

## Jenkins Installation

### Installing Java on Ubuntu

1.If a root user : sudo apt install openjdk-11-jdk

output:

```
Setting up libatk-wrapper-java-gtk:amd64 (0.37.1-1) ...
Setting up openjdk-11-jre-headless:amd64 (11.0.11+9-0ubuntu2~20.04) ...
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/java to provide /usr/bin/java (java) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jjs to provide /usr/bin/jjs (jjs) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/keytool to provide /usr/bin/keytool (keytool) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/rmid to provide /usr/bin/rmid (rmid) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/rmiregistry to provide /usr/bin/rmiregistry (rmiregistry) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/pack200 to provide /usr/bin/pack200 (pack200) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/unpack200 to provide /usr/bin/unpack200 (unpack200) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/lib/jexec to provide /usr/bin/jexec (jexec) in auto mode
Setting up openjdk-11-jre:amd64 (11.0.11+9-0ubuntu2~20.04) ...
Setting up openjdk-11-jdk-headless:amd64 (11.0.11+9-0ubuntu2~20.04) ...
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jar to provide /usr/bin/jar (jar) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jarsigner to provide /usr/bin/jarsigner (jarsigner) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/javac to provide /usr/bin/javac (javac) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/javadoc to provide /usr/bin/javadoc (javadoc) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/javap to provide /usr/bin/javap (javap) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jcmd to provide /usr/bin/jcmd (jcmd) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jdb to provide /usr/bin/jdb (jdb) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jdeprscan to provide /usr/bin/jdeprscan (jdeprscan) in auto mode
```

2.Adding Jenkins Repository :

wget -q -O - <https://pkg.jenkins.io/debian-stable/jenkins.io.key> | sudo apt key add -

sudo sh -c 'echo deb <https://pkg.jenkins.io/debian-stable binary/> > \

/etc/apt/sources.list.d/jenkins.list'

sudo apt update

sudo apt install jenkins

```
root@ip-172-31-46-82:/home/ubuntu# wget -q -O - https://pkg.jenkins.io/debian-stable/jenkins.io.key | sudo apt-key add -
OK
root@ip-172-31-46-82:/home/ubuntu# sudo sh -c 'echo deb https://pkg.jenkins.io/debian-stable binary/ > \
> /etc/apt/sources.list.d/jenkins.list'
root@ip-172-31-46-82:/home/ubuntu# sudo sh -c 'echo deb https://pkg.jenkins.io/debian-stable binary/ > \
/etc/apt/sources.list.d/jenkins.list'
root@ip-172-31-46-82:/home/ubuntu# sudo apt-get update
Hit:1 http://security.ubuntu.com/ubuntu focal-security InRelease
Hit:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu focal InRelease
Hit:4 http://us-east-2.ec2.archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:5 http://us-east-2.ec2.archive.ubuntu.com/ubuntu focal-backports InRelease
Ign:6 https://pkg.jenkins.io/debian-stable binary/ InRelease
Get:7 https://pkg.jenkins.io/debian-stable binary/ Release [2044 B]
Get:8 https://pkg.jenkins.io/debian-stable binary/ Release.gpg [833 B]
Hit:2 https://packages.cloud.google.com/apt kubernetes-xenial InRelease
Get:9 https://pkg.jenkins.io/debian-stable binary/ Packages [20.4 kB]
Fetched 23.2 kB in 1s (32.0 kB/s)
Reading package lists... Done
```

```

root@ip-172-31-46-82:/home/ubuntu# sudo apt-get install jenkins
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  daemon net-tools
The following NEW packages will be installed:
  daemon jenkins net-tools
0 upgraded, 3 newly installed, 0 to remove and 0 not upgraded.
Need to get 71.9 MB of archives.
After this operation, 75.4 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu focal/universe amd64 daemon amd64 0.6.4-1build2 [96.3 kB]
Get:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu focal/main amd64 net-tools amd64 1.60+git20180626.aebd88e-lubuntu1 [196 kB]
Get:3 https://pkg.jenkins.io/debian-stable binary/ jenkins 2.289.3 [71.6 MB]

```

3. identify the IP address of the system in order to access Jenkins via web browser

Public DNS (IPv4)	ec2-3-144-126-236.us-east-2.compute.amazonaws.com	
IPv4 Public IP	3.144.126.236	
IPv6 IPs	-	Activate
Elastic IPs		Go to Settings

4. check jenkins active or not

```

root@ip-172-31-46-82:/home/ubuntu# sudo systemctl daemon-reload
root@ip-172-31-46-82:/home/ubuntu# sudo systemctl start jenkins
root@ip-172-31-46-82:/home/ubuntu# sudo systemctl status jenkins
• jenkins.service - LSB: Start Jenkins at boot time
   Loaded: loaded (/etc/init.d/jenkins; generated)
   Active: active (exited) since Tue 2021-08-24 09:23:35 UTC; 44min ago
     Docs: man:systemd-sysv-generator(8)
    Tasks: 0 (limit: 1160)
   Memory: 0B
   CGroup: /system.slice/jenkins.service

Aug 24 09:23:33 ip-172-31-46-82 systemd[1]: Starting LSB: Start Jenkins at boot time...
Aug 24 09:23:33 ip-172-31-46-82 jenkins[96088]: Correct java version found

```

4. Getting password to unlock jenkins

```

root@ip-172-31-46-82:/home/ubuntu# cat /var/lib/jenkins/secrets/initialAdminPassword
616162dfa7784608a93b58a56e94f4cc
root@ip-172-31-46-82:/home/ubuntu# ^C

```

4. Unlocking jenkins

# Unlock Jenkins

To ensure Jenkins is securely set up by the administrator, a password has been written to the log (not sure where to find it?) and this file on the server:

```
/var/lib/jenkins/secrets/initialAdminPassword
```

Please copy the password from either location and paste it below.

**Administrator password**