Jenkins Installation on EC2 (Ubuntu)

**Prerequisites**

* EC2 Ubuntu instance (18.04+)
* OpenJDK 21 installed

**Installation Steps**

1. **Update your package list**  
   *sudo apt update*
2. **Install OpenJDK 21**  
   *sudo apt install fontconfig openjdk-21-jre*  
   Validate installation:  
   *java -version*  
   *Expected output*:  
   *openjdk version "21.0.3"*
3. **Add Jenkins repository key**  
   *sudo wget -O /etc/apt/keyrings/jenkins-keyring.asc https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key*
4. **Add Jenkins package source**  
   *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*
5. **Install Jenkins**  
   *sudo apt-get update*  
   *sudo apt-get install jenkins*
6. **Enable and Start Jenkins Service**  
   *sudo systemctl enable jenkins*  
   *sudo systemctl start jenkins*  
   Check status:  
   *sudo systemctl status jenkins*
7. **Access Jenkins Web UI**  
   Open in browser:  
   *http://<your-ec2-public-ip>:8080/*
8. **Jenkins**

In Master terminal paste below command:

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

Copy the password and paste it into Administrator prompt in Jenkins UI

Select Suggested Plugins

**Sample Pipeline Configuration**

**Below are the steps for Declarative Pipeline**

Create a new item:

* Choose **Pipeline**
* Configure build retention: *Keep builds for 3 days or max 4 builds*

**Sample Jenkinsfile (Groovy script)**

*pipeline {*

*agent any*

*stages {*

*stage('Hello') {*

*steps {*

*echo 'Hello World'*

*}*

*}*

*stage('Create Folder') {*

*steps {*

*sh "mkdir -p devops1"*

*}*

*}*

*stage('Demo') {*

*steps {*

*sh "mkdir -p devops2"*

*}*

*}*

*}*

*}*