Table of Contents

Installation

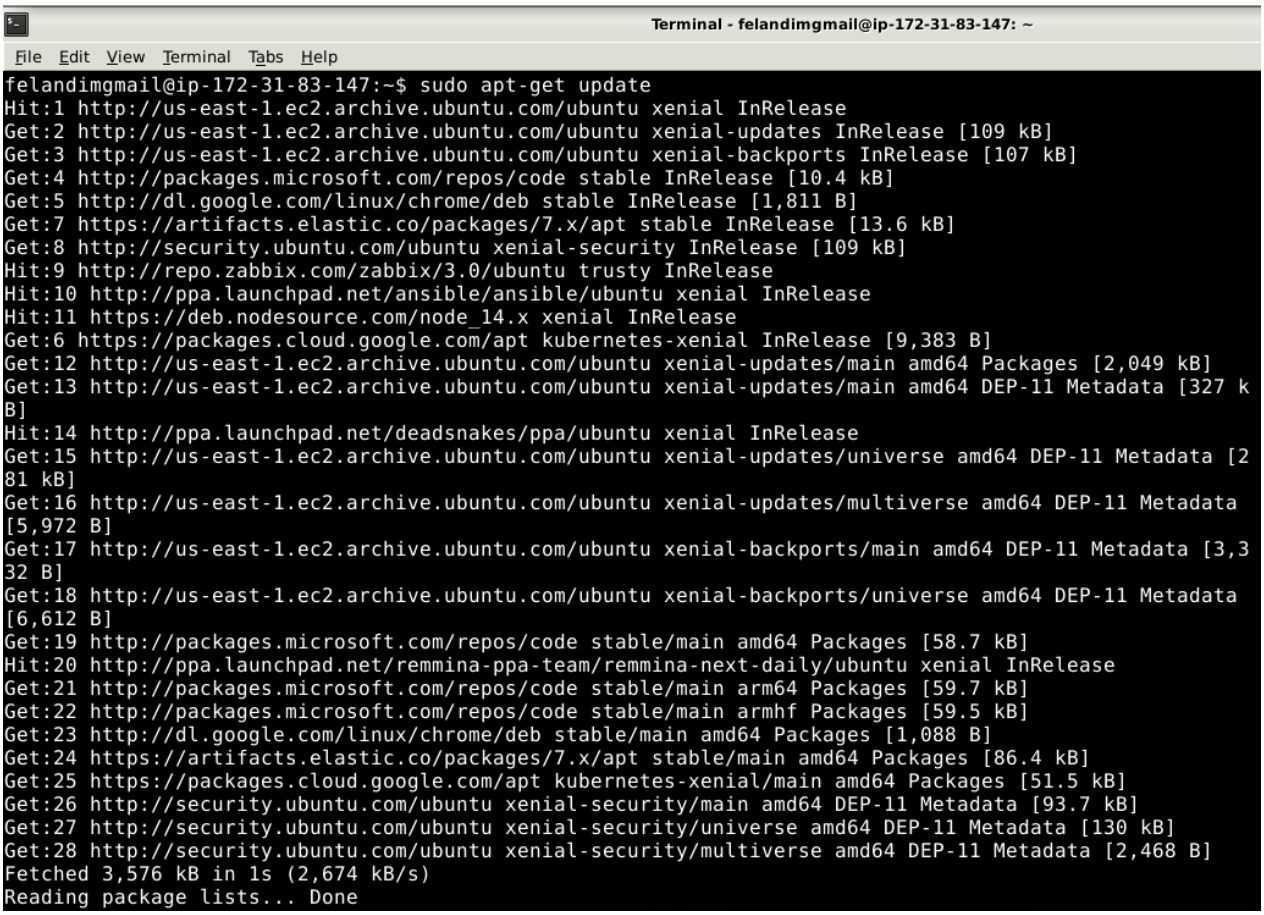
Before demonstrating the continuous integration and delivery by building a Docker Jenkins Pipeline, is necessary to perform the installation of each program that need to use.

Because of that, is necessary to install Jenkins, Docker and Git.

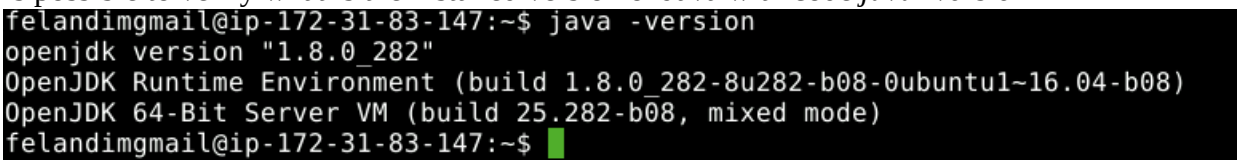
Java Run Time

First important item about these processes, JRE is very important for all artifacts, because of this, this is the first step.

sudo apt-get update



Is possible to verify what is the installed version of Java with code *java -version*



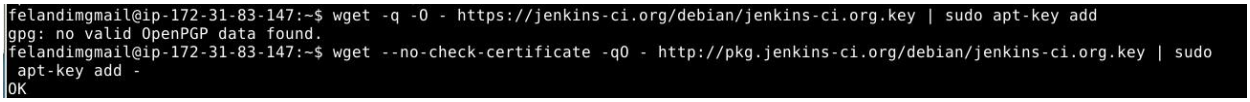
Jenkins Instalation

On the same terminal that executes the java installation, can be execute the Jenkins installation, with the command:

wget -q -O - https://jenkins-ci.org/debian/jenkins-ci.org.key | sudo apt-key add

if receives the message: *gpg: no valid OpenPGP data found.*

This problem might occur if you are behind corporate proxy and corporation uses its own certificate. Just add "--no-check-certificate" in the command. e.g. ***wget --no-check-certificate -qO - http://pkg.jenkins-ci.org/debian/jenkins-ci.org.key | sudo apt-key add***



And run the command ***sudo sh -c 'echo deb http://pkg.jenkins-ci.org/debian binary/ > /etc/apt/sources.list.d/jenkins.list'*** *and after the command* ***sudo apt-get update***

Has installed all pre-requisites to install Jenkins, to install Jenkins execute the command ***sudo apt-get install jenkins***

```
felandimgmail@ip-172-31-83-147:~$ sudo apt-get install jenkins
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages will be upgraded:
  jenkins
1 upgraded, 0 newly installed, 0 to remove and 78 not upgraded.
Need to get 73.1 MB of archives.
After this operation, 2,653 kB of additional disk space will be used.
Get:1 http://pkg.jenkins-ci.org/debian binary/ jenkins 2.324 [73.1 MB]
Fetched 73.1 MB in 3s (20.1 MB/s)
(Reading database ... 236528 files and directories currently installed.)
Preparing to unpack .../archives/jenkins_2.324_all.deb ...
Unpacking jenkins (2.324) over (2.277.2) ...
Processing triggers for ureadahead (0.100.0-19.1) ...
Processing triggers for systemd (229-4ubuntu21.27) ...
Setting up jenkins (2.324) ...
felandimgmail@ip-172-31-83-147:~$
```

After Jenkins installation, is necessary to start the Jenkins, execute following command:

sudo systemctl start jenkins

To verify the start status of Jenkins, execute the following command

sudo systemctl status jenkins

```
felandimgmail@ip-172-31-83-147:/$ sudo systemctl status jenkins
● jenkins.service - LSB: Start Jenkins at boot time
   Loaded: loaded (/etc/init.d/jenkins; bad; vendor preset: enabled)
   Active: active (exited) since Fri 2021-12-10 01:18:33 UTC; 21s ago
     Docs: man:systemd-sysv-generator(8)

Dec 10 01:18:32 ip-172-31-83-147 systemd[1]: Starting LSB: Start Jenkins at boot
Dec 10 01:18:32 ip-172-31-83-147 jenkins[19701]: Correct java version found
Dec 10 01:18:32 ip-172-31-83-147 jenkins[19701]:  * Starting Jenkins Automation
Dec 10 01:18:32 ip-172-31-83-147 su[19742]: Successful su for jenkins by root
Dec 10 01:18:32 ip-172-31-83-147 su[19742]: + ??? root:jenkins
Dec 10 01:18:32 ip-172-31-83-147 su[19742]: pam_unix(su:session): session opened
Dec 10 01:18:33 ip-172-31-83-147 jenkins[19701]:    ...done.
Dec 10 01:18:33 ip-172-31-83-147 systemd[1]: Started LSB: Start Jenkins at boot
Dec 10 01:18:44 ip-172-31-83-147 systemd[1]: Started LSB: Start Jenkins at boot
lines 1-14/14 (END)...skipping...
● jenkins.service - LSB: Start Jenkins at boot time
   Loaded: loaded (/etc/init.d/jenkins; bad; vendor preset: enabled)
   Active: active (exited) since Fri 2021-12-10 01:18:33 UTC; 21s ago
     Docs: man:systemd-sysv-generator(8)

Dec 10 01:18:32 ip-172-31-83-147 systemd[1]: Starting LSB: Start Jenkins at boot time...
Dec 10 01:18:32 ip-172-31-83-147 jenkins[19701]: Correct java version found
Dec 10 01:18:32 ip-172-31-83-147 jenkins[19701]:  * Starting Jenkins Automation Server jenkins
Dec 10 01:18:32 ip-172-31-83-147 su[19742]: Successful su for jenkins by root
Dec 10 01:18:32 ip-172-31-83-147 su[19742]: + ??? root:jenkins
Dec 10 01:18:32 ip-172-31-83-147 su[19742]: pam_unix(su:session): session opened for user jenkins by (uid=0)
Dec 10 01:18:33 ip-172-31-83-147 jenkins[19701]:    ...done.
Dec 10 01:18:33 ip-172-31-83-147 systemd[1]: Started LSB: Start Jenkins at boot time.
Dec 10 01:18:44 ip-172-31-83-147 systemd[1]: Started LSB: Start Jenkins at boot time.
```

When Jenkins has installed, Jenkins generated an initial admin password, because of that is necessary to copy this password after access Jenkins local website.

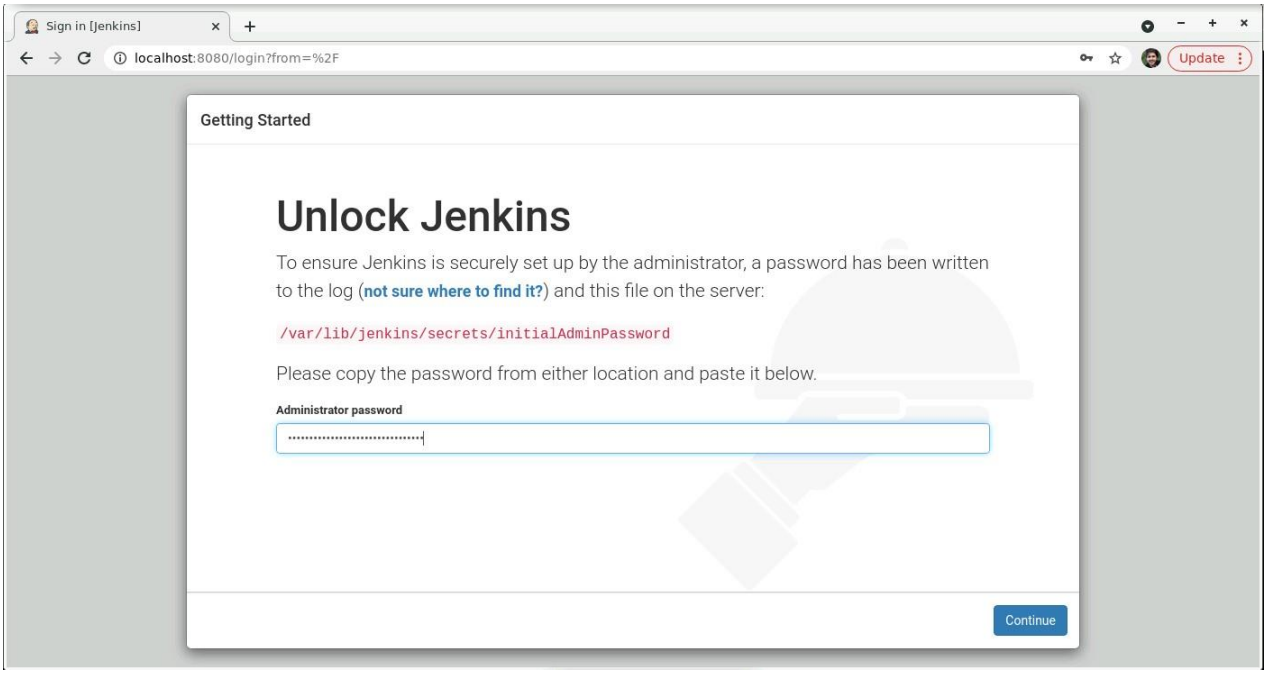
To verify Jenkins Initial admin password, is necessary to execute this command:

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

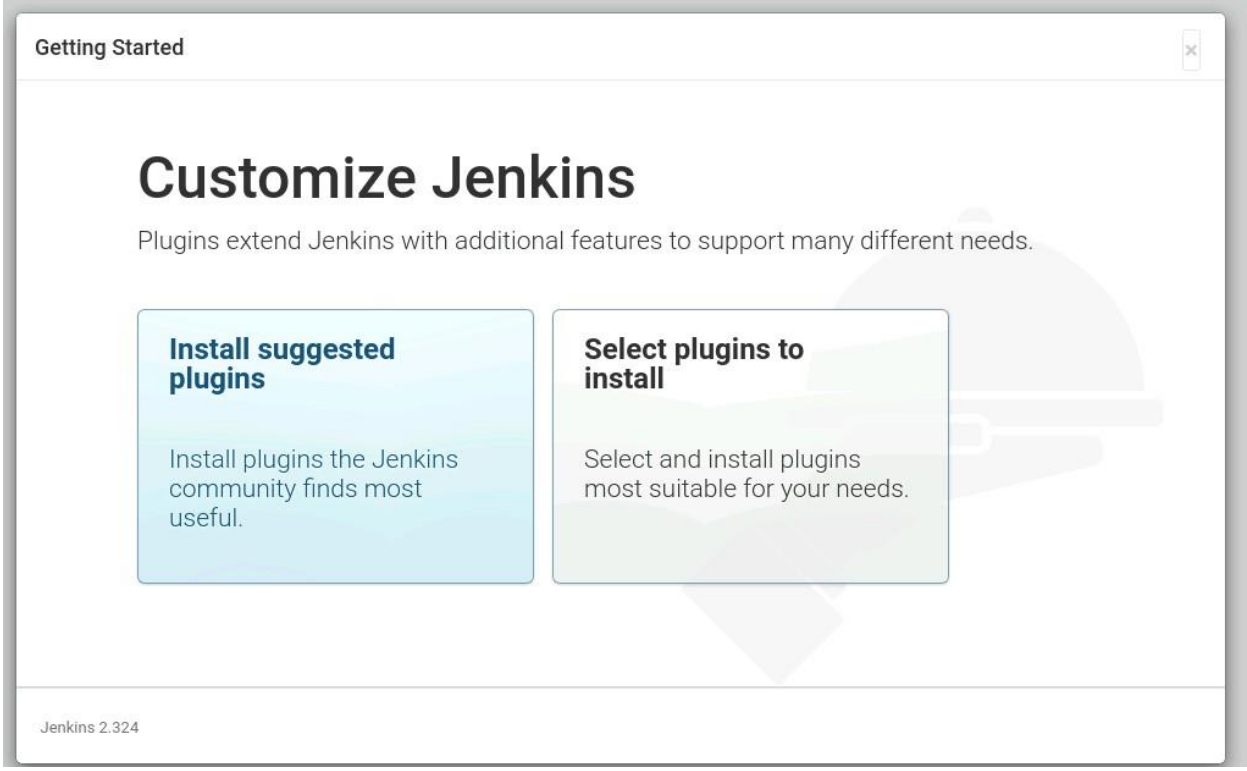
```
felandimgmail@ip-172-31-83-147:/$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword
6efaed663dbe432aa282ed7970b17756
felandimgmail@ip-172-31-83-147:/$
```

And copy this initial password

Open a browser on a URL http://localhost:8080 and on field Administrator password, paste the copied value.



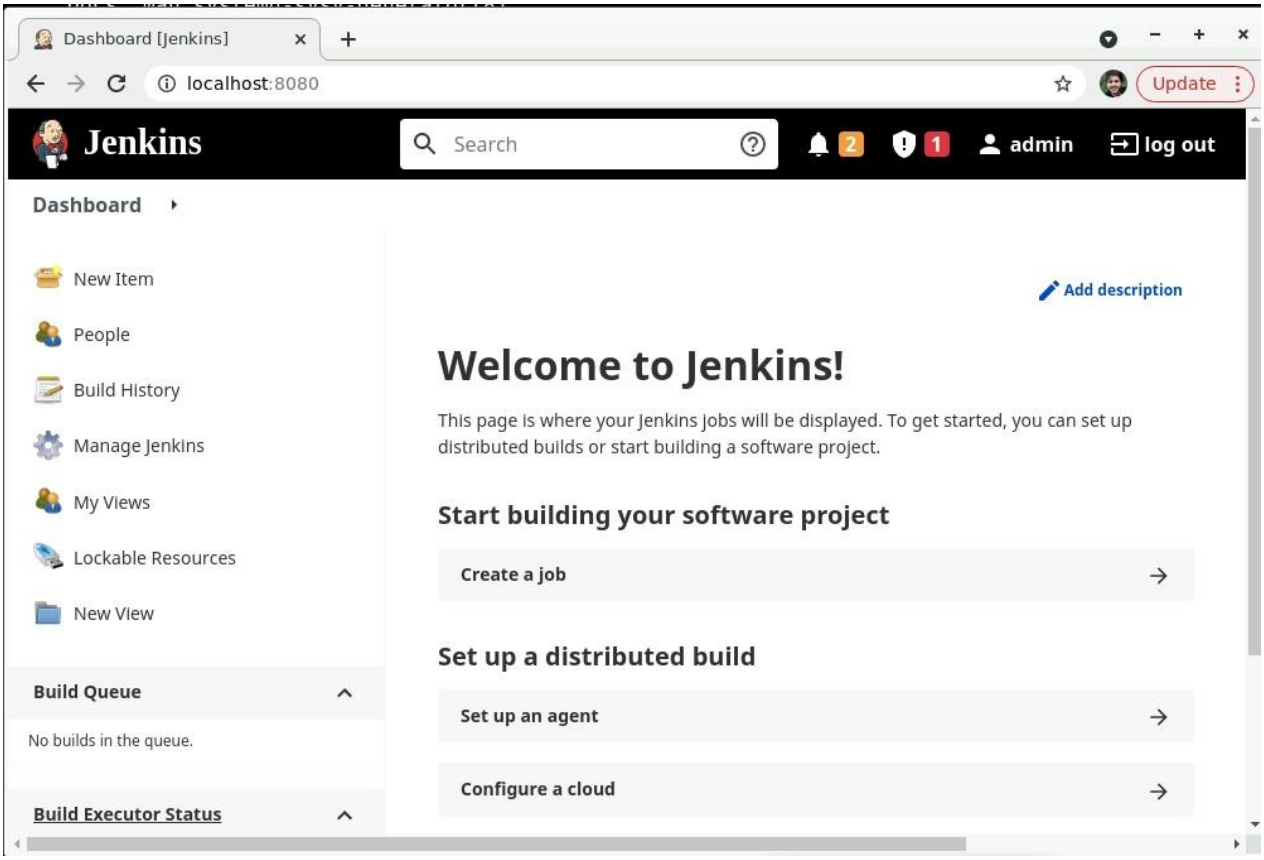
Click on Install suggested plugins



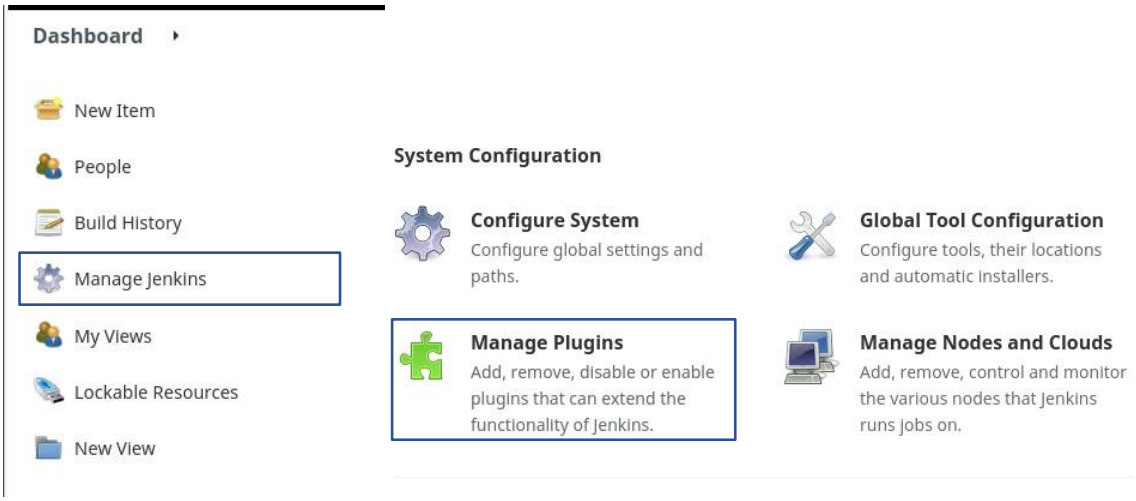
To facility the currently process, we going to proceed with admin access

Is possible to change the Jenkins default URL, but at this moment we proceed with this url and port

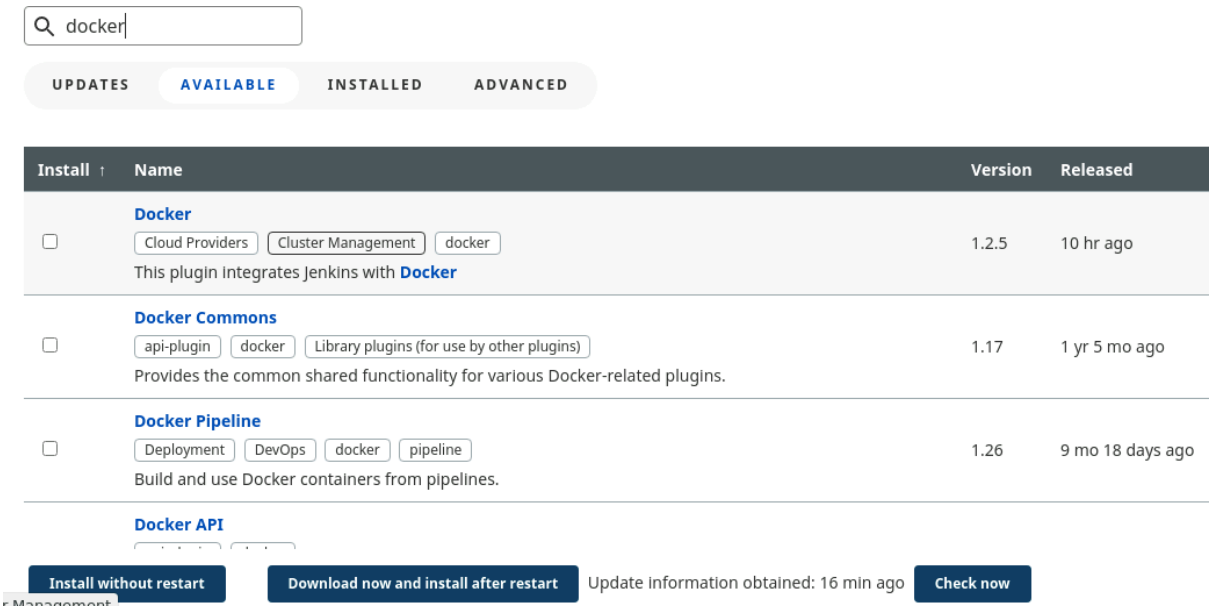
The default installation has executed



With Suggested plugins has installed the github plugin, but we also proceed with docker plugin, but is necessary to install docker plugin to perform our solution, because of this is necessary to click on Manage Jenkins > Manage Plugins



Click on "***Available***" and Search for "***Docker***", select Docker and Download ***now and install after restart***



Docker Instalation

On terminal Update the apt package index and install packages to allow apt to use a repository over HTTPS:
sudo apt-get update

sudo apt-get install \ ca-certificates \ curl \ gnupg \ lsb-release

```
felandimgmail@ip-172-31-83-147:/$ sudo apt-get update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates InRelease [109 kB]
Ign:3 http://pkg.jenkins-ci.org/debian binary/ InRelease
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-backports InRelease [107 kB]
Hit:5 http://pkg.jenkins-ci.org/debian binary/ Release
Hit:6 http://packages.microsoft.com/repos/code stable InRelease
Get:7 http://security.ubuntu.com/ubuntu xenial-security InRelease [109 kB]
Hit:8 http://dl.google.com/linux/chrome/deb stable InRelease
Hit:10 https://artifacts.elastic.co/packages/7.x/apt stable InRelease
Hit:11 https://deb.nodesource.com/node_14.x xenial InRelease
Hit:12 http://ppa.launchpad.net/ansible/ansible/ubuntu xenial InRelease
Hit:13 http://repo.zabbix.com/zabbix/3.0/ubuntu trusty InRelease
Hit:9 https://packages.cloud.google.com/apt kubernetes-xenial InRelease
Hit:15 http://ppa.launchpad.net/deadsnakes/ppa/ubuntu xenial InRelease
Hit:16 http://ppa.launchpad.net/remmina-ppa-team/remmina-next-daily/ubuntu xenial InRelease
Fetched 325 kB in 1s (319 kB/s)
Reading package lists... Done
W: http://repo.zabbix.com/zabbix/3.0/ubuntu/dists/trusty/InRelease: Signature by key FBABD5FB20255ECAB22EE194D13D58E479EA5ED4 uses weak diges
 algorithm (SHA1)
felandimgmail@ip-172-31-83-147:/$ sudo apt-get install \    ca-certificates \  curl \  gnupg \  lsb-release
Reading package lists... Done
Building dependency tree
Reading state information... Done
E: Unable to locate package
E: Unable to locate package
E: Unable to locate package
E: Unable to locate package
felandimgmail@ip-172-31-83-147:/$
```

Add Docker's official GPG key

curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /usr/share/keyrings/docker-archive-keyring.gpg

Use the following command to set up the stable repository. To add the nightly or test repository, add the word nightly or test (or both) after the word stable in the commands below. Learn about nightly and test channels.

***echo ***
***"deb [arch=$(dpkg --print-architecture) signed-by=/usr/share/keyrings/docker-archive-keyring.gpg] https://download.docker.com/linux/ubuntu ***
$(lsb_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null

```
felandimgmail@ip-172-31-83-147:/$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /usr/share/keyrings/docker-a
rchive-keyring.gpg
felandimgmail@ip-172-31-83-147:/$ echo \
>   "deb [arch=$(dpkg --print-architecture) signed-by=/usr/share/keyrings/docker-archive-keyring.gpg] https://download.docker.com/linux/ubuntu
 \
>   $(lsb_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
felandimgmail@ip-172-31-83-147:/$
```

Update the apt package index, and install the latest version of Docker Engine and containerd, or go to the next step to install a specific version:

sudo apt-get update

```
felandimgmail@ip-172-31-83-147:/$ sudo apt-get update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates InRelease [109 kB]
Hit:3 http://packages.microsoft.com/repos/code stable InRelease
Get:4 http://security.ubuntu.com/ubuntu xenial-security InRelease [109 kB]
Hit:5 http://dl.google.com/linux/chrome/deb stable InRelease
Ign:6 http://pkg.jenkins-ci.org/debian binary/ InRelease
Hit:7 http://pkg.jenkins-ci.org/debian binary/ Release
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-backports InRelease [107 kB]
Hit:10 https://artifacts.elastic.co/packages/7.x/apt stable InRelease
Hit:11 http://ppa.launchpad.net/ansible/ansible/ubuntu xenial InRelease
Hit:12 http://repo.zabbix.com/zabbix/3.0/ubuntu trusty InRelease
Get:13 https://download.docker.com/linux/ubuntu xenial InRelease [66.2 kB]
Hit:14 https://deb.nodesource.com/node_14.x xenial InRelease
Hit:15 http://ppa.launchpad.net/deadsnakes/ppa/ubuntu xenial InRelease
Hit:9 https://packages.cloud.google.com/apt kubernetes-xenial InRelease
Hit:16 http://ppa.launchpad.net/remmina-ppa-team/remmina-next-daily/ubuntu xenial InRelease
Get:18 https://download.docker.com/linux/ubuntu xenial/stable amd64 Packages [21.0 kB]
Fetched 412 kB in 1s (345 kB/s)
Reading package lists... Done
W: http://repo.zabbix.com/zabbix/3.0/ubuntu/dists/trusty/InRelease: Signature by key FBABD5FB20255ECAB22EE194D13D58E479EA5ED4 uses weak digest
 algorithm (SHA1)
```

Use the following commands to install the latest version of Docker CE and check the version:
sudo apt-get install docker-ce
docker ***--version***

```
felandimgmail@ip-172-31-83-147:/$ sudo apt-get install docker-ce
Reading package lists... Done
Building dependency tree
Reading state information... Done
docker-ce is already the newest version (5:20.10.7~3-0~ubuntu-xenial).
The following packages were automatically installed and are no longer required:
  bridge-utils ubuntu-fan
Use 'sudo apt autoremove' to remove them.
0 upgraded, 0 newly installed, 0 to remove and 78 not upgraded.
1 not fully installed or removed.
After this operation, 0 B of additional disk space will be used.
Do you want to continue? [Y/n] Y
Setting up docker-ce (5:20.10.7~3-0~ubuntu-xenial) ...
felandimgmail@ip-172-31-83-147:/$ docker  --version
Docker version 20.10.7, build f0df350
felandimgmail@ip-172-31-83-147:/$ 5
```

Test if docker is working running the default test repository from docker (hello-world)

```
File  Edit  View  Terminal  Tabs  Help
felandimgmail@ip-172-31-83-147:/$ sudo docker run hello-world

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/

felandimgmail@ip-172-31-83-147:/$
```

Git Instalation

First is necessary to check if has the git is installed, if is not installed, doesn't have a problem, these following steps is also responsible install the git.

```
felandimgmail@ip-172-31-83-147:/$ git --version
bash: git: command not found
```

Case is installed, is only necessary execute these following commands:
sudo apt-get update

```
felandimgmail@ip-172-31-83-147:/$ sudo apt-get update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates InRelease [109 kB]
Ign:3 http://pkg.jenkins-ci.org/debian binary/ InRelease
Hit:4 http://packages.microsoft.com/repos/code stable InRelease
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-backports InRelease [107 kB]
Hit:6 http://pkg.jenkins-ci.org/debian binary/ Release
Hit:7 http://dl.google.com/linux/chrome/deb stable InRelease
Hit:9 https://artifacts.elastic.co/packages/7.x/apt stable InRelease
Hit:10 https://download.docker.com/linux/ubuntu xenial InRelease
Hit:11 http://repo.zabbix.com/zabbix/3.0/ubuntu trusty InRelease
Get:12 http://security.ubuntu.com/ubuntu xenial-security InRelease [109 kB]
Hit:13 http://ppa.launchpad.net/ansible/ansible/ubuntu xenial InRelease
Hit:14 https://deb.nodesource.com/node_14.x xenial InRelease
Hit:8 https://packages.cloud.google.com/apt kubernetes-xenial InRelease
Hit:15 http://ppa.launchpad.net/deadsnakes/ppa/ubuntu xenial InRelease
Hit:17 http://ppa.launchpad.net/remmina-ppa-team/remmina-next-daily/ubuntu xenial InRelease
Fetched 325 kB in 1s (292 kB/s)
Reading package lists... Done
W: http://repo.zabbix.com/zabbix/3.0/ubuntu/dists/trusty/InRelease: Signature by key FBABD5FB20255ECAB22EE194D13D58E479EA5ED4 uses weak digest
 algorithm (SHA1)
```

sudo apt-get install git

```
felandimgmail@ip-172-31-83-147:/$  sudo apt-get install git
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  bridge-utils ubuntu-fan
Use 'sudo apt autoremove' to remove them.
Suggested packages:
  git-daemon-run | git-daemon-sysvinit git-doc git-el git-email git-gui gitk gitweb git-arch git-cvs git-mediawiki git-svn
The following NEW packages will be installed:
  git
0 upgraded, 1 newly installed, 0 to remove and 78 not upgraded.
Need to get 3,183 kB of archives.
After this operation, 24.1 MB of additional disk space will be used.
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 git amd64 1:2.7.4-0ubuntu1.10 [3,183 kB]
Fetched 3,183 kB in 0s (45.5 MB/s)
Selecting previously unselected package git.
(Reading database ... 235880 files and directories currently installed.)
Preparing to unpack .../git_1%3a2.7.4-0ubuntu1.10_amd64.deb ...
Unpacking git (1:2.7.4-0ubuntu1.10) ...
Setting up git (1:2.7.4-0ubuntu1.10) ...
felandimgmail@ip-172-31-83-147:/$ git --version
git version 2.7.4
felandimgmail@ip-172-31-83-147:/$
```

The last code (git –version) is to confer that git has been installed

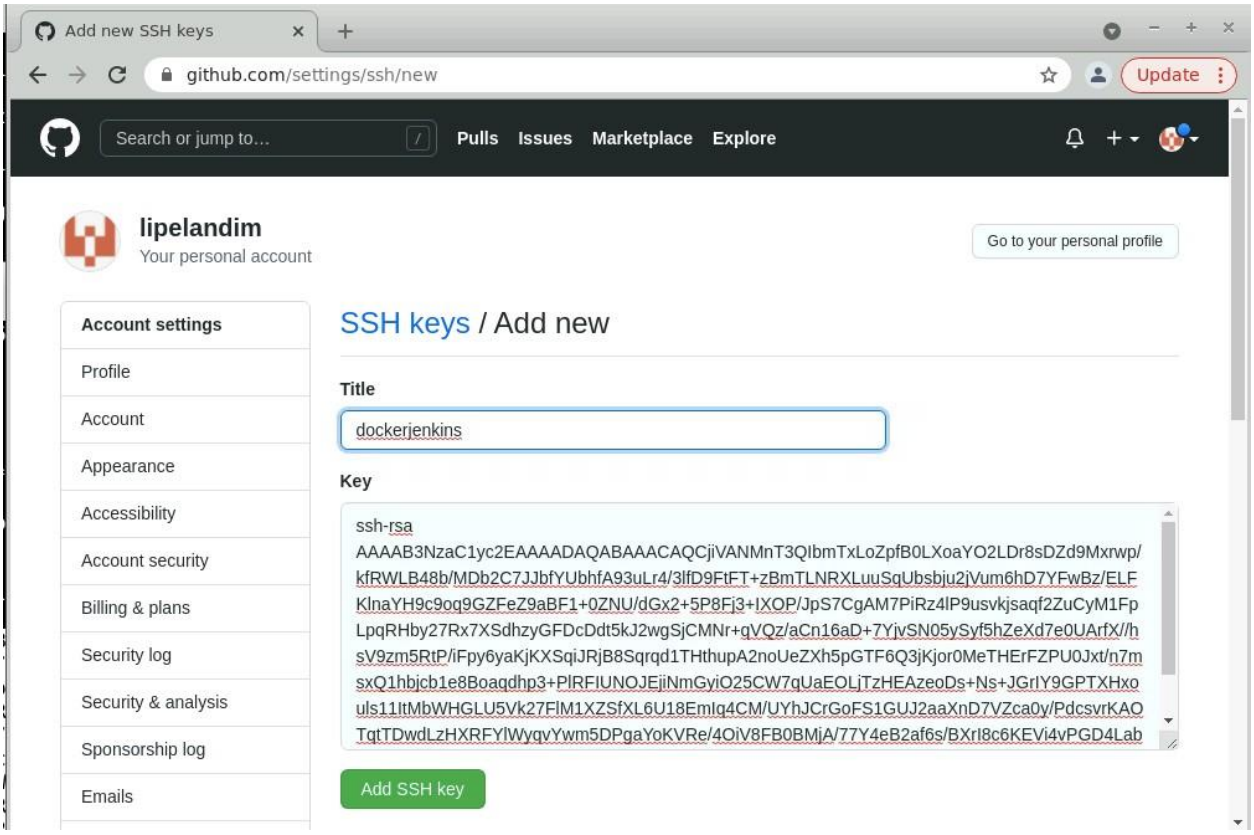
On terminal, generate a new SSH key, use command ***ssh-keygen -t rsa -b 4096 -C “felandim@gmail.com”***. Enter to accept default filename and input passphase as needed.

```
felandimgmail@ip-172-31-83-147:~/jenkinsdocker$ ssh-keygen -t rsa -b 4096 -C “fe
landim@gmail.com”
Generating public/private rsa key pair.
Enter file in which to save the key (/home/felandimgmail/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/felandimgmail/.ssh/id_rsa.
Your public key has been saved in /home/felandimgmail/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:Sdust8oI6+6Eg2w3pg+qUzU2C4GZLksVRb3/NDnPDFc “felandim@gmail.com”
The key's randomart image is:
+---[RSA 4096]----+
| + .+o.          |
|+ ..   .         |
|. ..    o        |
|.o. =  o =     E |
|o. + +  S o . .  |
|o....    o * .   |
|.=o+o   . + O    |
|+ =o.o o . o +   |
|+o.== . o..      |
+----[SHA256]-----+
felandimgmail@ip-172-31-83-147:~/jenkinsdocker$
```

Copy the generated ssh with command ***cat /home/felandimgmail/.ssh/id_rsa.pub***

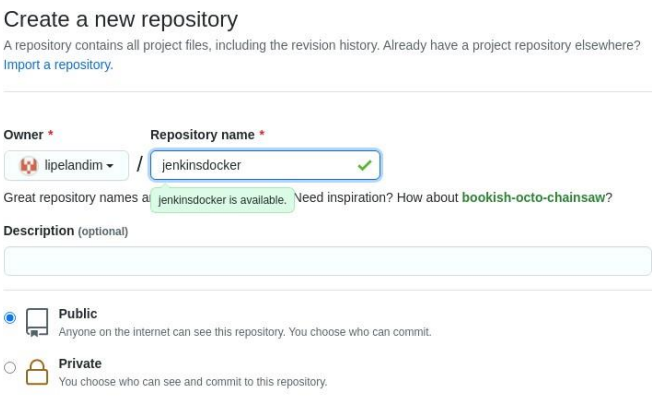
```
felandimgmail@ip-172-31-83-147:~/jenkinsdocker$ cat /home/felandimgmail/.ssh/id_
rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAACAQCjiVANMnT3QIbmTxLoZpfB0LXoaYO2LDr8sDZd9Mxr
wp/kfRWLB48b/MDb2C7JJbfYUbhfA93uLr4/3lfD9FtFT+zBmTLNRXLuuSqUbsbju2jVum6hD7YFwBz/
ELFKlnaYH9c9oq9GZFeZ9aBF1+0ZNU/dGx2+5P8Fj3+IXOP/JpS7CgAM7PiRz4lP9usvkjsaqf2ZuCyM
1FpLpqRHby27Rx7XSdhzyGFDcDdt5kJ2wgSjCMNr+qVQz/aCn16aD+7YjvSN05ySyf5hZeXd7e0UArfX
//hsV9zm5RtP/iFpy6yaKjKXSqiJRjB8Sqrqd1THthupA2noUeZXh5pGTF6Q3jKjor0MeTHErFZPU0Jx
t/n7msxQ1hbjcb1e8Boaqdhp3+PlRFIUNOJEjiNmGyiO25CW7qUaEOLjTzHEAzeoDs+Ns+JGrIY9GPTX
Hxouls11ItMbWHGLU5Vk27FlM1XZSfXL6U18EmIq4CM/UYhJCrGoFS1GUJ2aaXnD7VZca0y/PdcsvrKA
OTqtTDwdLzHXRFYlWyqvYwm5DPgaYoKVRe/4OiV8FB0BMjA/77Y4eB2af6s/BXrI8c6KEVi4vPGD4Lab
PV9VxDnp9MGv28mtpzv82mxnAU9lTzvdS6fAvHX+l16SOqjvIxKc/eNSXFcxyMkbDJKkRvMpOcoII5RB
zQ== “felandim@gmail.com”
felandimgmail@ip-172-31-83-147:~/jenkinsdocker$
```

On GitHub portal access Profile >> SSH Keys >> Add New nad paste the copied value

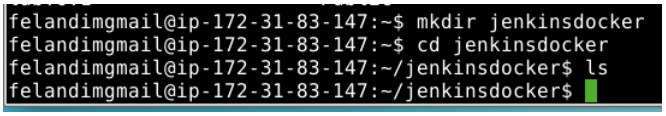


GitHub Repository

Create a new Jenkins repository on GitHub WebSite



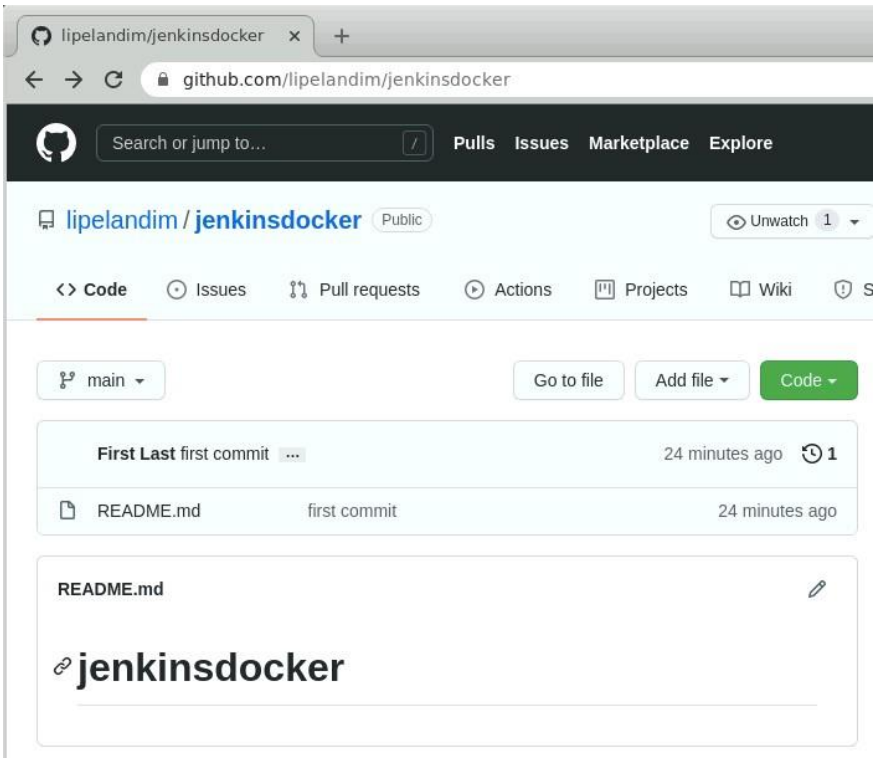
Create a directory named Jenkinsdocker



Execute these following commands

```
echo "# jenkinsdocker" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin git@github.com:lipelandim/jenkinsdocker.git
git push -u origin main
```

The github repo is working



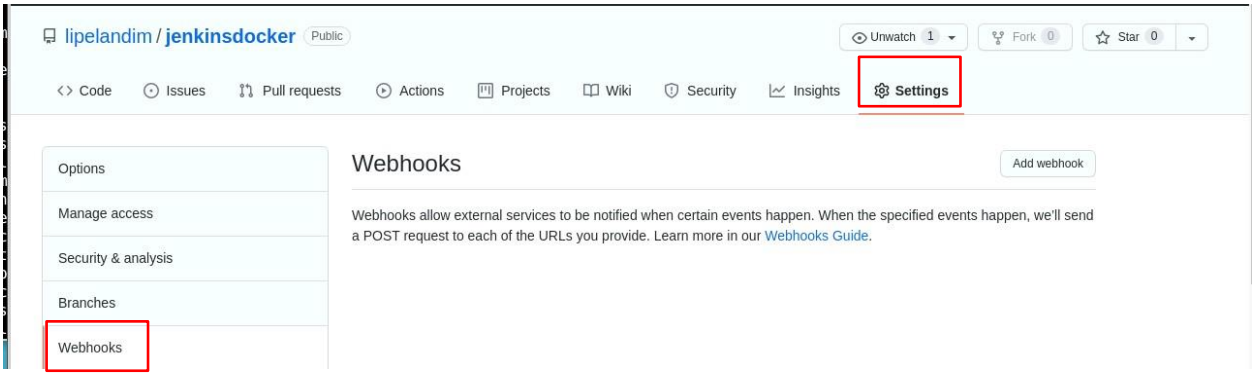
GitHub webhook

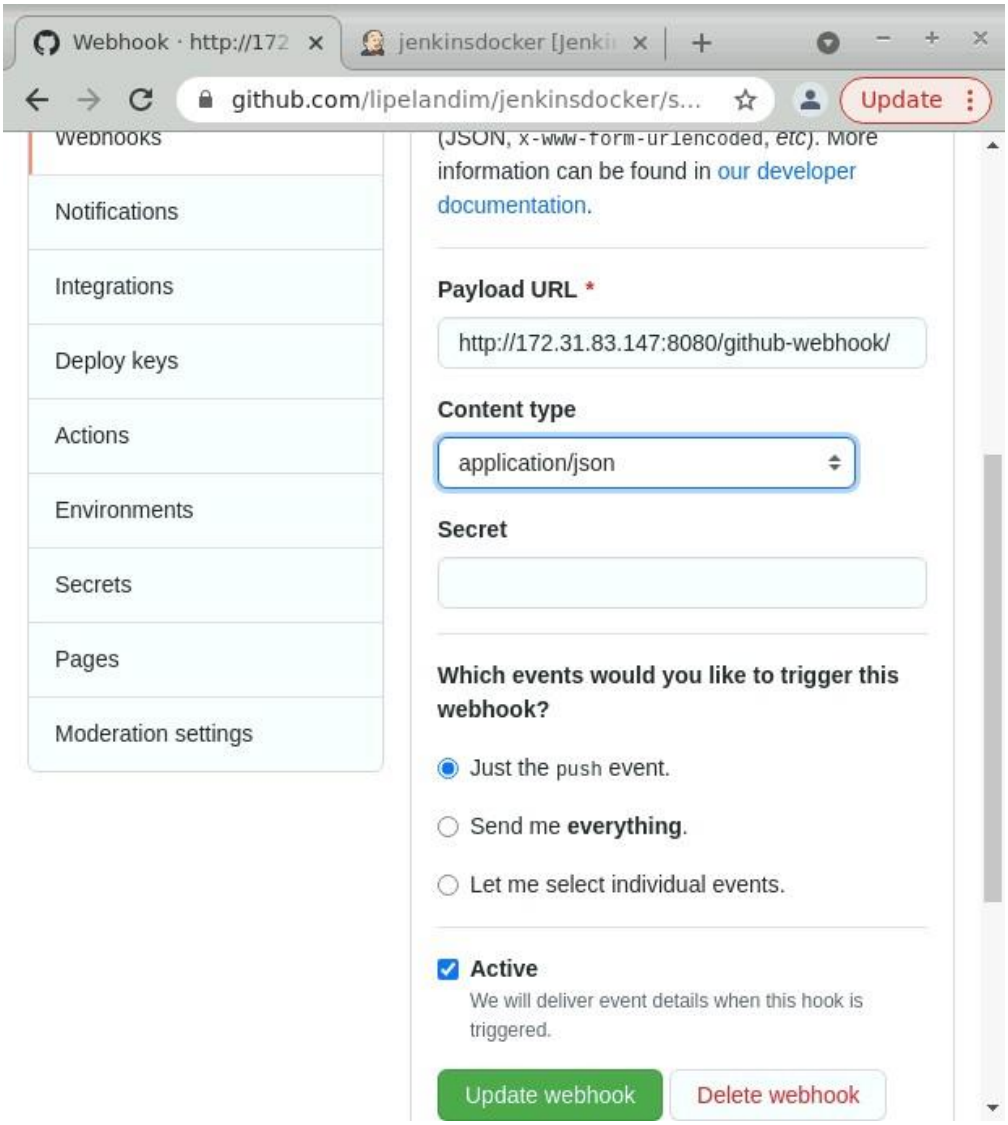
To configure the integration with GitHub.

Create a webhook inside the fork you created:

- Select **Settings**, then select **Webhooks** on the left-hand side.

- Choose **Add webhook**, then enter *Jenkins* in filter box.
- For the **Payload URL**, enter `http://<publicIps>:8080/github-webhook/`. Make sure you include the trailing /
- For **Content type**, select *application/x-www-form-urlencoded*.
- For **Which events would you like to trigger this webhook?**, select *Just the push event*.
- Set **Active** to checked.
- Click **Add webhook**.

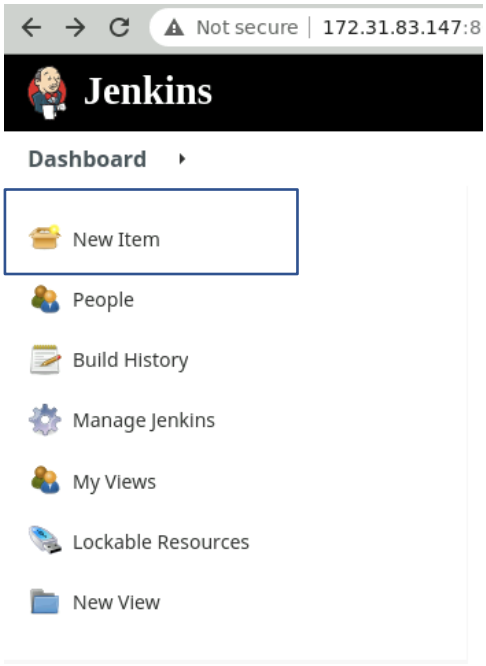




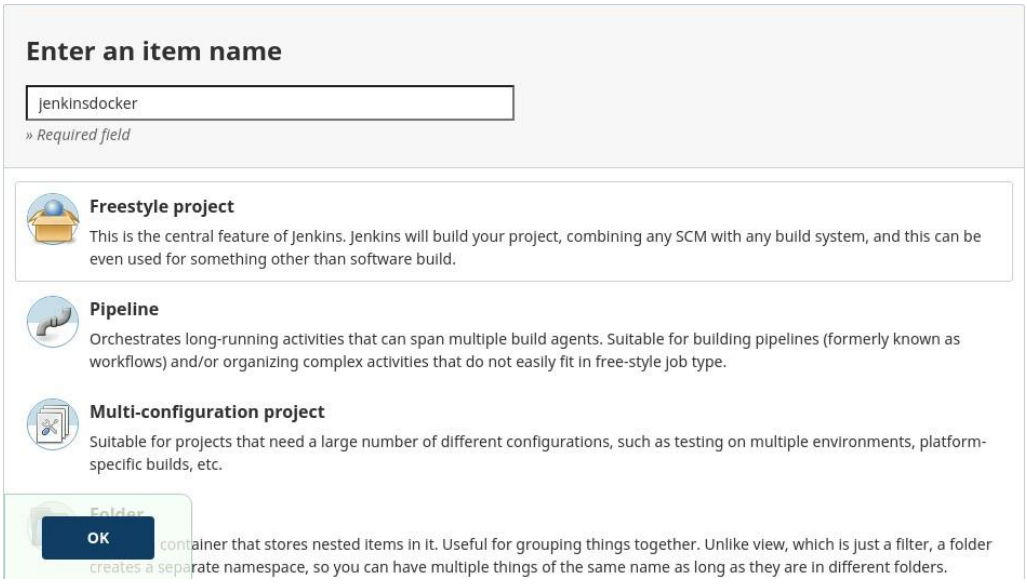
Integrating Jenkins and GitHub

To have Jenkins respond to an event in GitHub such as committing code, create a Jenkins job.

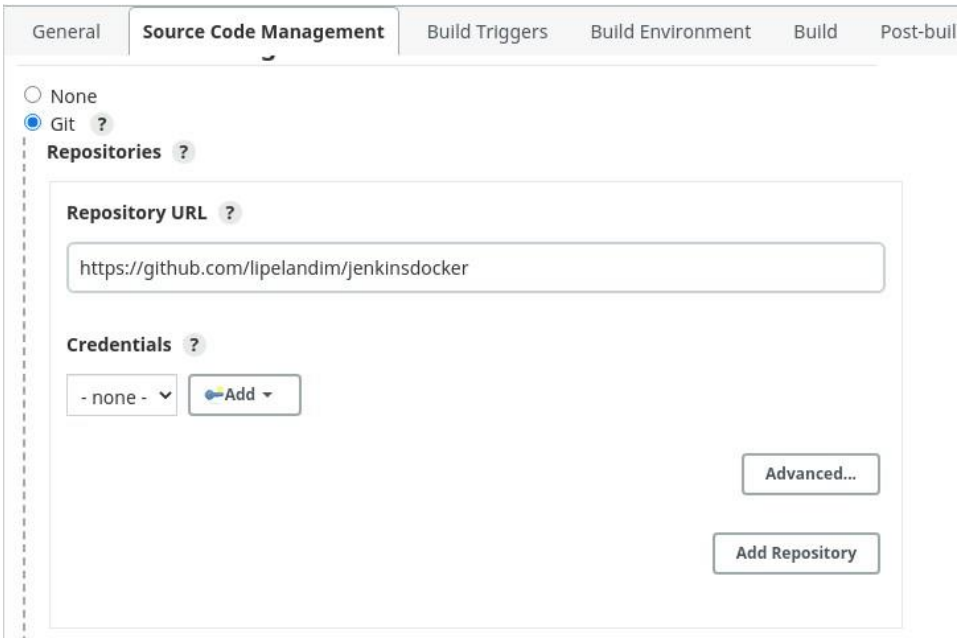
On Jenkins portal click on New Item



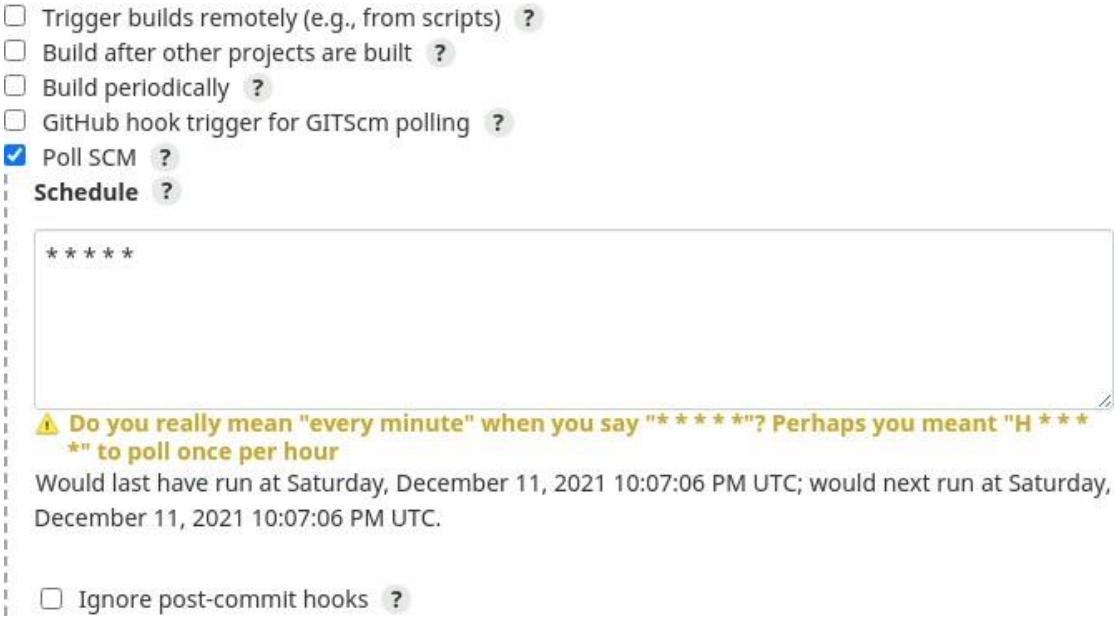
Select FreeStyle Project and put a name for your project >> Ok



On Source Code Management put the Repository URL



On Build Trigger select Pool SCM and type * * * * *

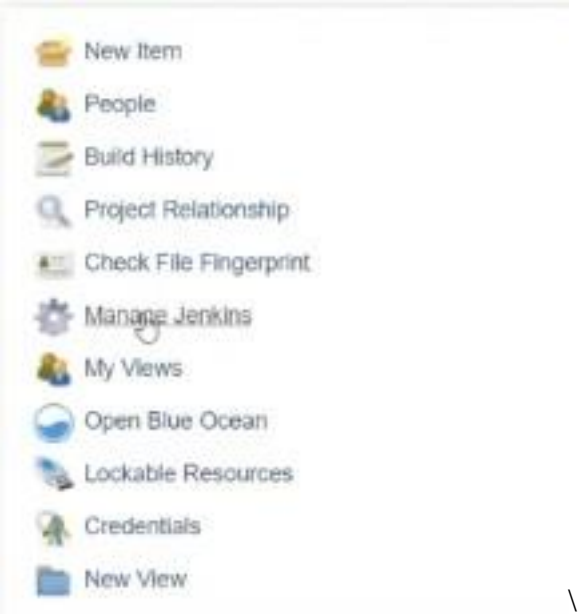


And Save changes.

If you change your code on github the process will starts automatically on Jenkins, the CI process is working fine.

Now is necessary to install Docker Plugin

Click on Manage Jenkins



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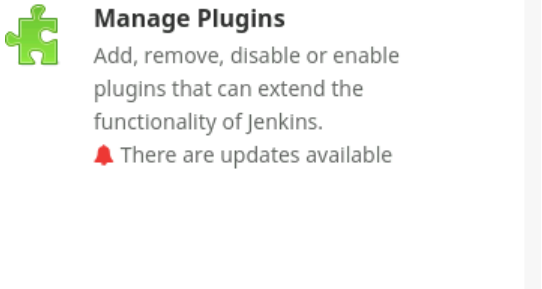
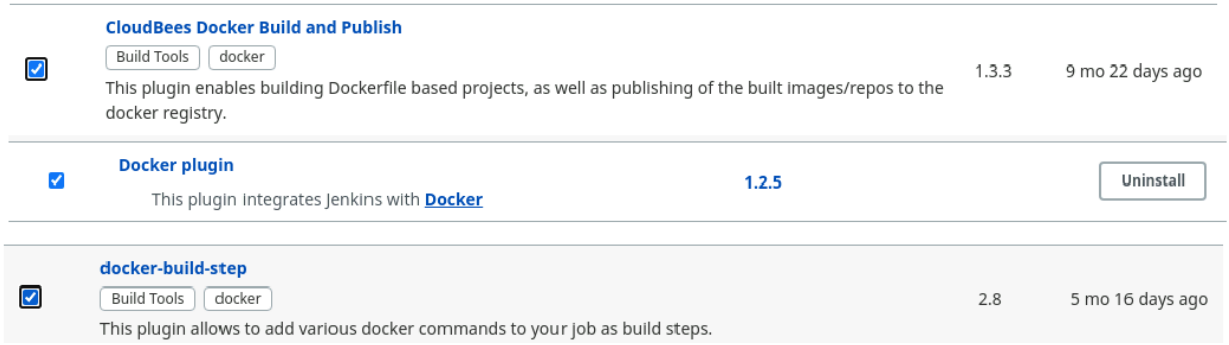
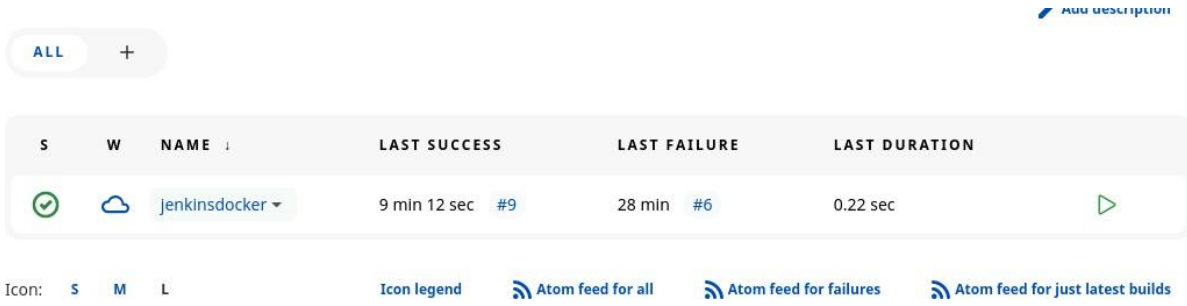
Click on Manage Plugins



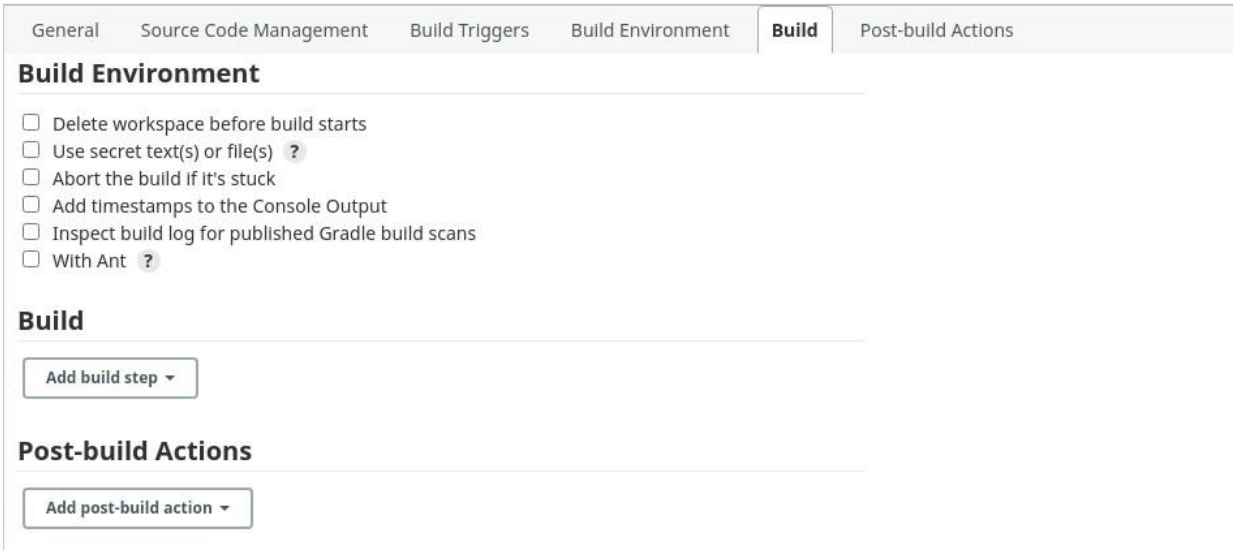
Install these plugins



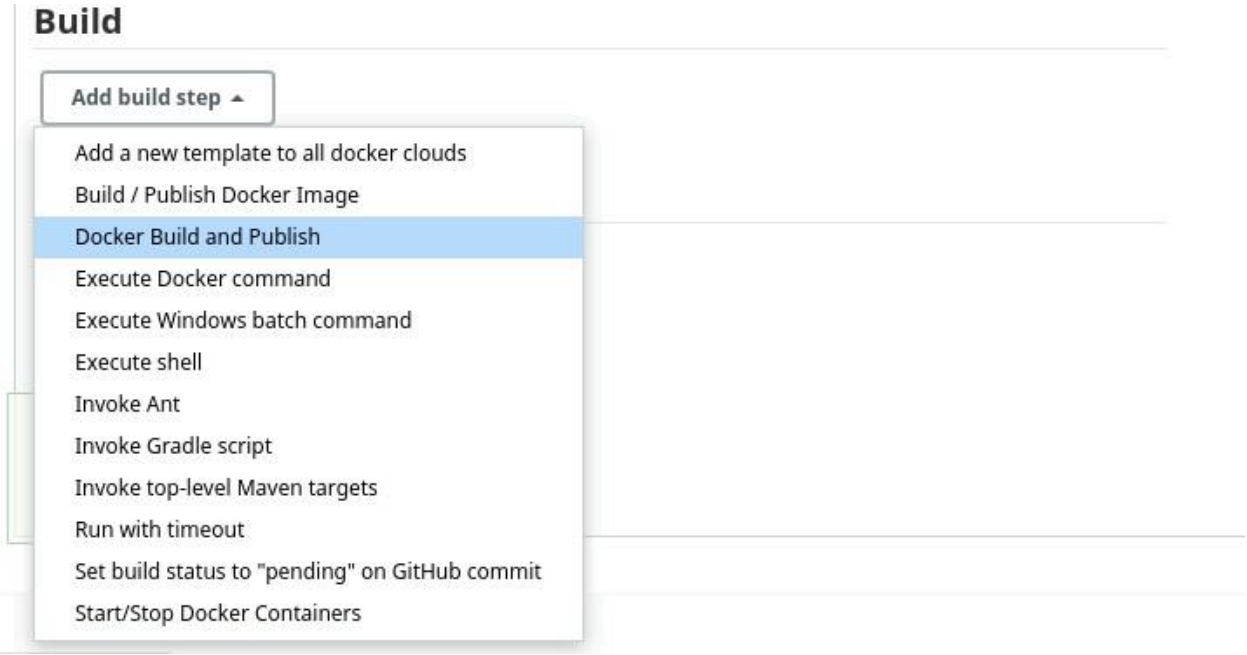
Click on Project



Click on Configure > Build



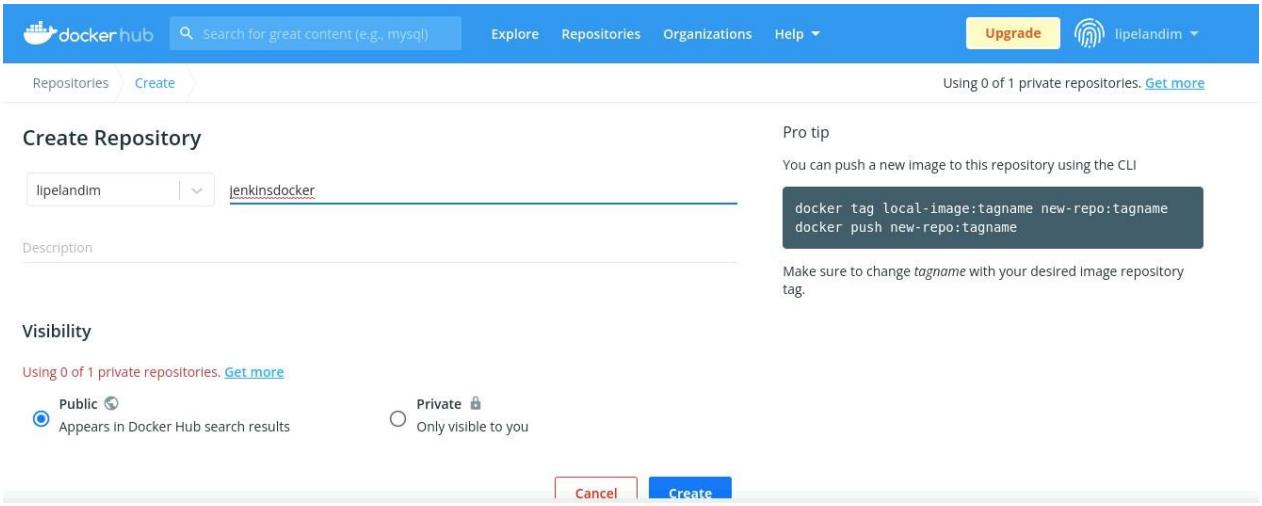
And on build button is possible to find a Docker Build and Publish



Add the credentials

Docker Image

Create docker repository on docker hub

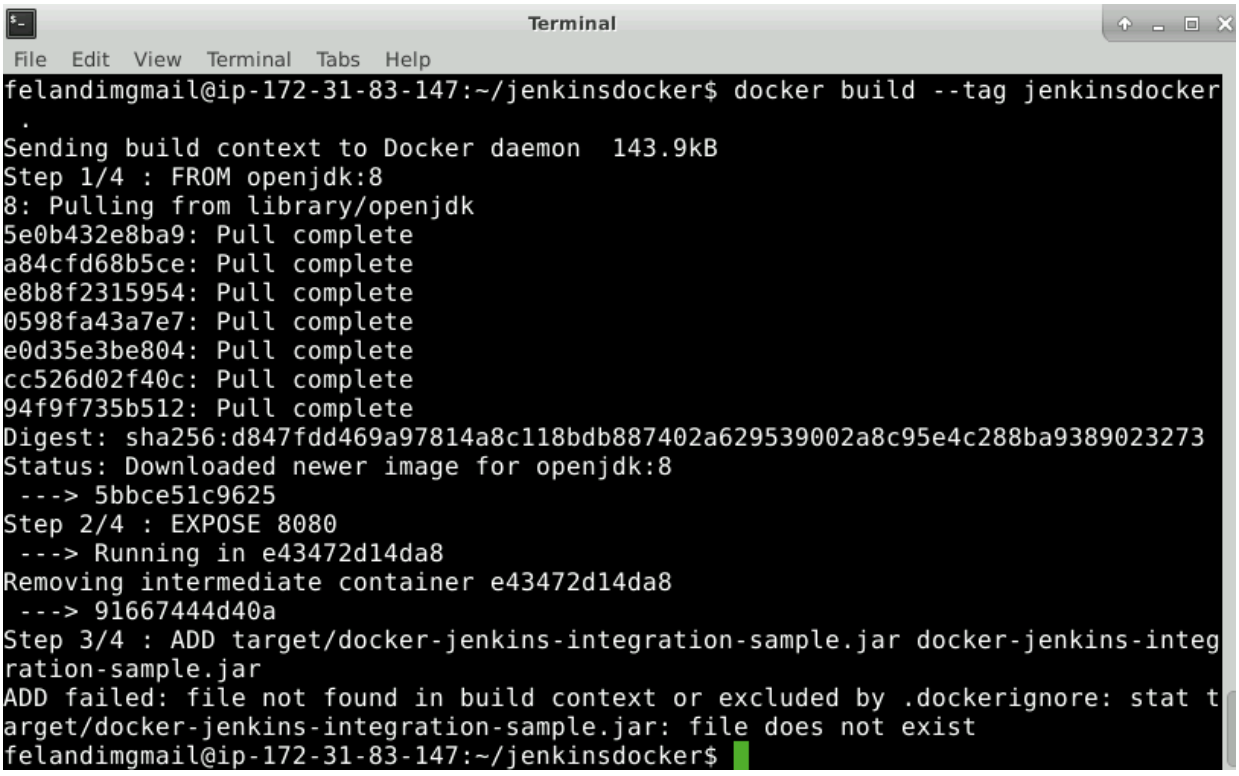


Create docker login

```
felandimgmail@ip-172-31-83-147:~/jenkinsdocker$ docker login
Login with your Docker ID to push and pull images from Docker Hub. If you don't
have a Docker ID, head over to https://hub.docker.com to create one.
Username: lipelandim
Password:
WARNING! Your password will be stored unencrypted in /home/felandimgmail/.docker
/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
felandimgmail@ip-172-31-83-147:~/jenkinsdocker$
```

Execute the creation of image from file dockerjenkins


Terminal
File Edit View Terminal Tabs Help
felandimgmail@ip-172-31-83-147:~/jenkinsdocker$ docker build --tag jenkinsdocker
.
Sending build context to Docker daemon 143.9kB
Step 1/4 : FROM openjdk:8
8: Pulling from library/openjdk
5e0b432e8ba9: Pull complete
a84cfd68b5ce: Pull complete
e8b8f2315954: Pull complete
0598fa43a7e7: Pull complete
e0d35e3be804: Pull complete
cc526d02f40c: Pull complete
94f9f735b512: Pull complete
Digest: sha256:d847fdd469a97814a8c118bdb887402a629539002a8c95e4c288ba9389023273
Status: Downloaded newer image for openjdk:8
---> 5bbce51c9625
Step 2/4 : EXPOSE 8080
---> Running in e43472d14da8
Removing intermediate container e43472d14da8
---> 91667444d40a
Step 3/4 : ADD target/docker-jenkins-integration-sample.jar docker-jenkins-integ
ration-sample.jar
ADD failed: file not found in build context or excluded by .dockerignore: stat t
arget/docker-jenkins-integration-sample.jar: file does not exist
felandimgmail@ip-172-31-83-147:~/jenkinsdocker$