Documentation

Step 1: Launch EC2 Instance

1. Go to the [EC2 Dashboard](#).

2. Click **"Launch Instance"**.

3. Set instance details:

   ○ **Name**: e.g., `Jenkins-Ubuntu`

   ○ **AMI**: Ubuntu 24.04 (as shown in your screenshot)

   ○ **Instance Type**: `t2.micro` (free tier)

4. Under **Key Pair**:

   ○ Select an existing key pair or create a new one.

5. Under **Network settings** → Click **Edit**:

   ○ **Allow SSH (port 22)** from your IP

   ○ **Add Custom Rule**:

      ■ Type: Custom TCP

      ■ Port Range: `8080`

      ■ Source: Anywhere (or custom IP)

6. **Storage**: Leave as default (8 GiB)

7. Click **"Launch Instance"**

▼ Summary

Number of instances | Info

```
1
```

Software Image (AMI)
Canonical, Ubuntu, 24.04, amd6...read more
ami-04f167a56786e4b09

Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 8 GiB

Cancel   **Launch instance**

                    ⟱ **Preview code**

Step 2: Connect to EC2 via SSH

```
chmod 400 your-key.pem    # Give secure permissions
ssh -i your-key.pem ubuntu@<EC2_Public_IP>
```

Replace `your-key.pem` with your key file and `<EC2_Public_IP>` with your instance's public IP from AWS.

```
(base) abdulrehamanshaik@Abduls-MacBook-Pro Linux % ssh -i "mykeyportal.pem" ubuntu@ec2-18-218-197-178.us-east-2.compute.amazonaws.com
The authenticity of host 'ec2-18-218-197-178.us-east-2.compute.amazonaws.com (18.218.197.178)' can't be established.
ED25519 key fingerprint is SHA256:mAzd5dCFpLCeLfZb0HfNJPbqtScXmKTskUgjO5qcGhU.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'ec2-18-218-197-178.us-east-2.compute.amazonaws.com' (ED25519) to the list of known hosts.
Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.8.0-1024-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

 System information as of Mon Apr 21 18:07:15 UTC 2025

  System load:  0.0              Processes:             105
  Usage of /:   25.0% of 6.71GB  Users logged in:       0
  Memory usage: 20%              IPv4 address for enX0: 172.31.0.117
  Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status


The list of available updates is more than a week old.
To check for new updates run: sudo apt update


The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-0-117:~$ vi jenkins.sh
ubuntu@ip-172-31-0-117:~$ ls
jenkins.sh
ubuntu@ip-172-31-0-117:~$ chmod +x jenkins-install.sh
chmod: cannot access 'jenkins-install.sh': No such file or directory
ubuntu@ip-172-31-0-117:~$ sudo chmod +x jenkins-install.sh
chmod: cannot access 'jenkins-install.sh': No such file or directory
ubuntu@ip-172-31-0-117:~$ chmod +x jenkins.sh
ubuntu@ip-172-31-0-117:~$ ls -al jenkins.sh
-rwxrwxr-x 1 ubuntu ubuntu 1265 Apr 21 18:07 jenkins.sh
ubuntu@ip-172-31-0-117:~$
```

Step 3: Create Jenkins Install Script

1.Create a new script file:

```
vi jenkins-install.sh
```

2. Press `i` to enter **insert mode**, paste the full script you provided.

3.Save and exit:

    Press Esc

    Type :wq and press Enter

Step 4: Make the Script Executable

chmod +x jenkins-install.sh

Step 5: Run the Script

./jenkins-install.sh

This script will:

- Install OpenJDK 17

- Install Maven and tree (optional)

- Add Jenkins GPG key and repository

- Install Jenkins

- Configure UFW firewall to allow ports 22 and 8080

- Enable and start Jenkins service

#!/bin/bash

echo "🔄 Updating package list..."

```
sudo apt update -y


echo "📦 Installing OpenJDK 17..."

sudo apt install openjdk-17-jdk -y


echo "📦 Installing Maven (optional)..."

sudo apt install maven -y


echo "📦 Installing 'tree' utility (optional)..."

sudo apt install tree -y


echo "🔑 Adding Jenkins repository key..."

sudo mkdir -p /usr/share/keyrings

curl -fsSL https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee
/usr/share/keyrings/jenkins-keyring.asc > /dev/null


echo "📦 Adding Jenkins source list..."

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


echo "🔁 Updating package list again..."

sudo apt update -y


echo "📦 Installing Jenkins..."

sudo apt install jenkins -y
```

echo "🚀 Starting and enabling Jenkins service..."

sudo systemctl start jenkins

sudo systemctl enable jenkins

echo "🛡️ Configuring UFW firewall rules..."

sudo ufw allow 8080

sudo ufw allow OpenSSH

sudo ufw --force enable

echo "✅ Jenkins installation complete!"

echo "🌐 Access Jenkins at: http://<your-server-ip>:8080"

echo "🔐 Initial Admin Password:"

sudo cat /var/lib/jenkins/secrets/initialAdminPassword

Step 6: Get Jenkins Initial Admin Password

```
sudo cat /var/lib/jenkins/secrets/initialAdminPassword
```

Copy this password.

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:

`/var/lib/jenkins/secrets/initialAdminPassword`

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

Administrator password

[   ]

Continue

Step 7: Access Jenkins Web Interface

Open your browser and go to:

`http://<EC2_Public_IP>:8080`

Instance Configuration

Jenkins URL:

http://18.218.197.178:8080/

The Jenkins URL is used to provide the root URL for absolute links to various Jenkins resources. That means this value is required for proper operation of many Jenkins features including email notifications, PR status updates, and the BUILD_URL environment variable provided to build steps.

The proposed default value shown is **not saved yet** and is generated from the current request, if possible. The best practice is to set this value to the URL that users are expected to use. This will avoid confusion when sharing or viewing links.

Not now   Save and Finish

Jenkins is ready!

Your Jenkins setup is complete.

Start using Jenkins

Jenkins 2.492.3

- Paste the password

- Install suggested plugins

- Create the first admin user

- Start using Jenkins!

Customize Jenkins

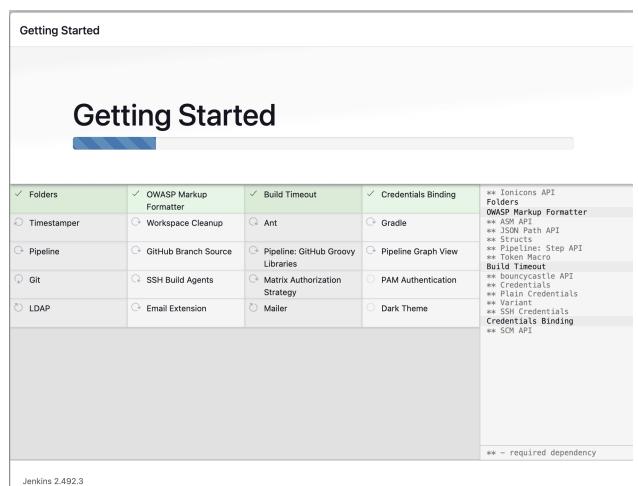Plugins extend Jenkins with additional features to support many different needs.

Install suggested plugins

Install plugins the Jenkins community finds most useful.

Select plugins to install

Select and install plugins most suitable for your needs.

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Getting Started

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

```
** Ionicons API
Folders
OWASP Markup Formatter
** ASM API
** JSON Path API
** Structs
** Pipeline: Step API
** Token Macro
Build Timeout
** bouncycastle API
** Credentials
** Plain Credentials
** Variant
** SSH Credentials
Credentials Binding
** SCM API



** — required dependency
```

Jenkins 2.492.3

What to Watch For

- If you see any **errors** during package installs, share a screenshot or paste it here.

Once it completes, you'll see:

✅ Jenkins installation complete!
🌐 Access Jenkins at: http://<your-server-ip>:8080
🔐 Initial Admin Password:

- <some-random-password>

🔐 Unlock Jenkins UI

After the script is fully done:

```
sudo cat /var/lib/jenkins/secrets/initialAdminPassword
```

✅ Step 7: Unlock & Setup Jenkins

1. **Paste initial password**

2. Click **"Install Suggested Plugins"**

3. Create:

   - Admin Username

   - Password

   - Email

4. Finish and log in to Jenkins!

Create First Admin User

Username

Rehu493

Password

···········

Confirm password

···········

Full name

Abdul Rehaman Shaik

E-mail address

abdulrehamansk1993@gmail.com

Skip and continue as admin   Save and Continue