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

▼ **Application and OS Images (Amazon Machine Image)** Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

🔍 ubuntu ✕

Quick Start

Amazon Linux	macOS	Ubuntu	Windows	Red Hat	SUSE Linux	Browse more AMIs
aws	Mac	ubuntu	Microsoft	RedHat	SUSE	Including AMIs from AWS, Marketplace and the Community

Select ubuntu free tier as amazoin image

Amazon Machine Image (AMI)

Ubuntu Server 22.04 LTS (HVM), SSD Volume Type   Free tier eligible
ami-023a307f3d27ea427 (64-bit (x86)) / ami-054ce975817cc2c02 (64-bit (Arm))
Virtualization: hvm   ENA enabled: true   Root device type: ebs

Select instance type t2.micro

▼ **Instance type** Info | Get advice

Instance type

t2.micro   Free tier eligible
Family: t2   1 vCPU   1 GiB Memory   Current generation: true
On-Demand Linux base pricing: 0.0124 USD per Hour
On-Demand Windows base pricing: 0.017 USD per Hour
On-Demand RHEL base pricing: 0.0268 USD per Hour
On-Demand Ubuntu Pro base pricing: 0.0142 USD per Hour
On-Demand SUSE base pricing: 0.0124 USD per Hour

⚪ All generations

Compare instance types

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

▼ Security group rule 2 (All, All, 0.0.0.0/0)   **Remove**

Type | Info

All traffic ▼

Protocol | Info

All

Port range | Info

All

Source type | Info

Anywhere ▼

Source | Info

🔍 Add CIDR, prefix list or security

0.0.0.0/0 ✕

Description - *optional* | Info

e.g. SSH for admin desktop

⚠ Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only. ✕

Add security group 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

☰   EC2 > Instances > i-03320d16872a6e9dd > Connect to instance

Connect to instance Info

Connect to your instance i-03320d16872a6e9dd (dev) using any of these options

| EC2 Instance Connect | Session Manager | **SSH client** | EC2 serial console |

Instance ID

🗐 i-03320d16872a6e9dd (dev)

1. Open an SSH client.

2. Locate your private key file. The key used to launch this instance is mahi18.pem

3. Run this command, if necessary, to ensure your key is not publicly viewable.
   🗐 chmod 400 "mahi18.pem"

4. Connect to your instance using its Public DNS:
   🗐 ⌐ ¹³⁻¹²⁶⁻66-156.ap-south-1.compute.amazonaws.com

⊘ Command copied

🗐 ssh -i "mahi18.pem" ubuntu@ec2-13-126-66-156.ap-south-1.compute.amazonaws.com

```
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+spFknaVb2FEEqNfBaICOLBO8M.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
```

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]
```

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:~$
```

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

```
Setting up libguava-java (32.0.1-1) ...
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:~$
```


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

Copy and paste link addrest

$wget linkaddress

Start the jenkins services

$ java -jar jenkins.war

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

Select the install suggested pluggins

Getting Started

					Folders
✓ Folders		OWASP Markup Formatter	Build Timeout	Credentials Binding	OWASP Markup Formatter
Timestamper	Workspace Cleanup	Ant	Gradle		** ASM API
					** JSON Path API
Pipeline	GitHub Branch Source	Pipeline: GitHub Groovy Libraries	Pipeline Graph View		** Structs
Git	SSH Build Agents	Matrix Authorization Strategy	PAM Authentication		** Pipeline: Step API
LDAP	Email Extension	Mailer	Dark Theme		

You can give all admin

Click on save and continue

Click on save and finish

admin

Password

•••••

Confirm password

•••••

Full name

admin

E-mail address

admin@gmail.com

Your jenkins is ready

Search (CTRL+K)

admin

log out

Dashboard >

+ New Item

Build History

Manage Jenkins

My Views

Add description

Welcome to Jenkins!

This page is where your Jenkins jobs will be displayed. To get started, you can set up distributed builds or start building a software project.

Note: don't close the jenkins server

Jenkins

Dashboard >

+ New Item

Build History

Manage Jenkins

My Views

Search (CTRL+K)

admin

log out

Add description