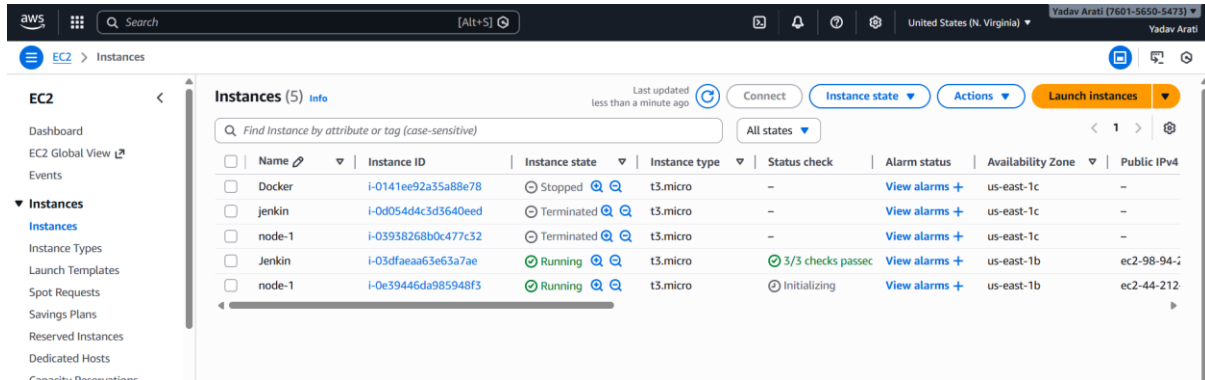


Master Slave Node

Create EC2 instance named as jenkins



Note: Make sure your security group is open for port 8080

Install java on both instance

```
sudo apt update
```

```
sudo apt install fontconfig openjdk-21-jre
```

```
java -version
```

Install jenkins on instance

```
sudo wget -O /etc/apt/keyrings/jenkins-keyring.asc \
```

```
https://pkg.jenkins.io/debian-stable/jenkins.io-2026.key
```

```
echo "deb [signed-by=/etc/apt/keyrings/jenkins-keyring.asc]" \
```

```
https://pkg.jenkins.io/debian-stable binary/ | sudo tee \
```

```
/etc/apt/sources.list.d/jenkins.list > /dev/null
```

```
sudo apt update
```

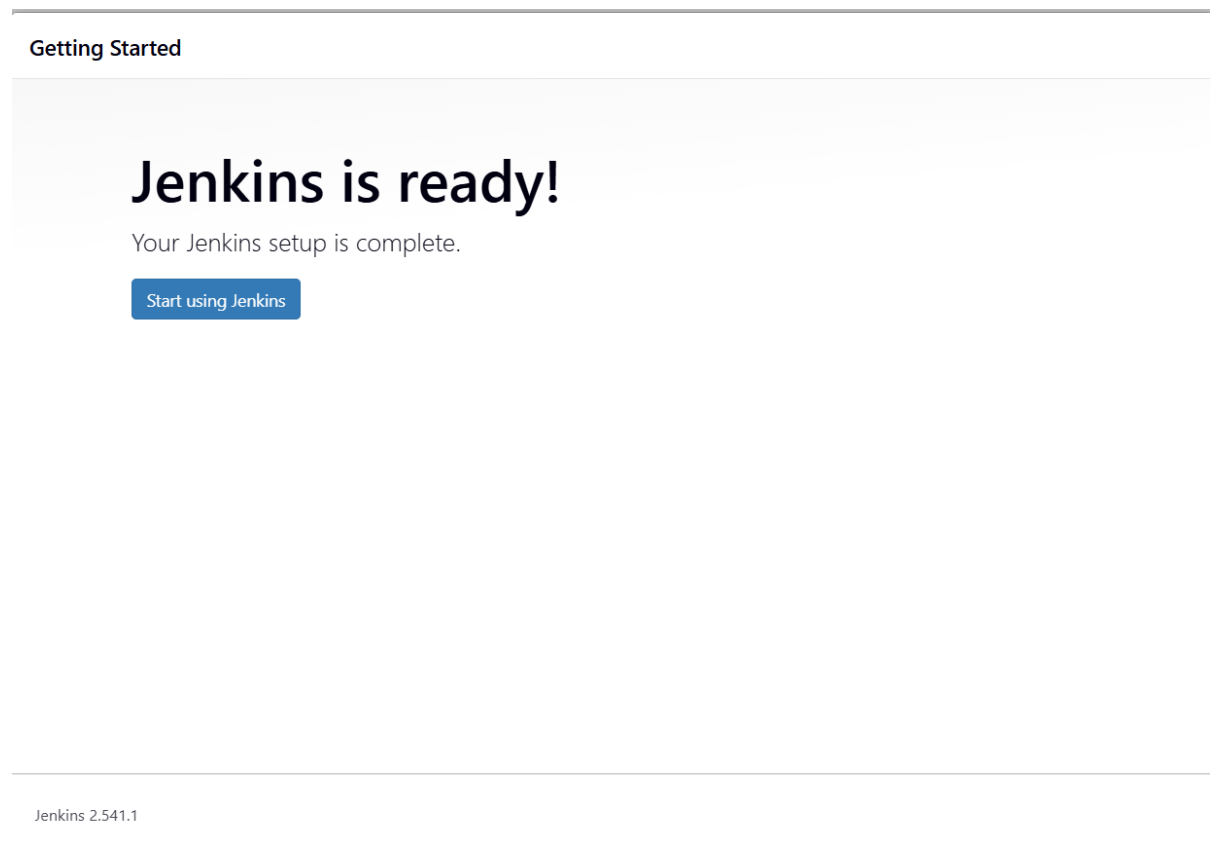
```
sudo apt install Jenkins
```

change host name

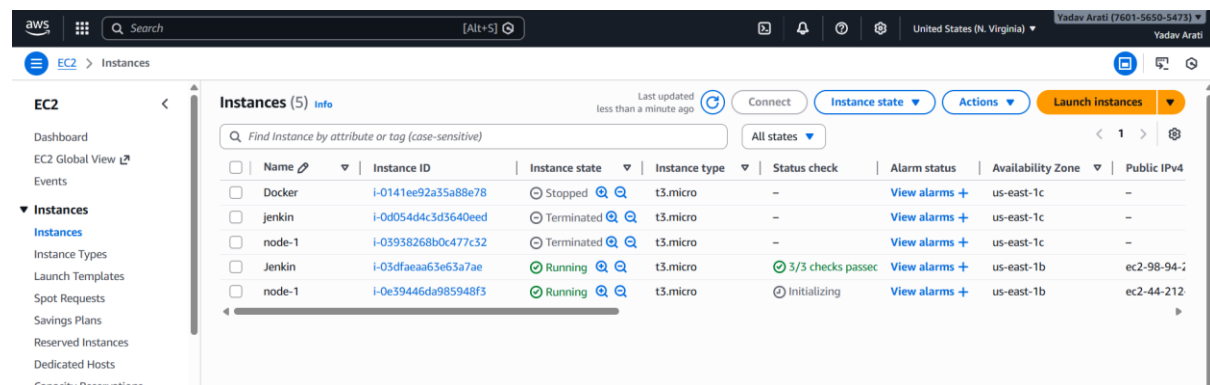
```
sudo hostnamectl set-hostname masternode-1
```

```
ubuntu@ip-172-31-89-24:~$ sudo hostnamectl set-hostname masternode-1
ubuntu@ip-172-31-89-24:~$ bash
ubuntu@masternode-1:~$
```

Install jenkins



Create EC2 instance named as node-1



Note: Make sure your security group is open for port 8080

Install java on node-1 instance

sudo apt update

sudo apt install fontconfig openjdk-21-jre

java -version


change hostname as a node-1

sudo hostnamectl set-hostname node-1

bash

```
ubuntu@ip-172-31-80-23:~$ sudo hostnamectl set-hostname node-1
ubuntu@ip-172-31-80-23:~$ bash
```

Setting – Nodes – Available plugins – build agent - install

 **Jenkins** / Manage Jenkins

Search settings


Building on the built-in node can be a security issue. You should set up distributed builds. See the documentation.


Set up agentSet up cloudDismiss


Jenkins can enforce Content Security Policy (CSP). CSP tells web browsers what they are allowed to do while rendering a web page. This limits or even eliminates the impact of vulnerabilities like cross-site scripting (XSS). CSP is disabled by default for backward compatibility, but it is recommended to enable it, if possible.


Learn moreDismiss


System Configuration


 **System**
Configure global settings and paths.

 **Tools**
Configure tools, their locations and automatic installers.


 **Plugins**
Add, remove, disable or enable plugins that can extend the functionality of Jenkins.


 **Nodes**
Add, remove, control and monitor the various nodes that Jenkins runs jobs on.


 **Clouds**
Add, remove, and configure cloud instances to provision agents on-demand.

 **Appearance**
Configure the look and feel of Jenkins

Security

 **Security**
Secure Jenkins; define who is allowed to access/use the system.

 **Users**
Create/delete/modify users that can log in to this Jenkins.

 **Jenkins** / Manage Jenkins / Plugins

Search build agent

Install

Updates


Available plugins

Installed plugins

Advanced settings

Download progress

Install	Name	Released	Health
<input checked="" type="checkbox"/>	SSH Build Agents 3.1097.v868116049892 Agent Management Allows to launch agents over SSH, using a Java implementation of the SSH protocol.	3 days 6 hr ago	100
<input type="checkbox"/>	Docker Slaves 1.0.7 docker Uses Docker containers to run Jenkins build agents.	8 yr 6 mo ago	73
<input type="checkbox"/>	Libvirt Agents 315.v5d33b_333a_551 Cloud Providers Cluster Management Agent Management This plugin enables libvirt-controlled build agents (including start before build, shutdown after build).	5 mo 22 days ago	96
<input type="checkbox"/>	Chaos Butler 1.0 Cluster Management A plugin that periodically wakes up and disconnects build agents in order to prove that your infrastructure is fault resilient. <div>This plugin is up for adoption! We are looking for new maintainers. Visit our Adopt a Plugin initiative for more information.</div>	9 yr 5 mo ago	25
<input type="checkbox"/>	Conflict Aware On Demand Retention Strategy 2.197.vd7e077d21c70		

 Jenkins

Manage Jenkins

Plugins

Updates

Available plugins

Installed plugins

Advanced settings

Download progress

Download progress

Preparation

- Checking internet connectivity
- Checking update center connectivity
- Success

Loading plugin extensions

EDDSA API

Gson API

Trilead API

commons-lang3 v3.x Jenkins API

Ionicons API

Struts

commons-text API

bouncycastle API

Credentials

Variant

SSH Credentials

SSH Build Agents

Loading plugin extensions

Success

Success

Success

Success

Success

Success

Success

Success

Success


Success

Success

Success

Success

Restart jenkins



Jenkins is restarting

Your browser will reload automatically when Jenkins is ready.

Safe Restart

Builds on agents can usually continue.

Setting – Nodes

Jenkins / Manage Jenkins

Manage Jenkins

Building on the built-in node can be a security issue. You should set up distributed builds. See the documentation. [Set up agent](#) [Set up cloud](#) [Dismiss](#)

Jenkins can enforce Content Security Policy (CSP). CSP tells web browsers what they are allowed to do while rendering a web page. This limits or even eliminates the impact of vulnerabilities like cross-site scripting (XSS). CSP is disabled by default for backward compatibility, but it is recommended to enable it, if possible. [Learn more](#) [Dismiss](#)

System Configuration

- System**
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- Security**
Secure Jenkins; define who is allowed to access/use the system.
- Users**
Create/delete/modify users that can log in to this Jenkins.

Create new node named as slave-1

Jenkins / Manage Jenkins / Nodes

Nodes [+ New Node](#) [Configure Monitors](#) [Refresh](#)

Add, remove, control and monitor the various nodes that Jenkins runs jobs on.

S	Name	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time
	Built-In Node	Linux (amd64)	In sync	3.91 GiB	1.0 B	3.91 GiB	0ms
	Data obtained	46 sec	46 sec	46 sec	46 sec	46 sec	46 sec

Icon: S M L Legend

Node name: slave-1

Select: ☒ Permanent Agent

Click: Create

Jenkins / Manage Jenkins / Nodes / New node

New node

Node name

slave-1

Type

☒ Permanent Agent
Adds a plain, permanent agent to Jenkins. This is called "permanent" because Jenkins doesn't provide higher level of integration with these agents, such as dynamic provisioning. Select this type if no other agent types apply — for example such as when you are adding a physical computer, virtual machines managed outside Jenkins, etc.

[Create](#)

Name: slave-1


Number of executors: 1

Remote root directory: /home/ubuntu

Labels:

slave-1

Scroll down 🖱️

 **Jenkins** / Manage Jenkins ▾ / Nodes ▾

Name ?

slave-1

Description ?

Plain text [Preview](#)

Number of executors ?

1

Remote root directory ?

/home/ubuntu

Labels ?

slave-1

Launch Method

Launch agents via SSH


☒ Host


Put your EC2 node-1 private IP(172.31.80.23)


Add Credentials

×

Select a type of credential

 Username with password
Commonly used for authentication to services like Git, APIs, or registries.

 SSH Username with private key

 Certificate
Upload a PKCS#12 or PEM encoded certificate and private key.

Next

Credentials : SSH Username with private key

- ID: fct-1
- Username: ubuntu
- Private Key: Paste your EC2 .pem file content

Click: **Create**

<

Add SSH Username with private key

×

ID ?

fct-1

Description ?

Username

ubuntu

☐ Treat username as secret ?

Private Key

☒ Enter directly

Key

Enter New Secret Below

PlM6FmOakz5mnROeSwlQk4scwWN9/b//ho36unCBRqW1C3EAj6Z8hCM
XaD3zJ0uu
SRBTE+z/dk2riYvT+LiaWxevm3Sb2cwT7cobpZECgYB50bxSRmGKAu6
2a1xVY+Op

Create

Host Key Verification Strategy : Non verifying Verification Strategy

☒ Availability : Keep this agent online as much as possible

☒ SAVE

Jenkins

Manage Jenkins

Nodes

Usage ?

Use this node as much as possible

Launch method ?

Launch agents via SSH

Host ?

172.31.80.23

Credentials ?

ubuntu

+ Add

Host Key Verification Strategy ?

Known hosts file Verification Strategy

Advanced

Availability ?

Keep this agent online as much as possible

Save

Jenkins

Manage Jenkins

Nodes

+ New Node

Configure Monitors

Nodes

Add, remove, control and monitor the various nodes that Jenkins runs jobs on.

S	Name	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time
	Built-In Node	Linux (amd64)	In sync	3.91 GiB	0 B	3.91 GiB	0ms
	slave-1		N/A	N/A	N/A	N/A	N/A
Data obtained		7 ms	9 ms	7 ms	4 ms	2 ms	3 ms

Icons: S M L

Legend

Create a new job

Jenkins

All

New Item

New Item

Enter an item name

node-1

Select an item type

Freestyle project

Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.

OK

Build Now

Note : Same steps for slave-2