1.23    2ab205cfebff  43 hours ago  249MB
hemanth509/docker-groovy v1.29    2ab205cfebff  43 hours ago  249MB
docker-groovy           v1.17    2ab205cfebff  43 hours ago  249MB
docker-groovy           v1.18    2ab205cfebff  43 hours ago  249MB
docker-groovy           v1.20    2ab205cfebff  43 hours ago  249MB
docker-groovy           v1.21    2ab205cfebff  43 hours ago  249MB
docker-groovy           v1.22    2ab205cfebff  43 hours ago  249MB
hello-world             latest   74cc54e27dc4  7 weeks ago   10.1kB
ubuntu@ip-172-31-84-176:~$ docker rm Hemanth/docker-groovy
Error response from daemon: No such container: Hemanth/docker-groovy
ubuntu@ip-172-31-84-176:~$ docker image rm $JOB_NAME:v1.$BUILD_ID Hemanth/$JOB_N
AME:v1.$BUILD_ID hemanth509/$JOB_NAME:latest
Error response from daemon: invalid reference format
Error response from daemon: invalid reference format
Error response from daemon: invalid reference format
ubuntu@ip-172-31-84-176:~$ 

```

docker image rm docker-groovy:v1.31 Hemanth/docker-groovy:v1.31
hemanth509/docker-groovy:latest

\$JOB_NAME=docker-groovy

\$BUILD_ID= 30

sh 'docker image rm \$JOB_NAME:v1.\$BUILD_ID
Hemanth/\$JOB_NAME:v1.\$BUILD_ID hemanth509/\$JOB_NAME:latest'

docker image rm docker-groovy:v1.30 Hemanth/docker-groovy:v1.30
hemanth509/docker-groovy:latest

Remove Docker images when tagged

docker rmi fd484f19954f

docker rmi test1:latest

-The local images are now being deleted after pushing to docker hub

Instances | EC2 | us-east-1 docker-groovy [Jenkins] docker image rm | Docker Docs

Jenkins

Dashboard > docker-groovy >

docker-groovy

Stage View

	git checkout	docker build image	push images to dockerhub	delete local images
Average stage times: (full run time: ~6s)	882ms	2s	5s	231ms
#33 13:42 No Changes	693ms	2s	2s	332ms
#32 13:40 No Changes	767ms	3s	2s	49ms
#31 13:27 No Changes	784ms	3s	2s	48ms
#30 11:47 No Changes	782ms	3s	2s	359ms failed

Builds

- #33 13:42
- #32 13:40

Today: 6°C Mostly sunny

1:44 PM 2025-03-14

Inject secrets into builds Neogym How to Get Help in V... Inbox (64) - hemanth.vosy! 54.197.35.154 hemanth509/docker-groovy

dockerhub

Repositories

hemanth509 / Repositories / docker-groovy / General

hemanth509/docker-groovy

Last pushed 2 minutes ago • Repository size: 99.3 MB

Add a description Add a category

Docker commands

To push a new tag to this repository:

```
docker push hemanth509/docker-groovy:tagname
```

General Tags Image Management BETA Collaborators Webhooks Settings

Tags

This repository contains 7 tag(s).

Tag	OS	Type	Pulled	Pushed
latest	Ubuntu	Image	less than 1 day	2 minutes
v1.33	Ubuntu	Image	less than 1 day	2 minutes
v1.32	Ubuntu	Image	less than 1 day	3 minutes
v1.31	Ubuntu	Image	less than 1 day	16 minutes

buildcloud

Build with Docker Build Cloud

Accelerate image build times with access to cloud-based builders and shared cache.

Docker Build Cloud executes builds on optimally-dimensioned cloud infrastructure with dedicated per-organization isolation.

Get faster builds through shared caching across your team, native multi-platform support, and encrypted data transfer - all without managing infrastructure.

6°C Mostly sunny

1:44 PM 2025-03-14

```

ubuntu@ip-172-31-84-176:~ 
hello-world latest 74cc54e27dc4 7 weeks ago 10.1kB
ubuntu@ip-172-31-84-176:~$ docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
hemanth509/docker-groovy latest 2a205febff 45 hours ago 249MB
hemanth509/docker-groovy v1.31 2a205febff 45 hours ago 249MB
docker-groovy v1.31 2a205febff 45 hours ago 249MB
hello-world latest 74cc54e27dc4 7 weeks ago 10.1kB
ubuntu@ip-172-31-84-176:~$ docker image rm docker-groovy:v1.31 hemanth509/docker-groovy:latest
Untagged: docker-groovy:v1.31
Untagged: hemanth509/docker-groovy:latest
Error response from daemon: No such image: Hemanth/docker-groovy:v1.31
ubuntu@ip-172-31-84-176:~$ docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
hemanth509/docker-groovy v1.31 2a205febff 45 hours ago 249MB
hello-world latest 74cc54e27dc4 7 weeks ago 10.1kB
ubuntu@ip-172-31-84-176:~$ docker image rm docker-groovy:v1.31 hemanth509/docker-groovy:latest
Error response from daemon: No such image: docker-groovy:v1.31
Error response from daemon: No such image: hemanth/docker-groovy:v1.31
Error response from daemon: No such image: hemanth509/docker-groovy:latest
ubuntu@ip-172-31-84-176:~$ docker image rm hemanth509/docker-groovy:v1.31
Untagged: hemanth509/docker-groovy:v1.31
Untagged: hemanth509/docker-groovy@ha256:b5b38a9928c22512ea429a4558701afbba0f06c37ecf8bf6cd7dd81bfa8a304b
Deleted: sha256:2ab205cfabf1c2695372cza499cb5287deb46f97d6f6311f58b9d14ee48b89
ubuntu@ip-172-31-84-176:~$ docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
docker-groovy v1.32 2a205febff 46 hours ago 249MB
hemanth509/docker-groovy latest 2a205febff 46 hours ago 249MB
hemanth509/docker-groovy v1.32 2a205febff 46 hours ago 249MB
hello-world latest 74cc54e27dc4 7 weeks ago 10.1kB
ubuntu@ip-172-31-84-176:~$ docker image rm hemanth509/docker-groovy:v1.32
Untagged: hemanth509/docker-groovy:v1.32
Untagged: hemanth509/docker-groovy@ha256:b5b38a9928c22512ea429a4558701afbba0f06c37ecf8bf6cd7dd81bfa8a304b
ubuntu@ip-172-31-84-176:~$ docker image rm docker-groovy:v1.32
Untagged: docker-groovy:v1.32
Deleted: sha256:2ab205cfabf1c2695372cza499cb5287deb46f97d6f6311f58b9d14ee48b89
ubuntu@ip-172-31-84-176:~$ docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
hello-world latest 74cc54e27dc4 7 weeks ago 10.1kB
ubuntu@ip-172-31-84-176:~$ docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
hello-world latest 74cc54e27dc4 7 weeks ago 10.1kB
ubuntu@ip-172-31-84-176:~$ 

```

17. Configure SSH agent in Jenkins

Add a global user for SSH agent using private key

ID	Name	Kind	Description
Hemanth509	Hemanth509***** (user name)	Username with password	user name
HemanthSecretText	HemanthSecretText	Secret text	HemanthSecretText
ssh_webapp_-_erver	ubuntu (webapp-server)	SSH Username with private key	webapp-server



18.Update the stage for SSH credentials and run the build

The screenshot shows the Jenkins Pipeline configuration page for a job named 'docker-groovy'. The left sidebar has tabs for General, Triggers, Pipeline (which is selected), and Advanced. The main area is titled 'Pipeline' with the sub-instruction 'Define your Pipeline using Groovy directly or pull it from source control.' Below this is a 'Definition' section with a dropdown set to 'Pipeline script'. The script editor contains the following Groovy code:

```
19
20
21
22+     }
23+
24     sh 'docker image rm $JOB_NAME:v1.$BUILD_ID hemanth509/$JOB_NAME:v1.$BUILD_ID hemanth509/$JOB_NAME:latest'
25+
26+   stage('connect to webapp via ssh'){
27
28     def docker_run = 'docker run -itd --name scriptedcontainer -p 9000:80 hemanth509/docker-groovy'
29+
30     sshagent(['ssh_webapp_server']) {
31       sh "ssh -o StrictHostKeyChecking=no ubuntu@172.31.93.47 ${docker_run}"
32       sh 'sudo chmod 777 /var/run/docker.sock'
33     }
34   }
35 }
```

Below the script editor are two buttons: 'Save' and 'Apply'. At the bottom of the window is a standard Windows taskbar with icons for Start, Search, File Explorer, Google Chrome, and others.

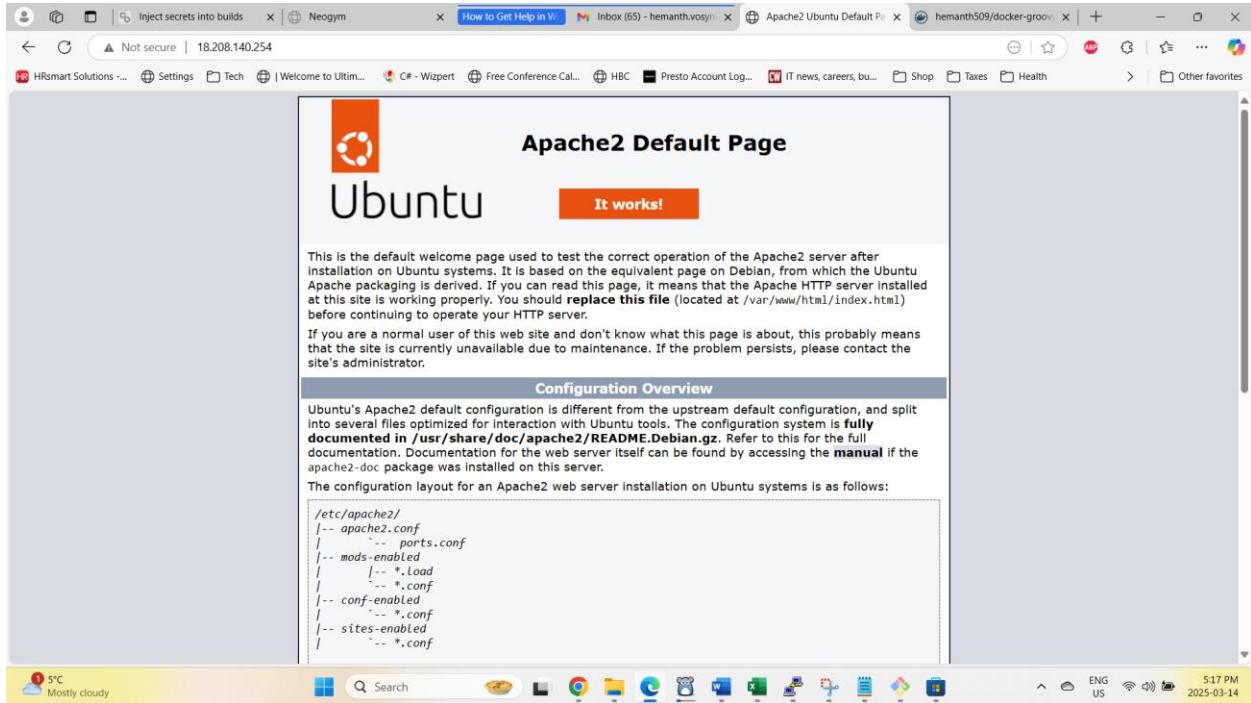
Build FAILED

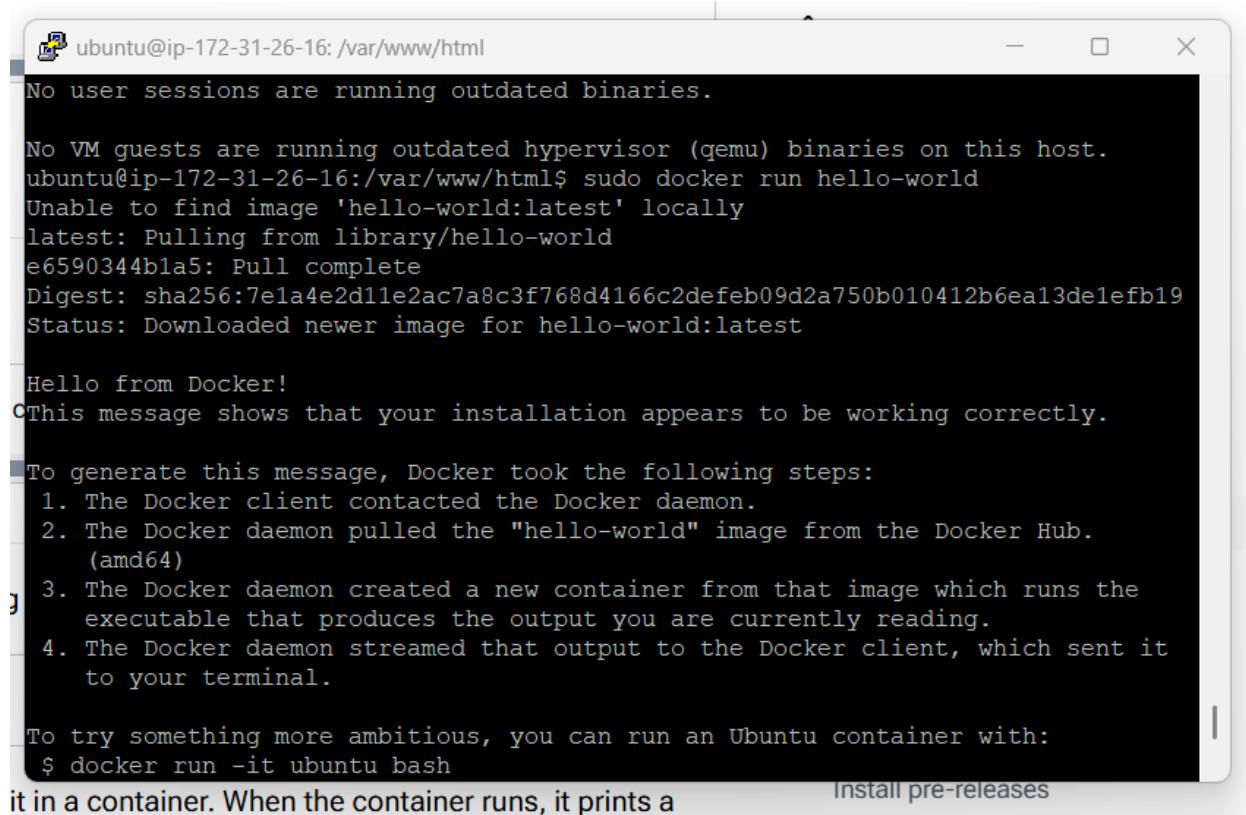
The screenshot shows the Jenkins console output for build #35 of the 'docker-groovy' job. The output text is as follows:

```
Untagged: docker-groovy:v1.35
Untagged: hemanth509/docker-groovy:v1.35
Untagged: hemanth509/docker-groovy:latest
Untagged: hemanth509/docker-groovy@sha256:b9b38a9928ce22512e4a29a4558701afbbaf06c37ecf8bfecd7dd81bfa8a304b
Deleted: sha256:2ab205cfef1c2695372c2a499bc5207deb4ef07d6f6311f58b9d14ee48b89
[Pipeline]
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (connect to webapp via ssh)
[Pipeline] sshagent
[ssh-agent] Using credentials ubuntu (webapp-server)
$ ssh-agent
SSH_AUTH_SOCK=/tmp/ssh-x1JShy6FDQkg/agent.5071
SSH_AGENT_PID=5074
Running ssh-add (command line suppressed)
Error loading key "/var/lib/jenkins/workspace/docker-groovy@tmp/private_key_559185459520750250.key": error in libcrypto
[Pipeline] // sshagent
[Pipeline]
[Pipeline] // stage
[Pipeline]
[Pipeline] // node
[Pipeline] End of Pipeline
ERROR: Failed to run ssh-add
Finished: FAILURE
```

At the bottom right of the window, it says 'REST API Jenkins 2.492.2'. The bottom of the screen shows a Windows taskbar with icons for Start, Search, File Explorer, Google Chrome, and others.

As the pem is missing for the EC2 instance, recreated new instance and installed docker and apache 2





ubuntu@ip-172-31-26-16: /var/www/html

```
No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-26-16:/var/www/html$ sudo docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
e6590344b1a5: Pull complete
Digest: sha256:7e1a4e2d11e2ac7a8c3f768d4166c2defeb09d2a750b010412b6ea13de1efb19
Status: Downloaded newer image for hello-world:latest

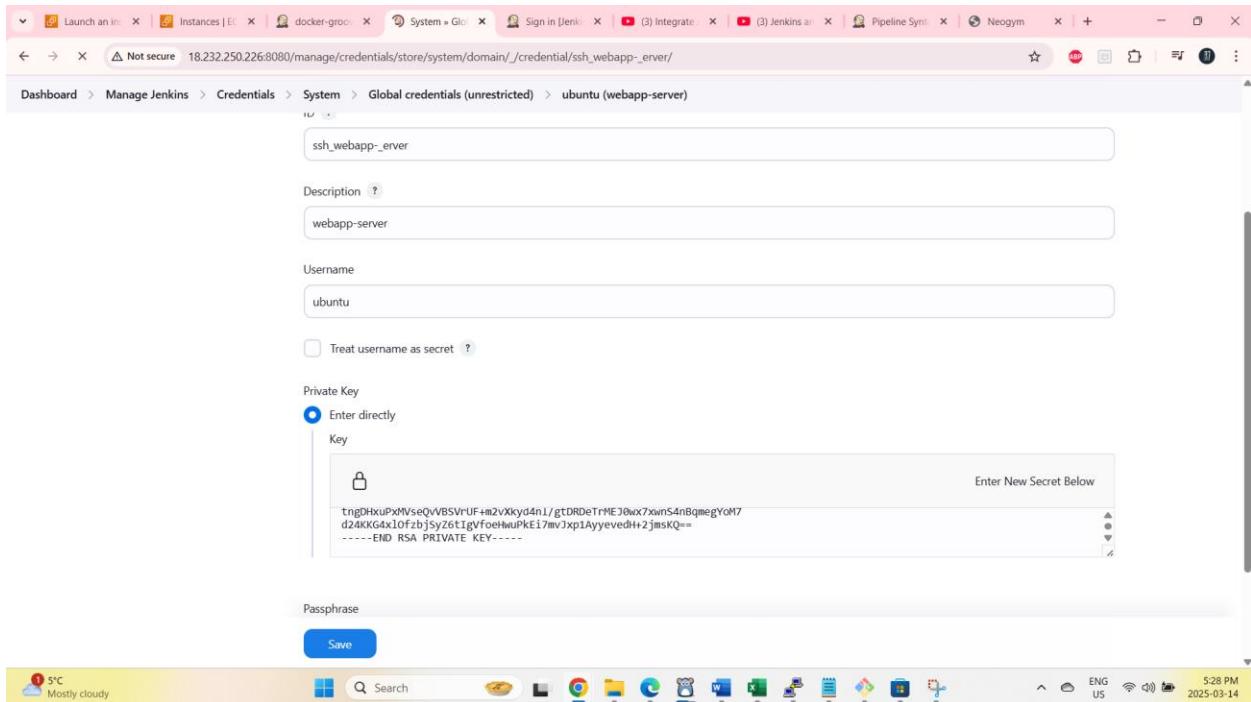
Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
1. The Docker client contacted the Docker daemon.
2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
   (amd64)
3. The Docker daemon created a new container from that image which runs the
   executable that produces the output you are currently reading.
4. The Docker daemon streamed that output to the Docker client, which sent it
   to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash
```

it in a container. When the container runs, it prints a [Install pre-releases](#)

Update the credentials with .pem key private key



Code

```
node {  
    stage('git checkout'){  
        git 'https://github.com/hemanthSel/Jenkins-Docker-Project.git'  
    }  
    stage('docker build image'){  
        sh 'sudo chmod 777 /var/run/docker.sock'  
        sh 'docker image build -t $JOB_NAME:v1.$BUILD_ID .'  
        sh 'docker image tag $JOB_NAME:v1.$BUILD_ID  
hemanth509/$JOB_NAME:v1.$BUILD_ID'  
        sh 'docker image tag $JOB_NAME:v1.$BUILD_ID  
hemanth509/$JOB_NAME:latest'  
    }  
}
```

```

stage('push images to dockerhub'){

    withCredentials([string(credentialsId: 'HemanthSecretText', variable: 'DockerPwd')]) {
        //double quotes to fetch value
        sh "docker login -u hemanth509 -p ${DockerPwd}"
        sh 'docker image push hemanth509/$JOB_NAME:v1.$BUILD_ID'
        sh 'docker image push hemanth509/$JOB_NAME:latest'

    }

}

stage('delete local images'){

    sh 'docker image rm $JOB_NAME:v1.$BUILD_ID
hemanth509/$JOB_NAME:v1.$BUILD_ID hemanth509/$JOB_NAME:latest'
}

stage('connect to webapp via ssh'){

    def docker_run = 'sudo docker run -itd -p 9000:80 hemanth509/docker-groovy'
    //def docker_rmv_container = 'docker rm -f
    def docker.rmi = 'docker rmi -f hemanth509/docker-groovy'

    sshagent(['ssh_webapp-erver']) {
        sh 'docker pull hemanth509/docker-groovy:latest'
        sh "ssh -o StrictHostKeyChecking=no ubuntu@18.208.140.254 ${docker_run}"

        //sh 'docker ps -a'
        // ${docker_run}"
    }
}

```

```
}
```

```
}
```

```
}
```

Docker list of images

```
[permission denied]
ubuntu@ip-172-31-26-16:~$ sudo docker images
REPOSITORY          TAG      IMAGE ID      CREATED       SIZE
nemanth509/docker-groovy    latest   2ab205cfefbf  3 days ago   249MB
hello-world          latest   74cc54e27dc4  7 weeks ago  10.1kB
ubuntu@ip-172-31-26-16:~$ 
```

image published

```
ubuntu@ip-172-31-26-16:~$ c^C
ubuntu@ip-172-31-26-16:~$ sudo docker run -p 8080:5000 nemanth509/docker-groovy
[Sat Mar 15 21:16:10.634147 2025] [core:warn] [pid 1] AH00111: Config variable ${APACHE_RUN_DIR} is not defined
apache2: Syntax error on line 80 of /etc/apache2/apache2.conf: DefaultRuntimeDir must be a valid directory, absolute or relative to ServerRoot
ubuntu@ip-172-31-26-16:~$ 
```

Find the value of the variable in the **apache configuration file**

```
export APACHE_RUN_DIR=/var/run/apache2$SUFFIX
```

```
ubuntu@ip-172-31-26-16:/var/run/apache2$ source /etc/apache2/envvars
ubuntu@ip-172-31-26-16:/var/run/apache2$ apache2 -S
VirtualHost configuration:
*:80                  ip-172-31-26-16.ec2.internal (/etc/apache2/sites-enabled/000-default.conf:1)
ServerRoot: "/etc/apache2"
Main DocumentRoot: "/var/www/html"
Main ErrorLog: "/var/log/apache2/error.log"
Mutex default: dir="/var/run/apache2/" mechanism=default
Mutex watchdog-callback: using_defaults
PidFile: "/var/run/apache2/apache2.pid"
Define: DUMP_VHOSTS
Define: DUMP_RUN_CFG
User: name="www-data" id=33 not_used
Group: name="www-data" id=33 not_used
ubuntu@ip-172-31-26-16:/var/run/apache2$ 
```

Tried workaround but not working

<https://askubuntu.com/questions/927355/ubuntu-apache2-defaultrunimedir-must-be-a-valid-directory-absolute-or-relative>

```
ubuntu@ip-172-31-26-16:/var/run/apache2$ Define: DUMP_VHOSTS
Define: DUMP_RUN_CFG
User: name="www-data" id=33 not used
Group: name="www-data" id=33 not used
ubuntu@ip-172-31-26-16:/var/run/apache2$ sudo docker run -p 8080:5000 hemanth509/docker-groovy
[Sat Mar 15 21:35:53.646130 2025] [core:warn] [pid 1] AH00111: Config variable ${APACHE_RUN_DIR} is not defined
apache2: Syntax error on line 80 of /etc/apache2/apache2.conf: DefaultRuntimeDir must be a valid directory, absolute or relative to ServerRoot
ubuntu@ip-172-31-26-16:/var/run/apache2$ sudo systemctl apache2ctl
Unknown command verb 'apachectl'
ubuntu@ip-172-31-26-16:/var/run/apache2$ sudo systemctl apache2
Unknown command verb 'apache2', did you mean 'check'?
ubuntu@ip-172-31-26-16:/var/run/apache2$ sudo apt update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Hit:4 https://download.docker.com/linux/ubuntu noble InRelease [126 kB]
Get:5 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [151 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [364 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [121 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [10 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main i386 Components [206 kB]
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [20.0 kB]
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 Components [216 kB]
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 kB]
Get:14 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [8976 kB]
Get:15 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [51.9 kB]
Get:16 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Components [212 kB]
Get:17 http://security.ubuntu.com/ubuntu noble-security/multiverse amd64 Components [208 kB]
Fetched 977 kB in 1s (892 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
99 packages can be upgraded. Run 'apt list --upgradable' to see them.
ubuntu@ip-172-31-26-16:/var/run/apache2$ 
ubuntu@ip-172-31-26-16:/var/run/apache2$ sudo apt-get install apache2ctl
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
E: Unable to locate package apache2ctl
ubuntu@ip-172-31-26-16:/var/run/apache2$ sudo apt-get install apachectl
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
E: Unable to locate package apachectl
ubuntu@ip-172-31-26-16:/var/run/apache2$ apache2 -v
Server version: Apache/2.4.58 (Ubuntu)
Server built: 2024-10-02T11:40:51
ubuntu@ip-172-31-26-16:/var/run/apache2$
```

```
ubuntu@ip-172-31-26-16:/var/run/apache2$ sudo docker images
REPOSITORY          TAG      IMAGE ID   CREATED        SIZE
hemanth509/docker-groovy    latest   2ab205cfefbf  3 days ago   249MB
hello-world         latest   74cc54e27dc4  7 weeks ago  10.1kB
ubuntu@ip-172-31-26-16:/var/run/apache2$ sudo docker run -d hemanth509/docker-groovy:latest
326ad0574c1b5e58300804244f4bbc78ed673e593ff8ce61fd4d936d6b096f8
ubuntu@ip-172-31-26-16:/var/run/apache2$ docker ps
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "http://%2Fvar%2Frun%2Fdocker
r.sock": connect: permission denied
ubuntu@ip-172-31-26-16:/var/run/apache2$ sudo docker ps
CONTAINER ID   IMAGE   COMMAND   CREATED   STATUS    PORTS   NAMES
ubuntu@ip-172-31-26-16:/var/run/apache2$
```

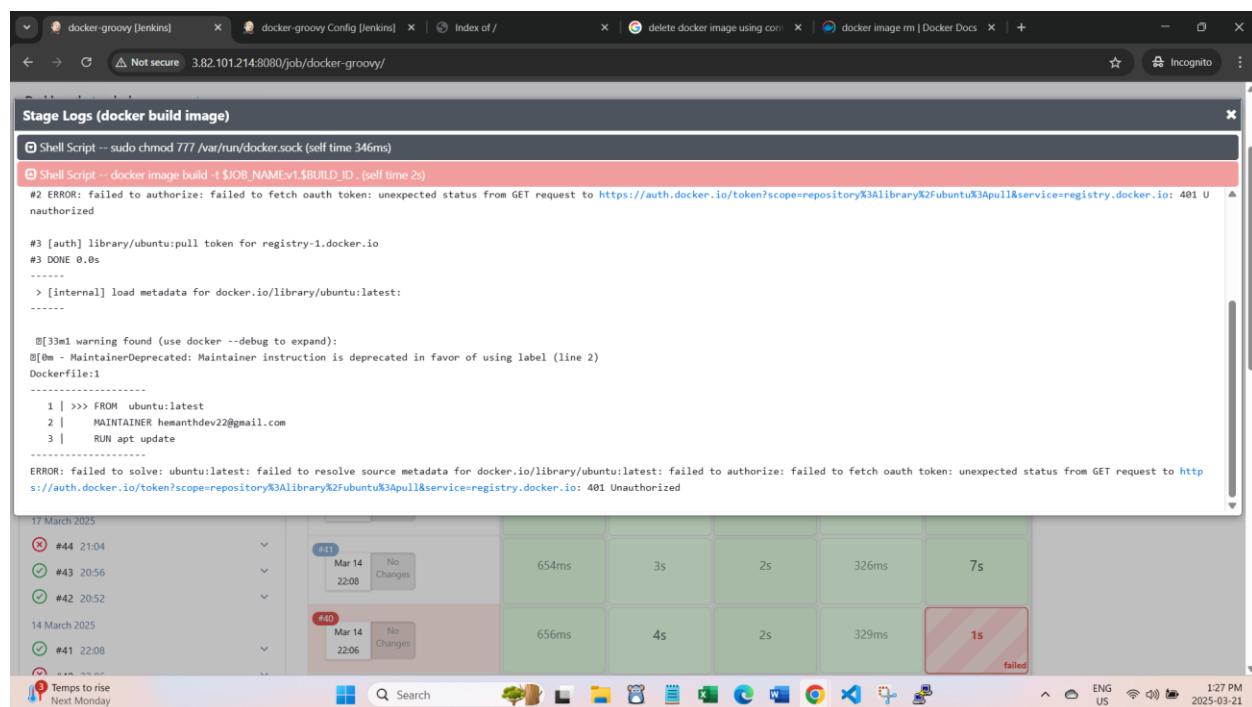
2ab205cfefbf

```

ubuntu@ip-172-31-26-16:/ 
cfb742b6956ba982e0b92e4a85dc80c26cd5a0593e016f8c50b63232eeb5c8f7
docker: Error response from daemon: failed to set up container networking: driver failed programming external connectivity on endpoint nervous_fermi (39ba44df55442ab8ccf397a2064e649a8942e09
15508e5653c0ff643a6cbf): failed to bind host port for 0.0.0.0:80:172.17.0.2:5000/tcp: address already in use

Run 'docker run --help' for more information
ubuntu@ip-172-31-26-16:/ $ c
ubuntu@ip-172-31-26-16:/ $ sudo docker run -d -p 8080:5000 hemanth509/docker-groovy:latest
69a042ec071d2d46549d4dd3b3d3d87f8a0f1ab664a940d4e012
ubuntu@ip-172-31-26-16:/ $ sudo docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
ubuntu@ip-172-31-26-16:/ $ sudo netstat -tulnp | grep :80
sudo: netstat: command not found
ubuntu@ip-172-31-26-16:/ $ sudo docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
69a042ec071d hemanth509/docker-groovy:latest "/usr/sbin/apache2 -" 5 minutes ago Exited (1) 5 minutes ago
cfb742b6956ba982e0b92e4a85dc80c26cd5a0593e016f8c50b63232eeb5c8f7
hemanth509/docker-groovy:latest "/usr/sbin/apache2 -" 6 minutes ago Created
530830ef501c 2ab205cebf " /usr/sbin/apache2 -" About an hour ago Exited (1) 31 minutes ago
af4477192dc3 2ab205cebf " /usr/sbin/apache2 -" About an hour ago Exited (1) About an hour ago
326ad0574cc1 hemanth509/docker-groovy:latest "/usr/sbin/apache2 -" 4 hours ago Exited (1) 4 hours ago
db5498e5993 hemanth509/docker-groovy "/usr/sbin/apache2 -" 5 hours ago Exited (1) 5 hours ago
4580d7dc9c412 hemanth509/docker-groovy "/usr/sbin/apache2 -" 5 hours ago Exited (1) 5 hours ago
871c12b9833 hemanth509/docker-groovy:latest "/usr/sbin/apache2 -" 5 hours ago Exited (1) 5 hours ago
79dc4a4eb526 hemanth509/docker-groovy:latest "/bin/bash" 5 hours ago Exited (130) 5 hours ago
hemanth509/docker-groovy:latest "/bin/bash" 6 hours ago Exited (127) 6 hours ago
la38666d17d9 hemanth509/docker-groovy:latest "/bin/bash" 6 hours ago Created
559a81e520d hemanth509/docker-groovy "/usr/sbin/apache2 -" 24 hours ago Exited (1) 24 hours ago
f4fc53b5f21 hemanth509/docker-groovy "/usr/sbin/apache2 -" 24 hours ago Exited (0) 24 hours ago
66de99e02ae hello-world "/hello" 29 hours ago Exited (0) 29 hours ago
ubuntu@ip-172-31-26-16:/ $ sudo docker start 69a042ec071d
69a042ec071d
ubuntu@ip-172-31-26-16:/ $ sudo docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
ubuntu@ip-172-31-26-16:/ $ sudo docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
69a042ec071d hemanth509/docker-groovy:latest "/usr/sbin/apache2 -" 9 minutes ago Exited (1) 10 seconds ago
cfb742b6956ba982e0b92e4a85dc80c26cd5a0593e016f8c50b63232eeb5c8f7
hemanth509/docker-groovy:latest "/usr/sbin/apache2 -" 10 minutes ago Created
530830ef501c 2ab205cebf " /usr/sbin/apache2 -" About an hour ago Exited (1) 35 minutes ago
af4477192dc3 2ab205cebf " /usr/sbin/apache2 -" About an hour ago Exited (1) About an hour ago
326ad0574cc1 hemanth509/docker-groovy:latest "/usr/sbin/apache2 -" 4 hours ago Exited (1) 4 hours ago
db5498e5993 hemanth509/docker-groovy "/usr/sbin/apache2 -" 5 hours ago Exited (1) 5 hours ago
4580d7dc9c412 hemanth509/docker-groovy "/usr/sbin/apache2 -" 5 hours ago Exited (1) 5 hours ago
871c12b9833 hemanth509/docker-groovy:latest "/usr/sbin/apache2 -" 5 hours ago Exited (1) 5 hours ago
79dc4a4eb526 hemanth509/docker-groovy:latest "/bin/bash" 5 hours ago Exited (130) 5 hours ago
hemanth509/docker-groovy:latest "/bin/bash" 6 hours ago Exited (127) 6 hours ago
la38666d17d9 hemanth509/docker-groovy:latest "/bin/bash" 6 hours ago Created
559a81e520d hemanth509/docker-groovy "/usr/sbin/apache2 -" 6 hours ago Exited (1) 24 hours ago
f4fc53b5f21 hemanth509/docker-groovy "/usr/sbin/apache2 -" 24 hours ago Exited (0) 24 hours ago
66de99e02ae hello-world "/hello" 29 hours ago Exited (0) 29 hours ago
ubuntu@ip-172-31-26-16:/ $ 

```



New domain

Domain Name ?
DOCK_CRED

Description ?
DOCK_CRED

Specification ?
Docker Server Credentials

Add ▾

Create

```
USING WEB-BASED LOGIN

Info → To sign in with credentials on the command line, use 'docker login -u <username>'

Your one-time device confirmation code is: VBQB-DNFD
Press ENTER to open your browser or submit your device code here: https://login.docker.com/activate

Waiting for authentication in the browser...

docker login -u hemanth509
^Clogin canceled
ubuntu@ip-172-31-84-176:~$ docker login -u hemanth509 -p Twilight@402
WARNING! Using --password via the CLI is insecure. Use --password-stdin.

WARNING! Your credentials are stored unencrypted in '/home/ubuntu/.docker/config.json'.
Configure a credential helper to remove this warning. See
https://docs.docker.com/go/credential-store/

Login Succeeded
ubuntu@ip-172-31-84-176:~$
```

Login succeeded

Added SSH user and private key

The screenshot shows the Jenkins Global credentials configuration page. A new credential named "SSH_WEBAPP_VM" is being created. The "Description" is "TO CONNECT TO THE UBUNTU WEBAPP VM". The "Username" is "ubuntu". The "Private Key" section has "Enter directly" selected and contains the following RSA private key:

```
tngDhxuPxMvseQvB5VrUF+m2vXkyd4n1/gtDRDeTrME30wx7xvnS4nBqmegYoM7  
d24KG4xJ0fzbjSyZ6tgvFoHwUPkE17mVJxp1AyyevedH+2JmsKQ==  
-----END RSA PRIVATE KEY-----
```

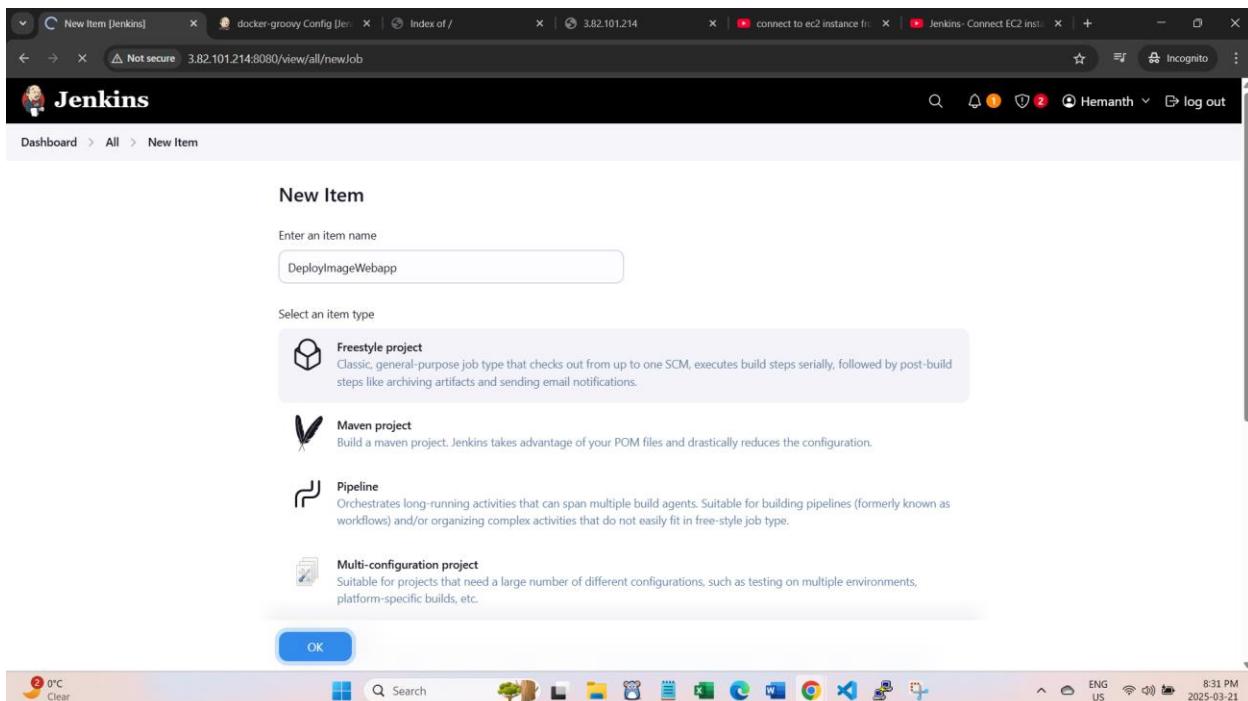
A "Create" button is visible at the bottom left.

SSH connectin successful

The screenshot shows the Jenkins System configuration page. Under "Port", "22" is entered. Under "Credentials", "ubuntu (TO CONNECT TO THE UBUNTU WEBAPP VM)" is selected. Under "serverAliveInterval", there is a text input field. Under "timeout", there is a text input field. At the bottom right, a "Check connection" button is visible. Below the form, a message says "Successful connection". At the very bottom, there are "Save" and "Apply" buttons.

Setup SSH remote server

Deploy new pipeline



New Item

Enter an item name
DeployImageWebapp

Select an item type

Freestyle project
Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.

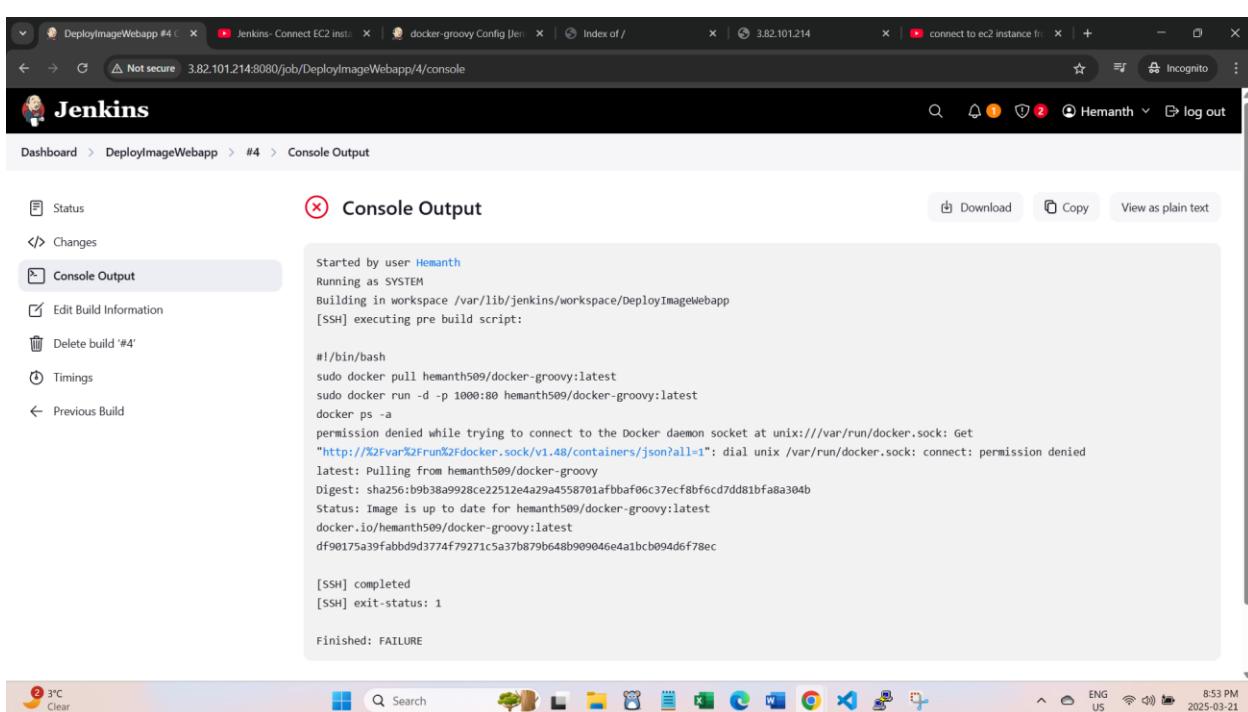
Maven project
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.

Pipeline
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

Multi-configuration project
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

OK

0°C Clear 8:31 PM 2025-03-21



Status Changes Console Output Edit Build Information Delete build #4 Timings Previous Build

Console Output

Started by user Hemanth
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/DeployImageWebapp
[SSH] executing pre build script:

```
#!/bin/bash
sudo docker pull hemanth509/docker-groovy:latest
sudo docker run -d -p 1000:80 hemanth509/docker-groovy:latest
docker ps -a
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "http://%/var%2frun%2fdocker.sock/v1.48/containers/json?all=1": dial unix /var/run/docker.sock: connect: permission denied
latest: Pulling from hemanth509/docker-groovy
Digest: sha256:b9b38a9928ce22512e4a29a4558701afbbaf06c37ecf8bf6cd7dd81bfa8a304b
Status: Image is up to date for hemanth509/docker-groovy:latest
docker.io/hemanth509/docker-groovy:latest
df90175a39fabbd9d3774f79271c5a37b879b648b909046e4a1bcba94d6f78ec

[SSH] completed
[SSH] exit-status: 1
```

Finished: FAILURE

3°C Clear 8:53 PM 2025-03-21

Deploy pipeline content

Screenshot of a Jenkins configuration page for a job named "DeployImageWebapp". The "Configuration" tab is selected. Under the "Environment" section, the "Execute shell script on remote host using ssh" checkbox is checked, and the "SSH site" dropdown is set to "ubuntu@52.204.125.1522". The "Pre build script" field contains the following command:

```
#!/bin/bash
sudo chmod 777 /var/run/docker.sock
sudo docker pull hemanth509/docker-groovy:latest
sudo docker run -d -p 1000:80 hemanth509/docker-groovy:latest
docker ps -a
```

The "Post build script" field is empty.

At the bottom, there are "Save" and "Apply" buttons.

Error In Jenkins server -docker logs

Screenshot of a terminal window showing Docker logs. The user runs "docker ps" and "sudo docker logs" to inspect container logs. The logs show several Apache containers starting up and failing due to a missing configuration variable.

```
Usage: docker [OPTIONS] COMMAND [ARG...]
Run 'docker --help' for more information
ubuntu@ip-172-31-84-176:~$ docker login -u hemanth509 -p Twilight#462
WARNING! Using --password via the CLI is insecure. Use --password-stdin.
Login Succeeded
ubuntu@ip-172-31-84-176:~$ sudo docker run -dit docker-groovy:latest
Unable to find image 'docker-groovy:latest' locally
docker: Error response from daemon: pull access denied for docker-groovy, repository does not exist or may require 'docker login': denied: requested access to the resource is denied

Run 'docker run --help' for more information
ubuntu@ip-172-31-84-176:~$ sudo docker run -dit hemanth509/docker-groovy:latest
3afc288cbe605cb456466bfe7e54d77eaaf1422b5e8a364d31599f4c8295df
ubuntu@ip-172-31-84-176:~$ docker ps
permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "http://%2Fvar%2Frun%2Fdocker.sock/v1.48/containers/json": dial unix /var/run/docker.sock: connect: permission denied
ubuntu@ip-172-31-84-176:~$ sudo docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
ubuntu@ip-172-31-84-176:~$ sudo docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
3afc288cbe605cb456466bfe7e54d77eaaf1422b5e8a364d31599f4c8295df hemanth509/docker-groovy:latest "/usr/bin/apache2 -DFOREGROUND" 35 seconds ago Exited (1) 34 seconds ago
3afc288cbe605cb456466bfe7e54d77eaaf1422b5e8a364d31599f4c8295df hemanth509/docker-groovy:latest "bash" 35 seconds ago Exited (1) 34 seconds ago
vibrant_dubinsky
epic_black
gracious_brown
nifty_lichterman
silly_kare
exciting_newton
eager_moore
ubuntu@ip-172-31-84-176:~$ sudo docker run -dit debian
2260b1de011ce55e1943b4c8dc4ffaf807bd379a361e7441d62ebbae3d7726
ubuntu@ip-172-31-84-176:~$ sudo docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
2260b1de011ce55e1943b4c8dc4ffaf807bd379a361e7441d62ebbae3d7726 debian "/bin/bash" 3 seconds ago Up 2 seconds
mystifying_raman
vibrant_dubinsky
epic_black
gracious_brown
nifty_lichterman
silly_kare
exciting_newton
eager_moore
ubuntu@ip-172-31-84-176:~$ sudo docker logs 3afc288cbe60
[Mon Mar 24 14:19:13.754585 2025] [core:warn] [pid 1] AH00111: Config variable ${APACHE_RUN_DIR} is not defined
apache2: Syntax error on line 88 of /etc/apache2/apache2.conf: DefaultRuntimeDir must be a valid directory, absolute or relative to ServerRoot
ubuntu@ip-172-31-84-176:~$ C
ubuntu@ip-172-31-84-176:~$
```