## **JENKINS AND NGINX**

STEP 1: Install Ubuntu and use the Ubuntu OS

STEP2: Open the terminal in the Ubuntu

STEP 3: Make sure your Ubuntu has java . If not install java using

sudo apt install openjdk-17-jdk -y

Once you install java, check the version using "java-version"

```
voviya@VOVIYA:~$ sudo apt install openjdk-17-jdk -y
[sudo] password for voviya:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
openjdk-17-jdk is already the newest version (17.0.14+7-1~24.04).
The following package was automatically installed and is no longer required:
   libllvm17t64
Use 'sudo apt autoremove' to remove it.
0 upgraded, 0 newly installed, 0 to remove and 13 not upgraded.
```

STEP 4: Now install Jenkins and add the following commands

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

STEP 5: After step 4, run the follwing commands to run the jenkins

sudo systemctl enable jenkins sudo systemctl start jenkins sudo systemctl status jenkins

```
voviya@VOVIYA:~$ sudo systemctl enable jenkins
Synchronizing state of jenkins.service with SysV service script with /usr/lib/systemd/systemd-sysv-install.
Executing: /usr/lib/systemd/systemd-sysv-install enable jenkins
voviya@VOVIYA: $ sudo systemctl start jenkins
 /oviya@VOVIYA:~$ sudo systemctl status jenkins
jenkins.service - Jenkins Continuous Integration Server
    Loaded: loaded (/usr/lib/systemd/system/jenkins.service; enabled; preset: enabled)
    Active: active (running) since Tue 2025-03-18 08:54:41 UTC; 1h 42min ago
  Main PID: 179 (java)
     Tasks: 59 (limit: 9329)
    Memory: 984.7M ()
    CGroup: /system.slice/jenkins.service
             —179 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080
Mar 18 08:54:38 VOVIYA jenkins[179]: 2025-03-18 08:54:38.460+0000 [id=49]
                                                                                 INFO
                                                                                             h.p.b.g.GlobalTimeOutConfiguration#load: global ti>
Mar 18 08:54:40 VOVIYA jenkins[179]: 2025-03-18 08:54:40.811+0000 [id=51]
                                                                                 INF0
                                                                                             jenkins.InitReactorRunner$1#onAttained: System con
Mar 18 08:54:40 VOVIYA jenkins[179]: 2025-03-18 08:54:40.812+0000 [id=51]
                                                                                 INF0
                                                                                             jenkins.InitReactorRunner$1#onAttained: System con
Mar 18 08:54:40 VOVIYA jenkins[179]: 2025-03-18 08:54:40.895+0000 [id=43]
                                                                                 INF0
                                                                                             jenkins.InitReactorRunner$1#onAttained: Loaded all
Mar 18 08:54:40 VOVIYA jenkins[179]: 2025-03-18 08:54:40.904+0000 [id=53]
                                                                                 INFO
                                                                                             jenkins.InitReactorRunner$1#onAttained: Configurat
Mar 18 08:54:41 VOVIYA jenkins[179]: 2025-03-18 08:54:41.034+0000 [id=31]
                                                                                 INFO
                                                                                             jenkins.InitReactorRunner$1#onAttained: Completed
Mar 18 08:54:41 VOVIYA jenkins[179]: 2025-03-18 08:54:41.109+0000 [id=25]
                                                                                 INFO
                                                                                             hudson.lifecycle.Lifecycle#onReady: Jenkins is ful
Mar 18 08:54:41 VOVIYA systemd[1]: Started jenkins.service - Jenkins Continuous Integration Server.
```

**STEP 6:** Now your jenkins is running, go to localhost:8080, you should see the administration page.

STEP 7: In the terminal again type the following command,

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

voviya@VOVIYA:~\$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword 6bb78fbebfdd43ff9da544b7bb23633c voviya@VOVIYA:~\$ sudo apt-get insert nginx [sudo] password for voviya:

**STEP 9:** Now you have your password generated, enter this password in the admin page and enter basic details and finish necessary resources installation and you will be taken into the jenkins interface

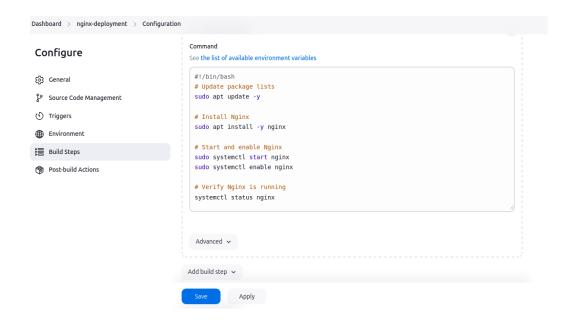
**STEP 10**: Give your project a name, and in configure in the shell, type in the following commands and save it .

#!/bin/bash
# Update package lists
sudo apt update -y

# Install Nginx sudo apt install -y nginx

# Start and enable Nginx sudo systemctl start nginx sudo systemctl enable nginx

# Verify Nginx is running systemctl status nginx



STEP 11: Go to your terminal and run the following command,

## sudo apt-get install nginx sudo systemctl restart nginx

STEP 12: If you have a successful build, your console output looks like this

