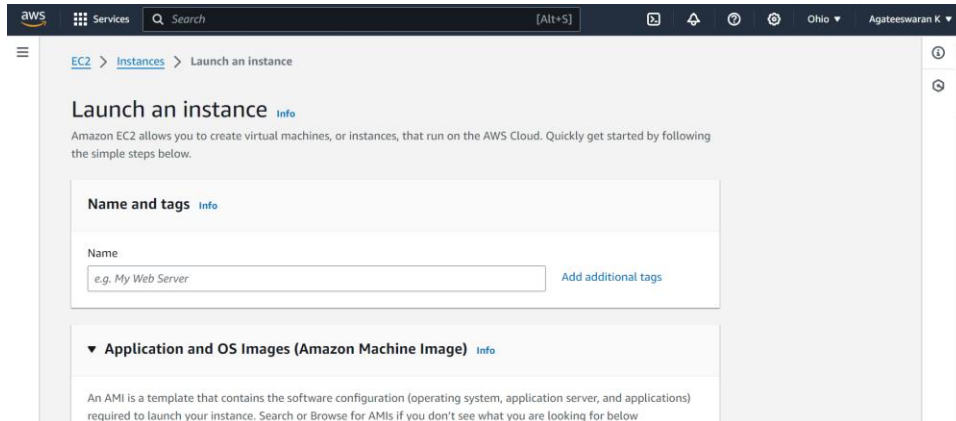


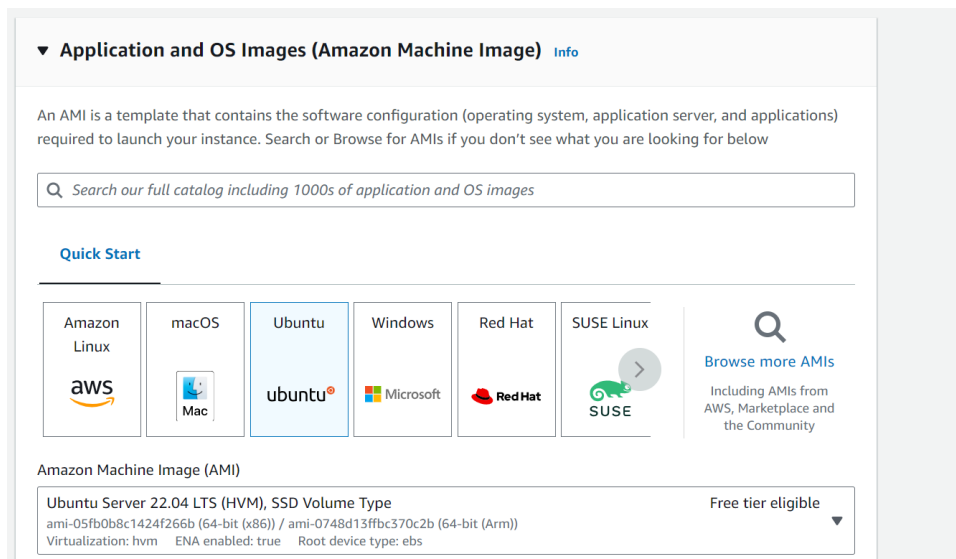
# JENKINS DEMO

Name: Agateeswaran K

Go to aws console and search for



Name your instance and select the Instances OS



## Select the instance type

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

Instance type

t2.micro

Family: t2 1 vCPU 1 GiB Memory Current generation: true

On-Demand Linux base pricing: 0.0116 USD per Hour

On-Demand SUSE base pricing: 0.0116 USD per Hour

On-Demand Windows base pricing: 0.0162 USD per Hour

On-Demand RHEL base pricing: 0.0716 USD per Hour

Free tier eligible

☒ All generations

[Compare instance types](#)

Additional costs apply for AMIs with pre-installed software

## Create the Key pair for accessing the instance

AMIs with pre-installed software

Create key pair

×

Key pair name

Key pairs allow you to connect to your instance securely.

jenkins\_key

The name can include up to 255 ASCII characters. It can't include leading or trailing spaces.

Key pair type

☒ RSA

RSA encrypted private and public key pair

☐ ED25519

ED25519 encrypted private and public key pair

Private key file format

☐ .pem

For use with OpenSSH

☒ .ppk

For use with PuTTY

Cancel

Create key pair

## After that select the edit option in network setting

▼ Network settings [Info](#)

Edit

to customize the inbound SG rules type as ssh to all TCP

Inbound Security Group Rules

▼ Security group rule 1 (TCP, 0-65535, 0.0.0.0/0) Remove

Type <a href="#">Info</a>	Protocol <a href="#">Info</a>	Port range <a href="#">Info</a>
All TCP	TCP	0-65535
Source type <a href="#">Info</a>	Source <a href="#">Info</a>	Description - optional <a href="#">Info</a>
Anywhere	<input type="text" value="Add CIDR, prefix list or security group ID"/>	<input type="text" value="e.g. SSH for admin desktop"/>

Now launch the instance

Number of instances [Info](#)

1

t2.micro

[Firewall \(security group\)](#)

New security group

[Storage \(volumes\)](#)

1 volume(s) - 8 GiB

**Free tier:** In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMLs per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel Launch instance [Review commands](#)

Now we can view the instance which we have created before, and we can also see the details of the instance.

aws Services Search [Alt+S] Ohio Agateeswaran K

EC2 Dashboard EC2 Global View Events

▼ Instances

Instances

Instance Types Launch Template

Instances (1) [Info](#) Refresh Connect Instance state Actions Launch instances

Any state

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status
<input type="checkbox"/>	Jenkins	i-06fd98e6778a4f4a5	Pending	t2.micro	-	<a href="#">View alarm</a>

On click on the instance after the instances had come to live

EC2 > Instances > i-06fd98e6778a4f4a5

**Instance summary for i-06fd98e6778a4f4a5 (Jenkins)** [Info](#)

[Refresh](#) [Connect](#) [Instance state ▼](#) [Actions ▼](#)

Updated less than a minute ago

Instance ID i-06fd98e6778a4f4a5 (Jenkins)	Public IPv4 address 13.59.193.75 <a href="#">open address</a>	Private IPv4 addresses 172.31.37.50
--	--	--

We can view this web page and we can select the connect option to connect with the instance.

EC2 > Instances > i-06fd98e6778a4f4a5 > Connect to instance

**Connect to instance** [Info](#)

Connect to your instance i-06fd98e6778a4f4a5 (Jenkins) using any of these options

[EC2 Instance Connect](#) [Session Manager](#) [SSH client](#) [EC2 serial console](#)

Instance ID  
i-06fd98e6778a4f4a5 (Jenkins)

Connection Type

☒ **Connect using EC2 Instance Connect**  
Connect using the EC2 Instance Connect browser-based client, with a public IPv4 address.

☐ **Connect using EC2 Instance Connect Endpoint**  
Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.

Public IP address  
13.59.193.75

Username  
Enter the username defined in the AMI used to launch the instance. If you didn't define a custom username, use the default username, ubuntu.

Follow these commands

## Long Term Support release

A [LTS \(Long-Term Support\) release](#) is chosen every 12 weeks from the stream of regular releases as the stable release for that time period. It can be installed from the [debian-stable apt repository](#).

```
sudo wget -O /usr/share/keyrings/jenkins-keyring.asc \
    https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key
echo deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] \
    https://pkg.jenkins.io/debian-stable binary/ | sudo tee \
    /etc/apt/sources.list.d/jenkins.list > /dev/null
sudo apt-get update
sudo apt-get install jenkins
```

Jenkins has a pre-requirement for java.

## Installation of Java

Jenkins requires Java to run, yet not all Linux distributions include Java by default. Additionally, [not all Java versions are compatible](#) with Jenkins.

There are multiple Java implementations which you can use. [OpenJDK](#) is the most popular one at the moment, we will use it in this guide.

Update the Debian apt repositories, install OpenJDK 17, and check the installation with the commands:

```
sudo apt update
sudo apt install fontconfig openjdk-17-jre
java -version
openjdk version "17.0.8" 2023-07-18
OpenJDK Runtime Environment (build 17.0.8+7-Debian-1deb12u1)
OpenJDK 64-Bit Server VM (build 17.0.8+7-Debian-1deb12u1, mixed mode, sharing)
```

After the installation of Java and Jenkins we can access our instance using the public IP

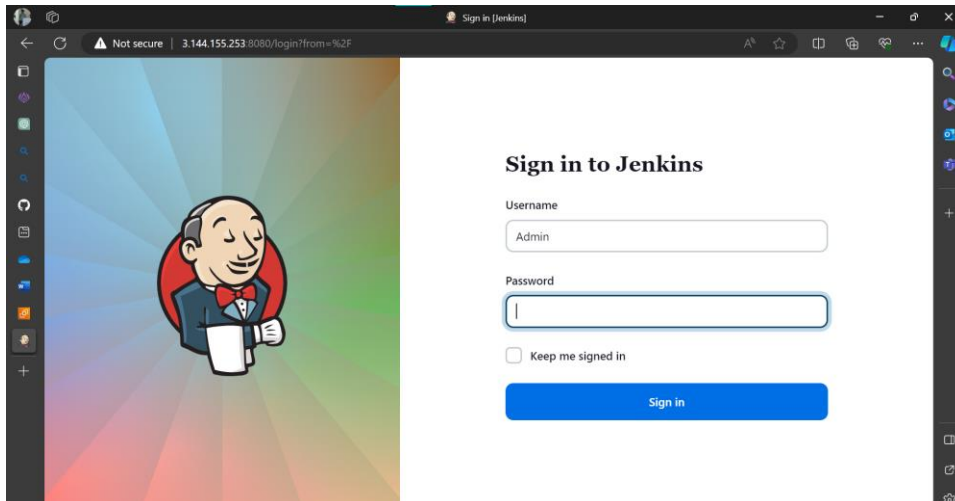


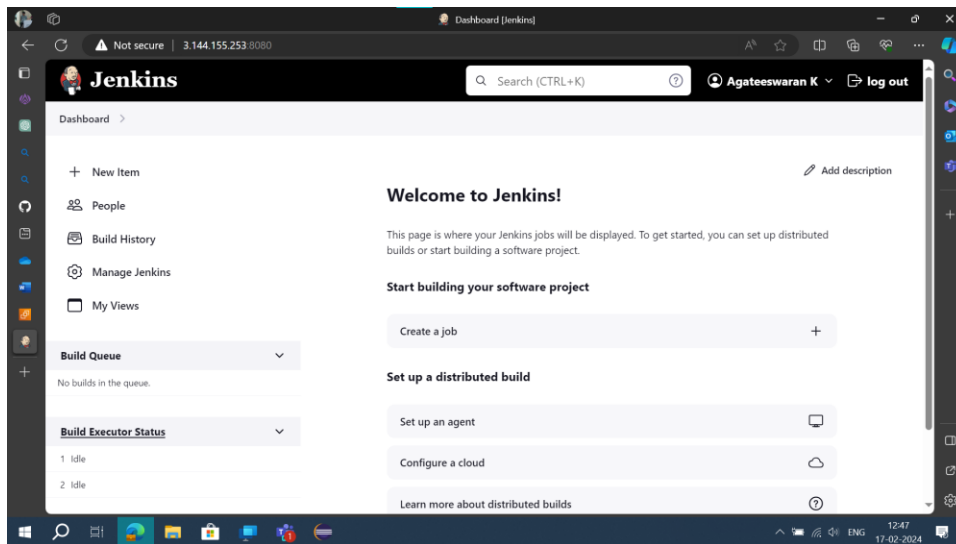
13.59.193.75

and add :8080 in the end.

To set the username and password we need to

```
ubuntu@ip-172-31-37-50:~$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword
d13c4e0755954efd8a88c7a8e943b512
```





## Creating a job

