

Lab-1

Introduction and setting up

Jenkins

Step1 -> Install JDK

```
arnim_taliyan@device:~/Downloads$ sudo apt install openjdk-18-jre
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
```

Then we will check its version

```
arnim_taliyan@device:~$ java -version
openjdk version "17.0.8" 2023-07-18
OpenJDK Runtime Environment (build 17.0.8+7-Ubuntu-122.04)
OpenJDK 64-Bit Server VM (build 17.0.8+7-Ubuntu-122.04, mixed mode, sharing)
```

Then we will add JAVA path to our environment

```
arnim_taliyan@device:~$ sudo gedit /etc/profile
29 JAVA_HOME="/usr/lib/jvm/java-17-openjdk-amd64"
30 export JAVA_HOME
31 export PATH=$PATH:$JAVA_HOME/bin
```

```
arnim_taliyan@device:~$ echo $JAVA_HOME
/usr/lib/jvm/java-17-openjdk-amd64
```

Step 2 -> Install Git

```
arnim_taliyan@device:~/Downloads$ sudo apt install git
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
```

Now we will see version of Git

```
arnim_taliyan@device:~$ git --version
git version 2.34.1
```

Path of Git

```
arnim_taliyan@device:~$ which git
/usr/bin/git
```

Step 3 -> Install Maven

```
arnim_taliyan@device:~/Downloads$ sudo apt install maven
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
```

Now we will see version of Maven

```
arnim_taliyan@device:~$ mvn --version
Apache Maven 3.6.3
Maven home: /usr/share/maven
Java version: 17.0.8, vendor: Private Build, runtime: /usr/lib/jvm/java-17-openjdk-amd64
Default locale: en_IN, platform encoding: UTF-8
OS name: "linux", version: "6.2.0-26-generic", arch: "amd64", family: "unix"
```

```
arnim_taliyan@device:~$ sudo gedit /etc/profile
```

```
33 M2_HOME="/usr/share/maven"
```

```
34 export M2_HOME
```

```
35 export PATH=$PATH:$M2_HOME/bin
```

```
arnim_taliyan@device:~$ echo $M2_HOME
```

Step 4 -> Install Jenkins

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

```
arnim_taliyan@device:~$ jenkins --version
2.401.3
```

```
arnim_taliyan@device:~$ sudo systemctl status jenkins
[sudo] password for arnim_taliyan:
● jenkins.service - Jenkins Continuous Integration Server
   Loaded: loaded (/lib/systemd/system/jenkins.service; enabled; vendor preset: enabled)
   Active: active (running) since Fri 2023-08-18 20:50:02 IST; 4min 38s ago
     Main PID: 781 (java)
        Tasks: 50 (limit: 9319)
       Memory: 1.7G
          CPU: 1min 26.804s
      CGroup: /system.slice/jenkins.service
              └─781 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080

Aug 18 20:49:57 device jenkins[781]: 2023-08-18 15:19:57.662+0000 [id=37] INFO jenkins.InitReactorRunner$1#onAttained: Started all plug
Aug 18 20:49:57 device jenkins[781]: 2023-08-18 15:19:57.710+0000 [id=38] INFO jenkins.InitReactorRunner$1#onAttained: Augmented all ex
Aug 18 20:50:00 device jenkins[781]: 2023-08-18 15:20:00.742+0000 [id=32] INFO h.p.b.g.GlobalTimeoutConfiguration#load: global timeout >
Aug 18 20:50:02 device jenkins[781]: 2023-08-18 15:20:02.411+0000 [id=33] INFO jenkins.InitReactorRunner$1#onAttained: System config lo
Aug 18 20:50:02 device jenkins[781]: 2023-08-18 15:20:02.419+0000 [id=33] INFO jenkins.InitReactorRunner$1#onAttained: System config ad
Aug 18 20:50:02 device jenkins[781]: 2023-08-18 15:20:02.436+0000 [id=32] INFO jenkins.InitReactorRunner$1#onAttained: Loaded all jobs
Aug 18 20:50:02 device jenkins[781]: 2023-08-18 15:20:02.497+0000 [id=33] INFO jenkins.InitReactorRunner$1#onAttained: Configuration fo
Aug 18 20:50:02 device jenkins[781]: 2023-08-18 15:20:02.644+0000 [id=36] INFO jenkins.InitReactorRunner$1#onAttained: Completed initia
Aug 18 20:50:02 device jenkins[781]: 2023-08-18 15:20:02.805+0000 [id=25] INFO hudson.lifecycle.Lifecycle#onReady: Jenkins is fully up >
Aug 18 20:50:02 device systemd[1]: Started Jenkins Continuous Integration Server.
lines 1-20/20 (END)
```



Dashboard >

+ New Item

Add description

People

Build History

Manage Jenkins

My Views

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.

Start building your software project

Build Queue

No builds in the queue.

Create a job

