








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

Q ubuntu X

Quick Start

						 Browse more AMIs Including AMIs from AWS, Marketplace and the Community
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Select ubuntu free tier as amazoin image

Amazon Machine Image (AMI)

Ubuntu Server 22.04 LTS (HVM), SSD Volume Type ami-023a307f3d27ea427 (64-bit (x86)) / ami-054ce975817cc2c02 (64-bit (Arm)) Virtualization: hvm ENA enabled: true Root device type: ebs	Free tier eligible ▼
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Select instance type t2.micro

▼ **Instance type** [Info](#) | [Get advice](#)

Instance type

t2.micro 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	Free tier eligible ▼	<input type="radio"/> All generations Compare instance types
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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	Protocol Info	Port range Info
All traffic ▼	All	All
Source type Info	Source Info	Description - optional Info
Anywhere ▼	<input type="text" value="Add CIDR, prefix list or security group"/> <input type="text" value="0.0.0.0/0"/> ✕	<input type="text" value="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
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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:
`ssh -i "mahi18.pem" ubuntu@ec2-13-126-66-156.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 "mah18.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+spFknaVb2FEEqNfBaICOLB08M.
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]
Get:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 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 libgda-java (3.0.1-1) ...
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 jenkins.io ([Download and deploy](#)) in browsedr and select the generic java package(.war)

Copy and paste link adress

\$wget linkaddress

```

ubuntu@ip-172-31-14-226:~$ wget https://get.jenkins.io/war-stable/2.479.3/jenkins.war
--2025-01-21 02:09:50-- https://get.jenkins.io/war-stable/2.479.3/jenkins.war
Resolving get.jenkins.io (get.jenkins.io)... 20.7.178.24, 2603:1030:408:5::15a
Connecting to get.jenkins.io (get.jenkins.io)[20.7.178.24]:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://2.mirrors.in.sahillister.net/jenkins/war-stable/2.479.3/jenkins.war [following]
--2025-01-21 02:09:51-- https://2.mirrors.in.sahillister.net/jenkins/war-stable/2.479.3/jenkins.war
Resolving 2.mirrors.in.sahillister.net (2.mirrors.in.sahillister.net)... 82.180.146.159, 2400:d321:2217:1599::1
Connecting to 2.mirrors.in.sahillister.net (2.mirrors.in.sahillister.net)[82.180.146.159]:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 96806970 (92M) [application/java-archive]
Saving to: 'jenkins.war'

jenkins.war
100%[=====] 92.32M 8.67MB/s in 10s

2025-01-21 02:10:02 (9.08 MB/s) - 'jenkins.war' saved [96806970/96806970]

ubuntu@ip-172-31-14-226:~$

```

Start the jenkins services

\$ java -jar jenkins.war

```

2025-01-21 02:11:18.931+0000 [id=32] INFO jenkins.InitReactorRunner$1#onAttained: Started all plugins
2025-01-21 02:11:18.943+0000 [id=32] INFO jenkins.InitReactorRunner$1#onAttained: Augmented all extensions
2025-01-21 02:11:19.329+0000 [id=32] INFO jenkins.InitReactorRunner$1#onAttained: System config loaded
2025-01-21 02:11:19.330+0000 [id=32] INFO jenkins.InitReactorRunner$1#onAttained: System config adapted
2025-01-21 02:11:19.330+0000 [id=32] INFO jenkins.InitReactorRunner$1#onAttained: Loaded all jobs
2025-01-21 02:11:19.331+0000 [id=32] INFO jenkins.InitReactorRunner$1#onAttained: Configuration for all jobs updated
2025-01-21 02:11:19.380+0000 [id=45] INFO hudson.util.Retrier#start: Attempt #1 to do the action check updates server
2025-01-21 02:11:20.359+0000 [id=32] INFO jenkins.install.SetupWizard#init:

*****
*****
*****
*****
*****

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

s103d95754da497eac50d479875e20d9

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

*****
*****
*****

2025-01-21 02:11:27.629+0000 [id=31] INFO jenkins.InitReactorRunner$1#onAttained: Completed initialization
2025-01-21 02:11:27.662+0000 [id=24] INFO hudson.lifecycle.Lifecycle#onReady: Jenkins is fully up and running
2025-01-21 02:11:29.272+0000 [id=45] INFO hudson.DownloadServiceDownloadable#load: Obtained the updated data file for hudson.tasks.Maven.MavenInstaller
2025-01-21 02:11:29.274+0000 [id=45] INFO hudson.util.Retrier#start: Performed the action check updates server successfully at the attempt #1

```

How can we access the jenkins

Take the public ip of dev server

Instances (1/2) [Info](#) Last updated less than a minute ago [Refresh](#) [Connect](#) [Instance state](#) [Actions](#) [Launch instances](#)

[All states](#) [1](#) [Settings](#)

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status
<input checked="" type="checkbox"/>	dev	i-03320d16872a6e9dd	Running	t2.micro	2/2 checks passed	View alarms
<input type="checkbox"/>		i-0134c6f69bd75cc39	Terminated	t2.micro	-	View alarms

i-03320d16872a6e9dd (dev) [Settings](#) [Down Arrow](#)

[Details](#) [Status and alarms](#) [Monitoring](#) [Security](#) [Networking](#) [Storage](#) [Tags](#)

▼ **Instance summary** [Info](#)

Instance ID

[Copy icon](#) i-03320d16872a6e9dd

Public IPv4 address

[Copy icon](#) 13.126.66.156 [open address](#)

Private IPv4 addresses

[Copy icon](#) 172.31.14.226

Copy and paste in the browser add 8080 as port number

⚠ Not secure | 13.126.66.156:8080/login?from=%2F ☆

Getting Started

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:

`/home/ubuntu/.jenkins/secrets/initialAdminPassword`

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

Administrator password

Continue

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 x

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

Getting Started

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

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

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