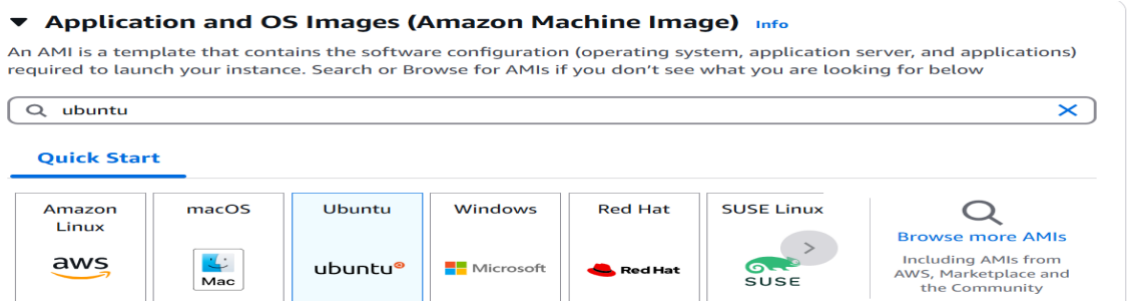
Exp-03 Jenkins Setup on AWS

Step-1

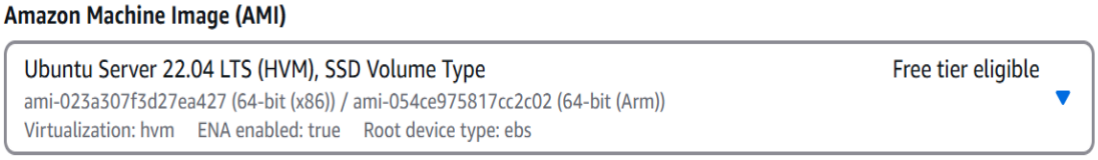
- Open aws account
- Select EC2 instance
- Click on launch instance

- **Select ubuntu OS**



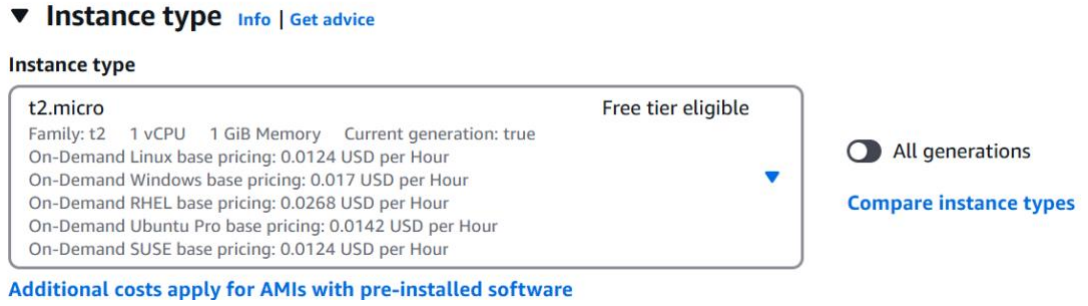
Step-2

- **Select ubuntu free tier as amazon in image**



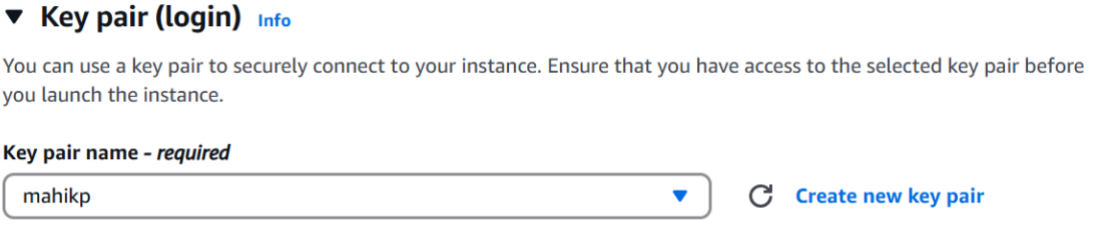
Step-3

- **Select instance type t2.micro**

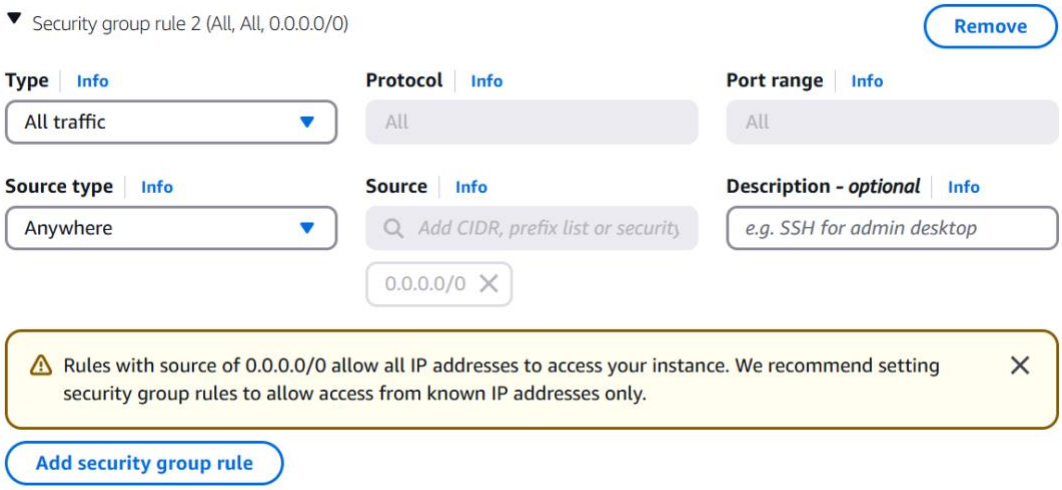


Step-4

Create key pair

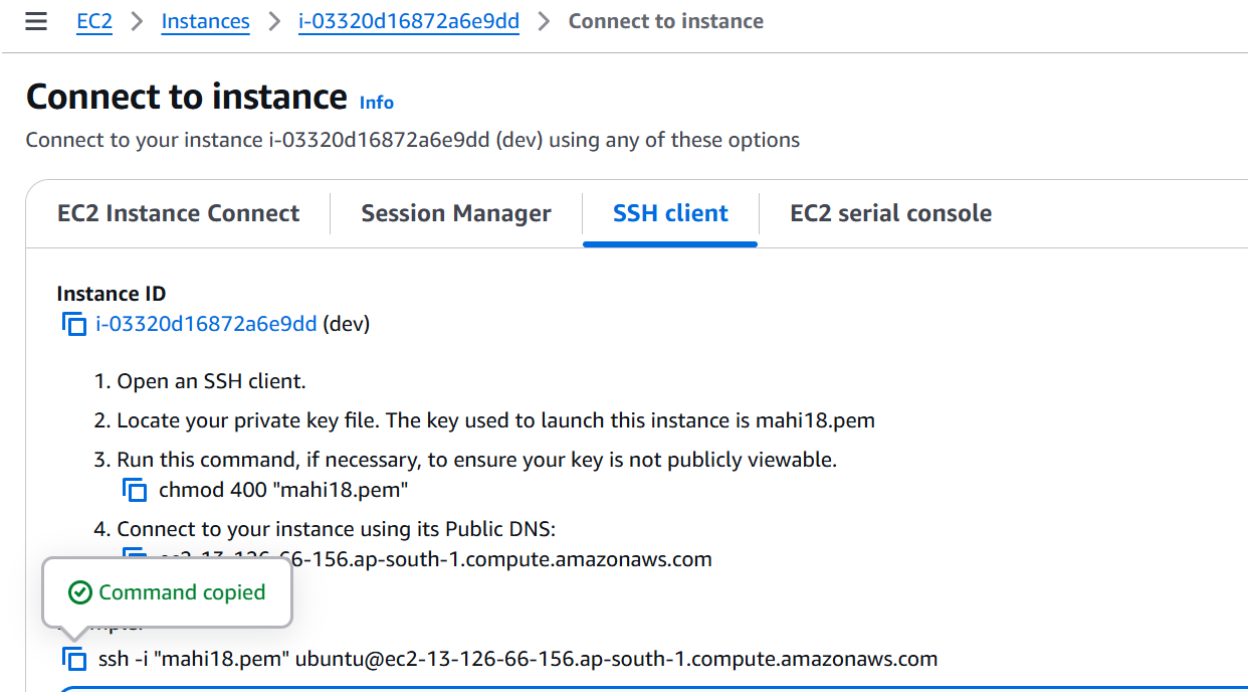


Step-5
Network add the below rule



Goto the .pem file location from there open gitbash (before you need to download and install gitbash in your computer)

Goto aws click on the connect take the ssh id copy and paste in the gitbash




```
Admin@DESKTOP-ASGG5M3 MINGW64 ~/Downloads
$ ssh -i "mahi18.pem" ubuntu@ec2-13-126-66-156.ap-south-1.compute.amazonaws.com
The authenticity of host 'ec2-13-126-66-156.ap-south-1.compute.amazonaws.com (13.126.66.156)' can't be established.
ED25519 key fingerprint is SHA256:UvyPb6zcAYpoJGBzL+spFknaVb2FEEqNfBaIC0LBO8M.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
```

Step-6

Now u need to install jenkins
First u need to update the apt repository
$ sudo apt update

```
ubuntu@ip-172-31-14-226:~$ sudo apt update
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble InRelease
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Get:4 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 MB]
Get:5 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:6 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]
```

Step-7
Install java
sudo apt install openjdk-21-jdk -y

```
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-172-31-14-226:~$ java --version
openjdk 21.0.5 2024-10-15
OpenJDK Runtime Environment (build 21.0.5+11-Ubuntu-1ubuntu124.04)
OpenJDK 64-Bit Server VM (build 21.0.5+11-Ubuntu-1ubuntu124.04, mixed mode, sharing)
ubuntu@ip-172-31-14-226:~$
```

Step-8

U need to install git and maven and check it
sudo apt-get install -y git maven
git --version
mvn --version

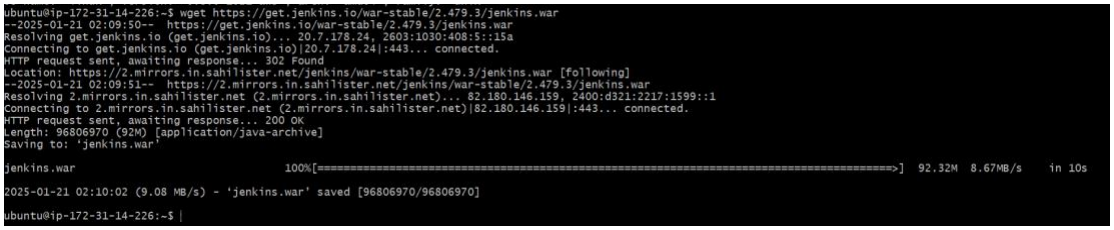
```
Setting up liberror-prone-java (2.18.0-1) ...
Setting up libguice-java (4.2.3-2) ...
Setting up libmaven3-core-java (3.8.7-2) ...
Setting up maven (3.8.7-2) ...
update-alternatives: using /usr/share/maven/bin/mvn to provide /usr/bin/mvn (mvn) in auto mode
Scanning processes...
Scanning linux images...

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-172-31-14-226:~$ git --version
git version 2.43.0
ubuntu@ip-172-31-14-226:~$ mvn --version
Apache Maven 3.8.7
Maven home: /usr/share/maven
Java version: 21.0.5, vendor: Ubuntu, runtime: /usr/lib/jvm/java-21-openjdk-amd64
Default locale: en, platform encoding: UTF-8
OS name: "linux", version: "6.8.0-1021-aws", arch: "amd64", family: "unix"
ubuntu@ip-172-31-14-226:~$
```

Step-9

Open jenkin.io (Download and deploy) in browsedr and select the generic java package(.war)

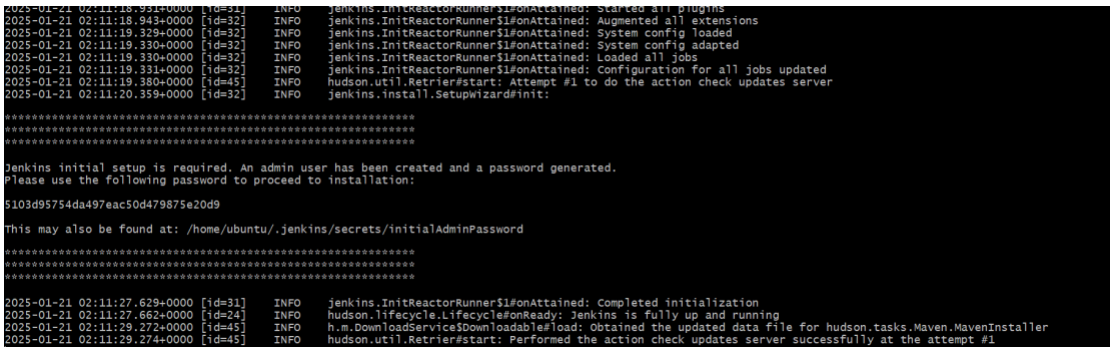
Copy and paste link addrest

$wgetlinkaddress



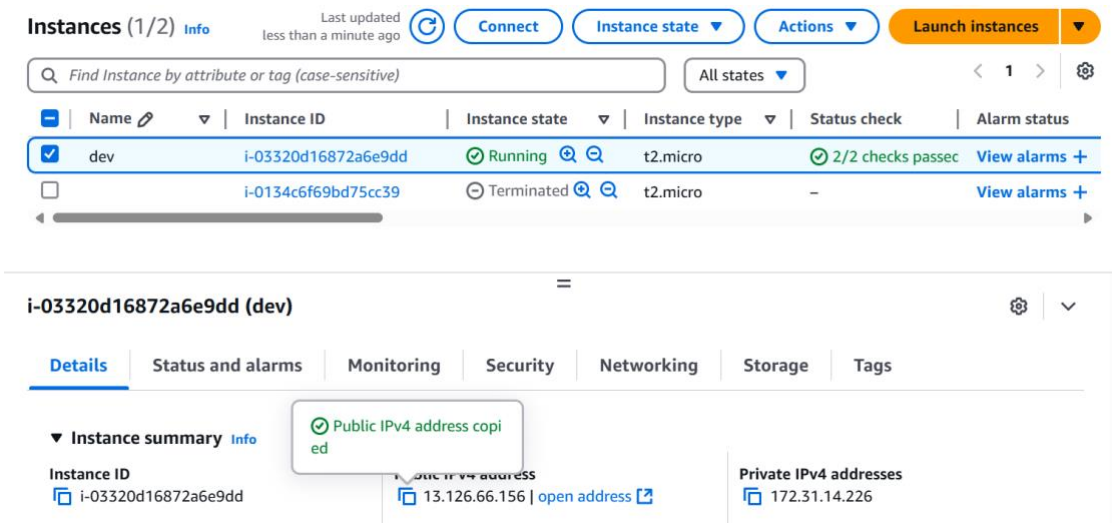
Start the jenkins services

$ java -jar jenkins.war

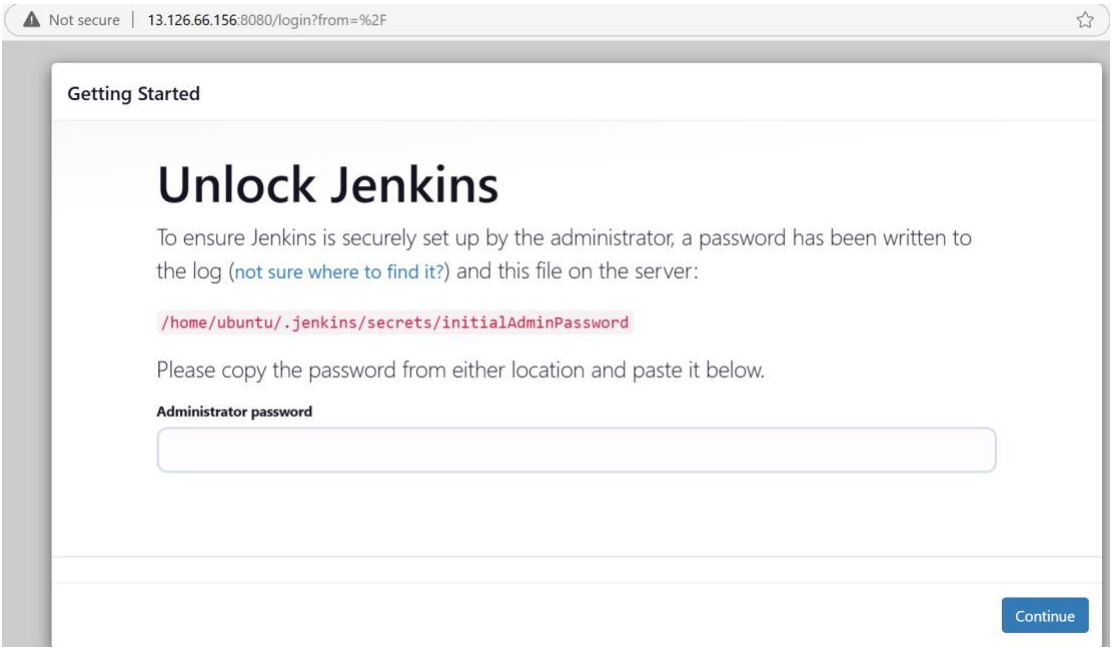


Step-10

we access the jenkin take the public ip of dev server



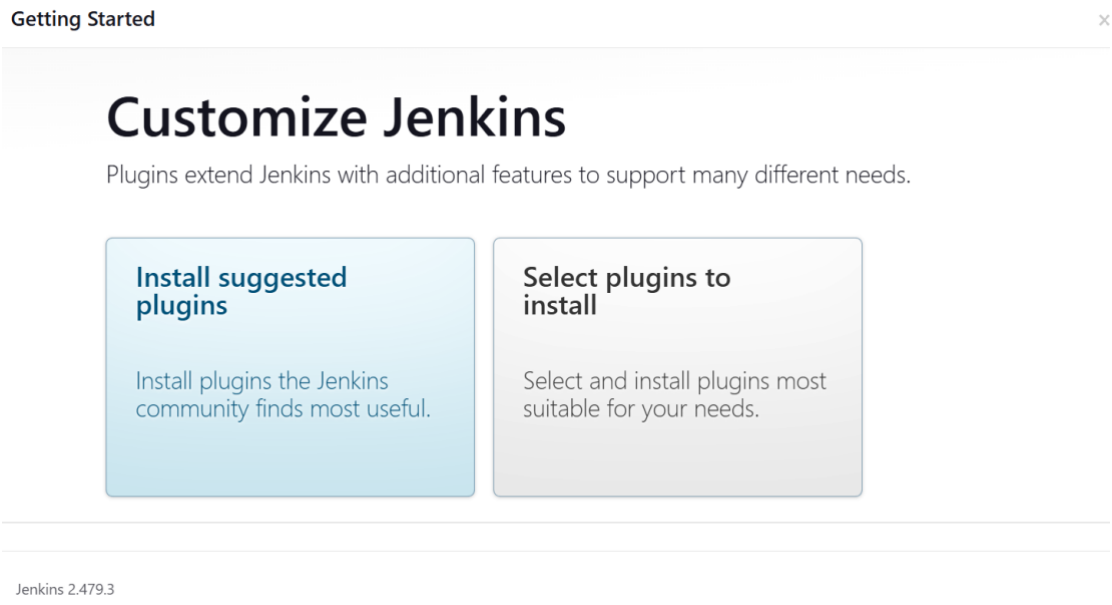
Copy and paste in the browser add :8080 as port number



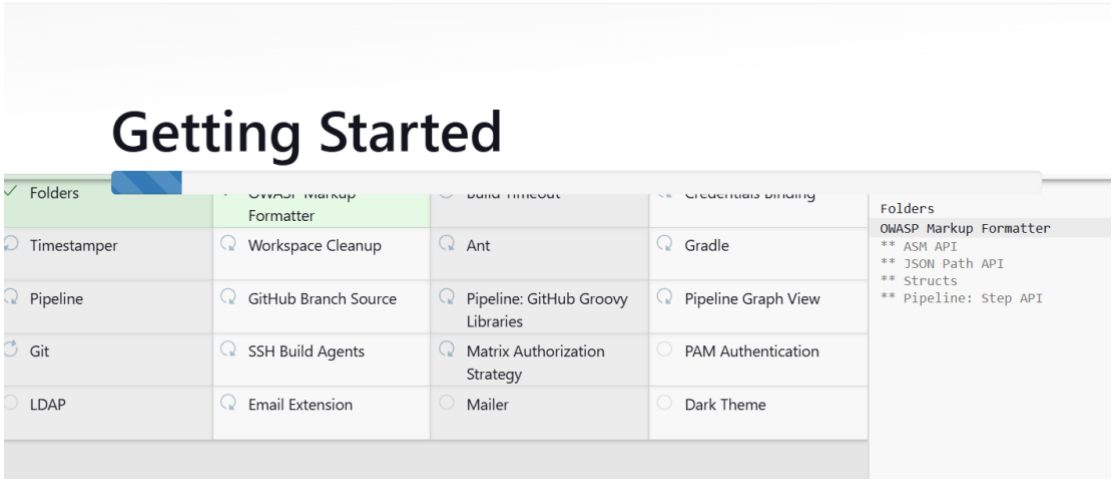
Unlock the jenkins with password which is present in the gitbash

```
Jenkins initial setup is required. An admin user has been created and a password generated.
Please use the following password to proceed to installation:

5103d95754da497eac50d479875e20d9

This may also be found at: /home/ubuntu/.jenkins/secrets/initialAdminPassword
```

Select the install suggested pluggins



Getting Started

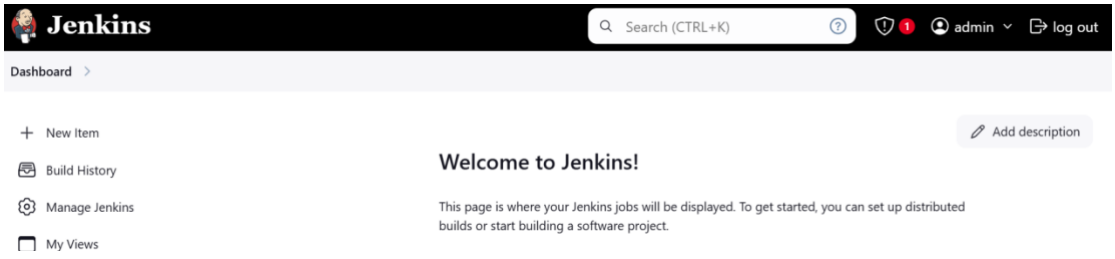


You can give all admin

Click on save and continue

Click on save and finish

Your jenkins is ready



Note: don’t close the jenkins server

Tools:

Trello, Jira, Azure Boards, or a custom dashboard in GitLab/GitHub.

By starting with this structure, you ensure clear communication, accountability, and efficiency in managing your DevOps tasks. Let me know if you need further elaboration or assistance with setting up tools!