Jenkins Installation

Jenkins Installation Steps

(Pre-requisite - Update and Upgrade Ubuntu OS and install open jdk version 17)

apt update -y && apt upgrade -y && apt install openjdk-17-jdk -y

```
root@ip-172-31-94-84:/home/ubuntu#
root@ip-172-31-94-84:/home/ubuntu# apt update -y && apt upgrade -y && apt install openjdk-17-jdk -y
```

(Check Java Version)

java --version

```
root@ip-172-31-94-84:/home/ubuntu# java --version
openjdk 17.0.12 2024-07-16
OpenJDK Runtime Environment (build 17.0.12+7-Ubuntu-1ubuntu224.04)
OpenJDK 64-Bit Server VM (build 17.0.12+7-Ubuntu-1ubuntu224.04, mixed mode, sharing)
```

(Download Jenkins package from the internet Repo epel)

curl -fsSL https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee \

/usr/share/keyrings/jenkins-keyring.asc > /dev/null

```
root@ip-172-31-94-84:/home/ubuntu#
root@ip-172-31-94-84:/home/ubuntu# curl -fsSL https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee  /usr/share/keyrings/jenkins-keyring.asc > /dev/null
```

(Update the server repo with Jenkins Packages)

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

```
root@ip-172-31-94-84:/home/ubuntu#
root@ip-172-31-94-84:/home/ubuntu# 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
```

(Update the OS Repo with Jenkins Packages)

sudo apt update -y

```
root@ip-172-31-94-84:/home/ubuntu# apt update -y
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
Ign:4 https://pkg.jenkins.io/debian-stable binary/ InRelease
Get:5 https://pkg.jenkins.io/debian-stable binary/ Release [2044 B]
Get:6 https://pkg.jenkins.io/debian-stable binary/ Release.gpg [833 B]
Hit:7 http://security.ubuntu.com/ubuntu noble-security InRelease
Get:8 https://pkg.jenkins.io/debian-stable binary/ Packages [27.3 kB]
Fetched 30.1 kB in 1s (38.4 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
All packages are up to date.
root@ip-172-31-94-84:/home/ubuntu#
```

(Install Jenkins)

sudo apt install jenkins -y

```
root@ip-172-31-94-84:/home/ubuntu#
root@ip-172-31-94-84:/home/ubuntu# apt install jenkins
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  net-tools
The following NEW packages will be installed:
  jenkins net-tools
0 upgraded, 2 newly installed, 0 to remove and 0 not upgraded.
Need to get 92.1 MB of archives.
After this operation, 94.3 MB 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/main amd64 net-tools amd64 2.10-0.1ubuntu4 [204 kB]
Get:2 https://pkg.jenkins.io/debian-stable binary/ jenkins 2.452.3 [91.9 MB]
Fetched 92.1 MB in 8s (11.8 MB/s)
Selecting previously unselected package net-tools.
(Reading database ... 113787 files and directories currently installed.)
Preparing to unpack .../net-tools_2.10-0.1ubuntu4_amd64.deb ...
Unpacking net-tools (2.10-0.1ubuntu4) ...
Selecting previously unselected package jenkins.
Preparing to unpack .../jenkins_2.452.3_all.deb ...
Unpacking jenkins (2.452.3) ...
Setting up net-tools (2.10-0.1ubuntu4) ...
Setting up jenkins (2.452.3) ...
Created symlink /etc/systemd/system/multi-user.target.wants/jenkins.service → /usr/lib/systemd/system/jenkins.service.
Processing triggers for man-db (2.12.0-4build2) ...
Scanning processes...
Scanning candidates...
Scanning linux images...

Pending kernel upgrade!
Running kernel version:
  6.8.0-1009-aws
Diagnostics:
  The currently running kernel version is not the expected kernel version 6.8.0-1012-aws.

Restarting the system to load the new kernel will not be handled automatically, so you should consider rebooting.

Restarting services...

Service restarts being deferred:
 /etc/needrestart/restart.d/dbus.service
 systemctl restart networkd-dispatcher.service
 systemctl restart systemd-logind.service
 systemctl restart unattended-upgrades.service

No containers need to be restarted.

User sessions running outdated binaries:
 ubuntu @ session #1: sshd[1041]
 ubuntu @ user manager service: systemd[1046]
```

(Jenkins Service Default location)

/usr/lib/systemd/system/jenkins.service

```
/usr/lib/systemd/system/jenkins.service
```

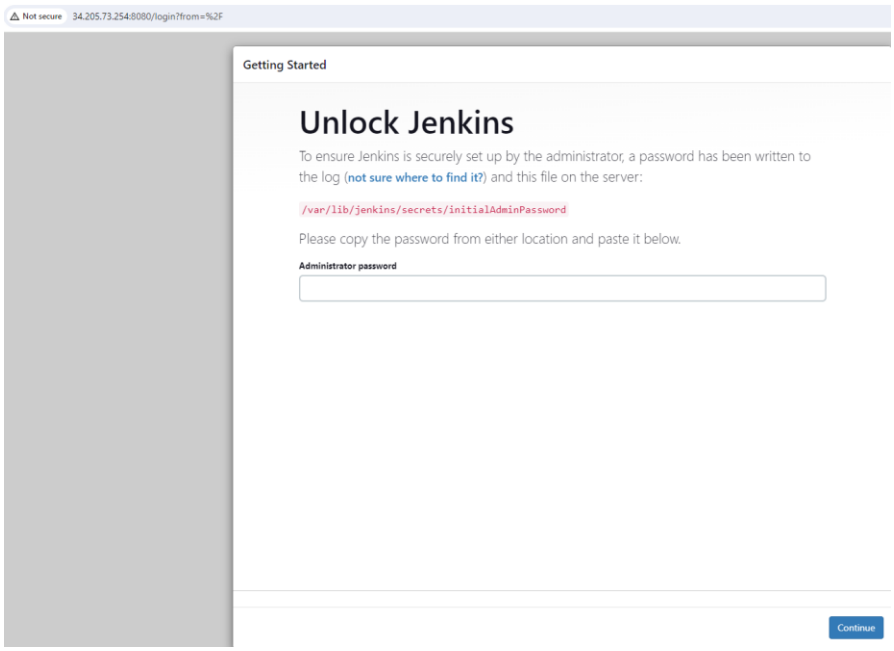
(Start Jenkins Service)

systemctl start Jenkins

```
root@ip-172-31-94-84:/home/ubuntu#
root@ip-172-31-94-84:/home/ubuntu# systemctl start jenkins
```

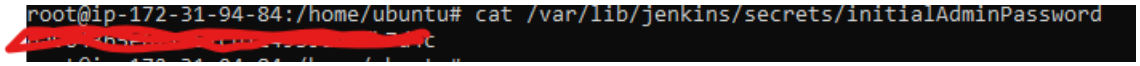
Post Installation Steps

Once Jenkins is installed, Open the Webpage now type Public IP of Jenkins: port Number (Default port for Jenkins is 8080) to confirm Jenkins is installed and updated

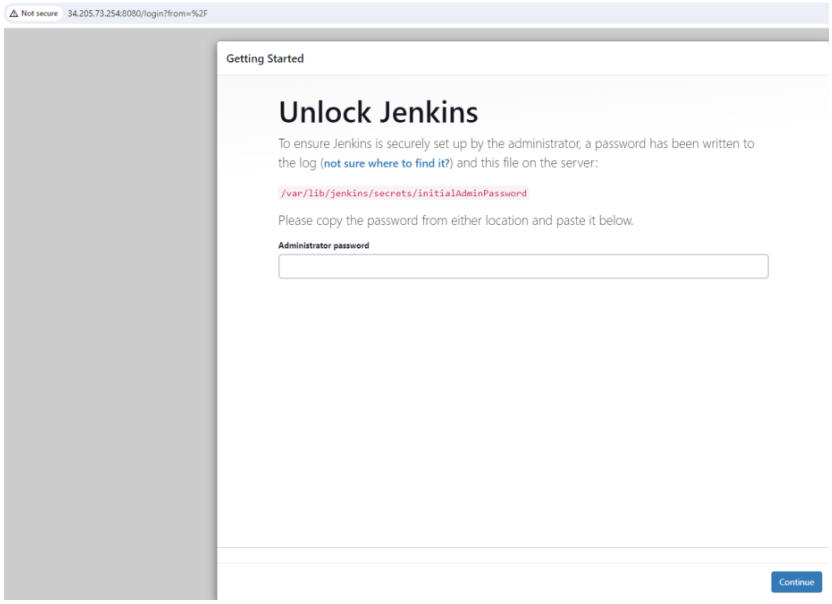


Once installation is done enter the default admin password from the below location on the ubuntu server where Jenkins is installed

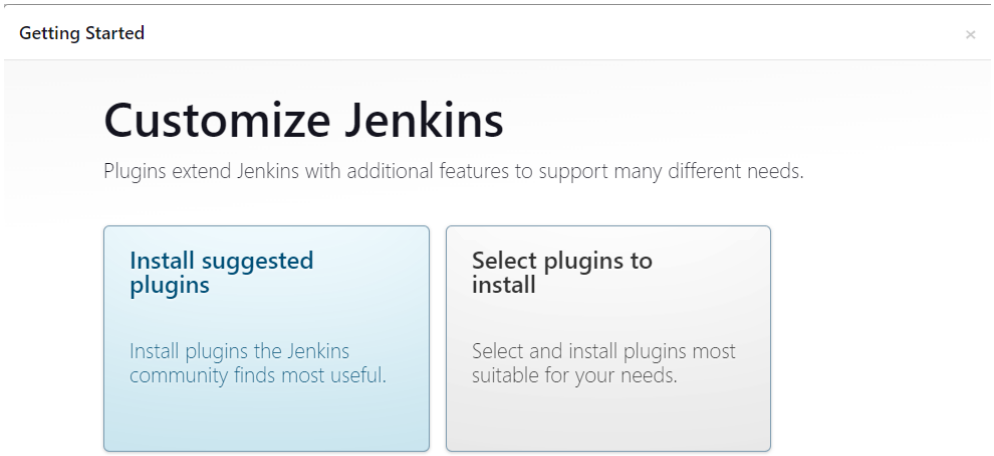
cat /var/lib/jenkins/secrets/initialAdminPassword



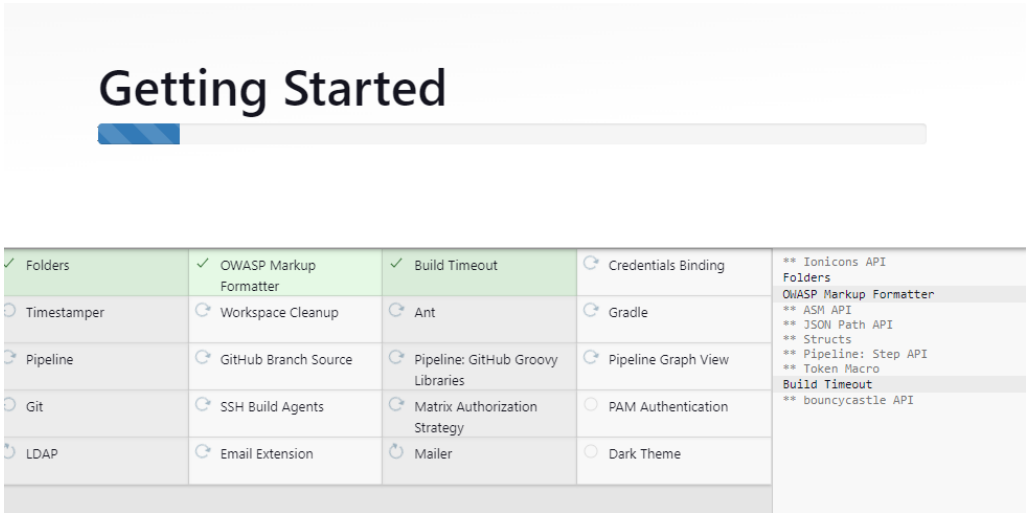
Enter the password on the below screen and click continue



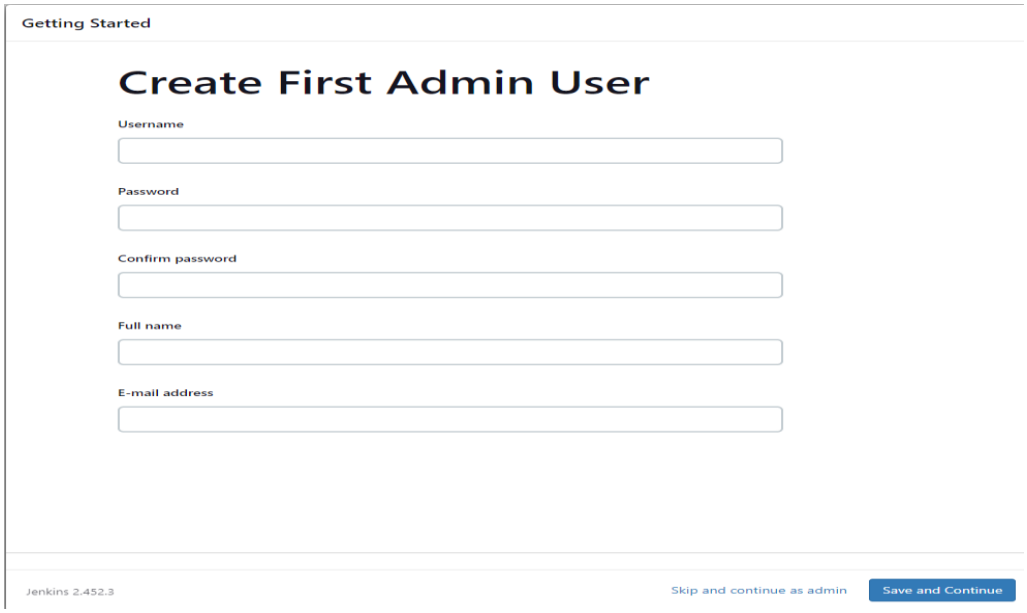
Select Install Suggested Plugins on the below screen



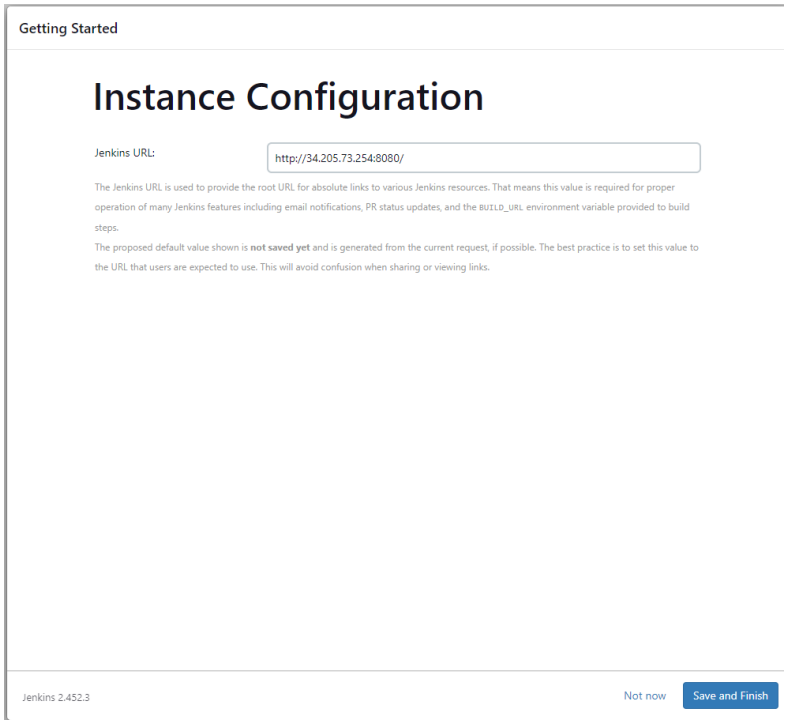
Suggested plugins are installing



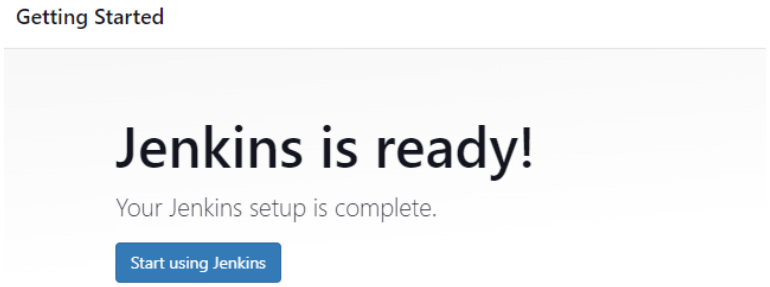
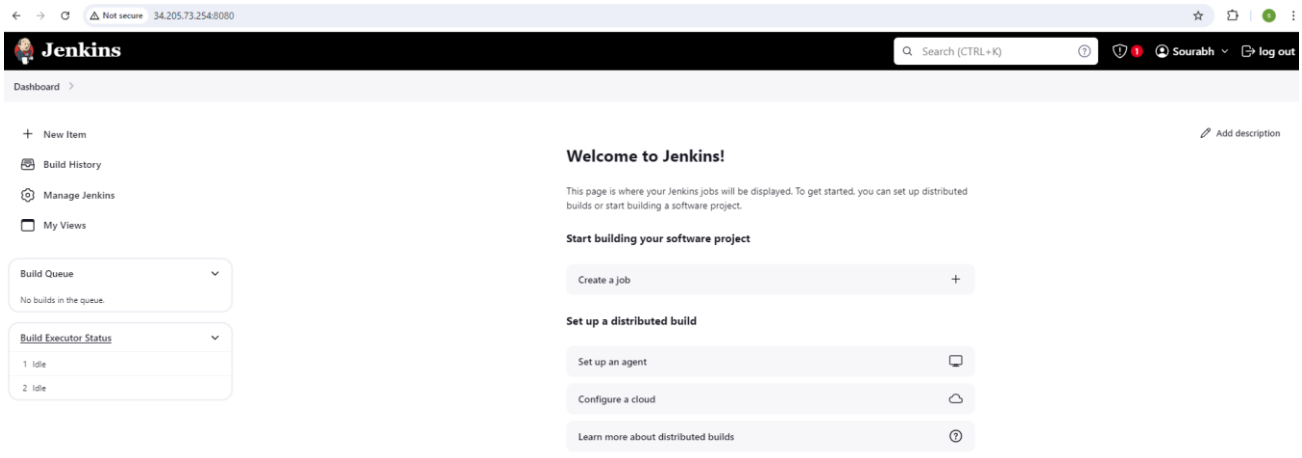
Create first Admin User on below screen and click save and continue



Verify Instance Configuration and click Save and Finish



Jenkins Setup is complete. Click Start using Jenkins in the below screen



Jenkins dashboard