Open aws account Select EC2 instance Click on launch instance Select ubuntu os



Select ubuntu free tier as amazoin image Amazon Machine Image (AMI)



Select instance type t2.micro

▼ Instance type Info | Get advice

Instance type



Additional costs apply for AMIs with pre-installed software

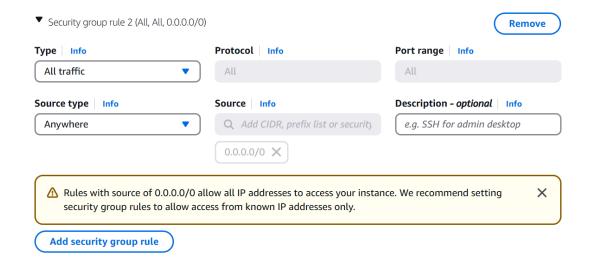
Create key pair

▼ Key pair (login) Info

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

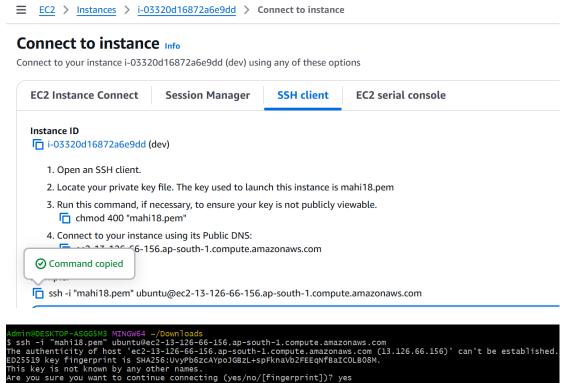
Key pair name - required mahikp ▼ Create new key pair

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



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]
Get:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu_poble/universe_amd64_Components_[3871 k]
```

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No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.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-lubuntu124.04)
OpenJDK 64-Bit Server VM (build 21.0.5+11-Ubuntu-lubuntu124.04, mixed mode, sharing)
ubuntu@ip-172-31-14-226:~$ |
```

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

```
Setting up liberor-prone-java (2.18.0-1) ...

Setting up liberor-prone-java (3.8.7-2) ...

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:~$ |
```

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

Copy and paste link addrest

\$wget linkaddress

```
ubuntu@ip=172-31-14-26:-$ wget https://get.jenkins.to/war-stable/2.479.3/jenkins.war
-2023-01-20:025:50-- https://get.jenkins.jo/war-stable/2.479.3/jenkins.war
Resolving get.jenkins.io (get.jenkins.io) (2.7.178.24; 2603:1030:4085::15a
Connecting to get.jenkins.io (get.jenkins.io) (2.7.178.24; 2603:1030:4085::15a
Connecting to get.jenkins.io (get.jenkins.io) (2.7.178.24; 2403... connected.

HTTP request sent, awaiting response... 302 Found
Location; https://g.mirrors.in.sablitister.net/jenkins,war=stable/2.479.3/jenkins.war [following]
Location; https://g.mirrors.in.sablitister.net/jenkins/war=stable/2.479.3/jenkins.war
Resolving 2.mirrors.in.sablitister.net (2.mirrors.in.sablitister.net)... 82.180.146.159; 2490:d321:2217:1599:1
Connecting to 2.mirrors.in.sablitister.net (2.mirrors.in.sablitister.net)... 82.180.146.159; 2490:d321:2217:1599:1
Connecting to 2.mirrors.in.sablitister.net (2.mirrors.in.sablitister.net)... 82.180.146.159; 2490:d321:2217:1599:1
Connecting to 2.mirrors.in.sablitister.net (2.mirrors.in.sablitister.net)... 92.180.146.159; 2490:d321:2217:1599:1
Connecting to 2.mirrors.in.sablitister.net
```

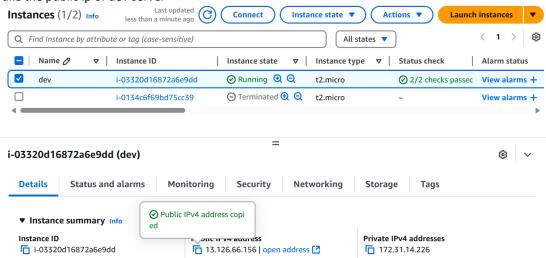
Start the jenkins services

\$ java -jar jenkins.war

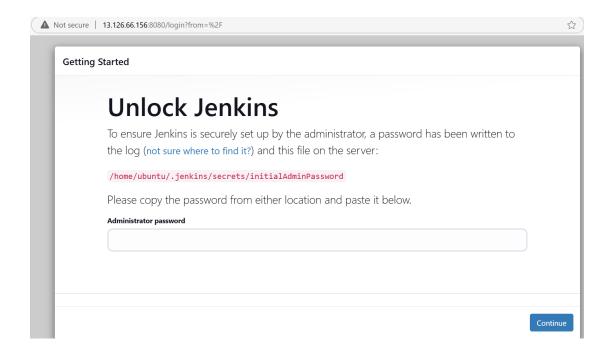
```
2025-01-21 02:111:8.931-0000 [id=31] INFO genkins.InitReactorRunnersIsfonAttained: Sugreed all plugins genkins.InitReactorRunnersIsfonAttained system config loaded genkins.InitReactorRunnersIsfonAttained: System config loaded genkins.InitReactorRun
```

How can 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

Customize Jenkins

Plugins extend Jenkins with additional features to support many different needs.

Install suggested plugins

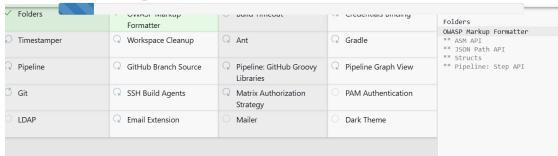
Install plugins the Jenkins community finds most useful.

Select plugins to install

Select and install plugins most suitable for your needs.

Getting Started





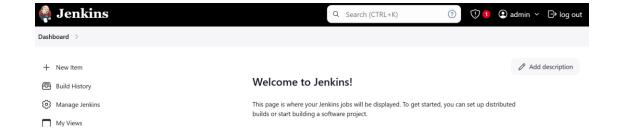
You can give all admin

Click on save and continue

Click on save and finish



Your jenkins is ready



Note: don't close the jenkins server