Aim: To resolve the errors while installing Jenkins on Linux operating system.

Errors resolved:

1) 'jenkins' has no installation candidate

2) Warning: apt-key is deprecated. Manage keyring files in trusted.gpg.d instead (see apt-key(8)).

3) -bash: /etc/environment: Permission denied

4) After successful installation on any cloud platform Jenkins not working on port ("public_ip:8080")

To resolve all the issues, follow the following installation steps

1) sudo su

2) sudo apt-get -y install openjdk-11-jdk openjdk-11-jre

3) java -version

4) cat >> /etc/environment <<EOL
   JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64
   JRE_HOME=/usr/lib/jvm/java-8-openjdk-amd64/jre
   EOL

5) 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

6) sudo apt-get update

7) sudo apt-get install jenkins

8) sudo systemctl start jenkins

9) sudo systemctl status jenkins

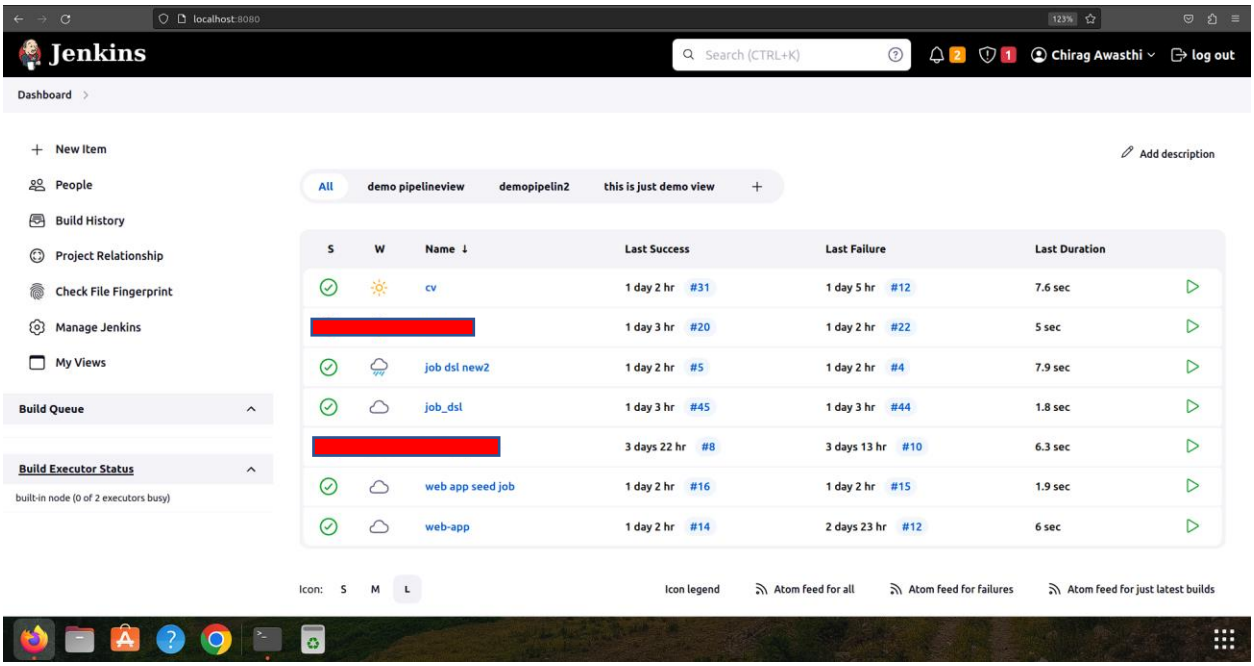
```
chirag@chirag-virtual-machine:~$ sudo systemctl start jenkins
chirag@chirag-virtual-machine:~$ sudo systemctl status jenkins
● jenkins.service - Jenkins Continuous Integration Server
     Loaded: loaded (/lib/systemd/system/jenkins.service; enabled; vendor preset: enabled)
     Active: active (running) since Fri 2023-04-14 02:58:07 IST; 1min 26s ago
   Main PID: 1010 (java)
      Tasks: 67 (limit: 4573)
     Memory: 1.1G
        CPU: 1min 42.631s
     CGroup: /system.slice/jenkins.service
             └─1010 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080
```

If status is Active that means we have successfully installed Jenkins in our system

Steps to use Jenkins in our system

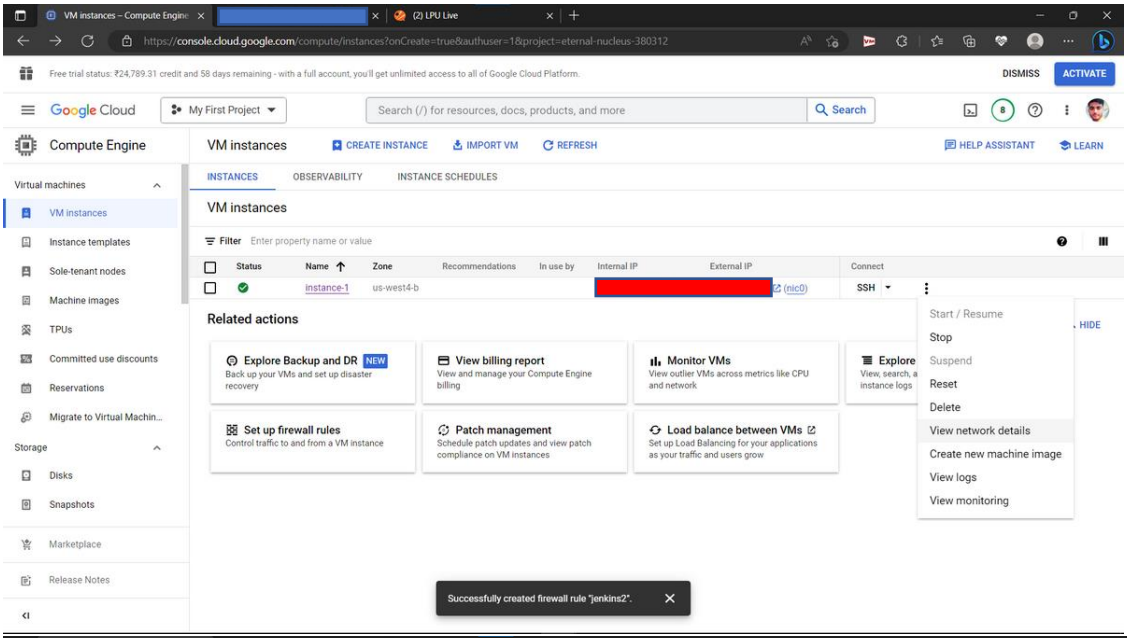
To access/open the Jenkins follow the following steps

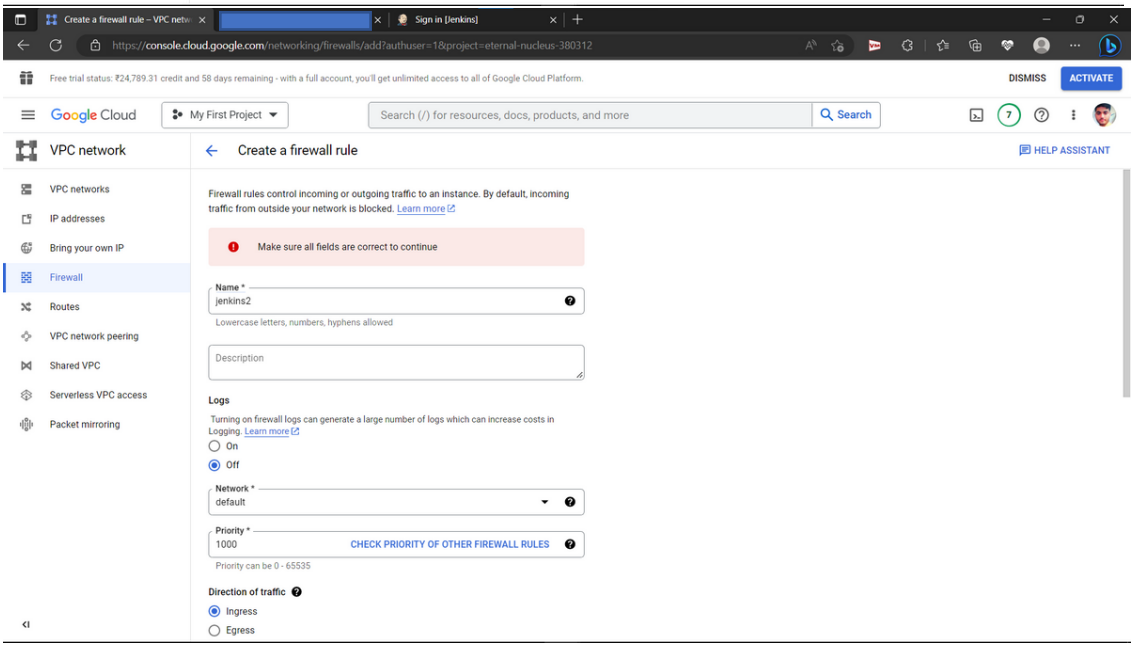
1) If installed in local environment directly go to the browser and access (“localhost:8080”)

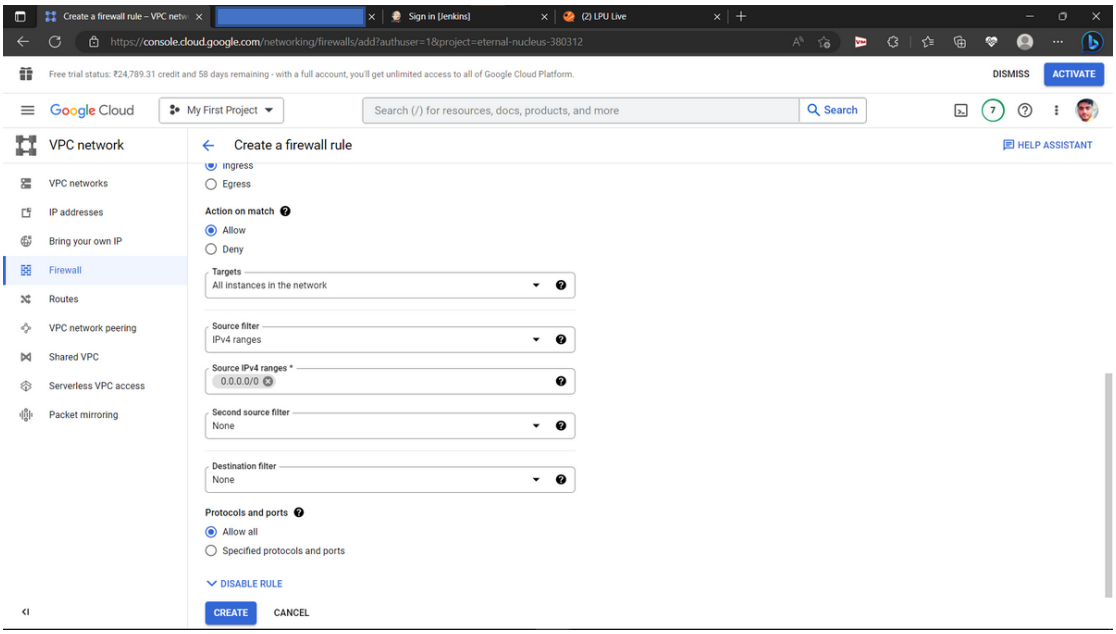


2) If installed inside cloud environment (AWS,GCP,AZURE) create new firewall rule so that we can access the port 8080 with ip address of our created instance

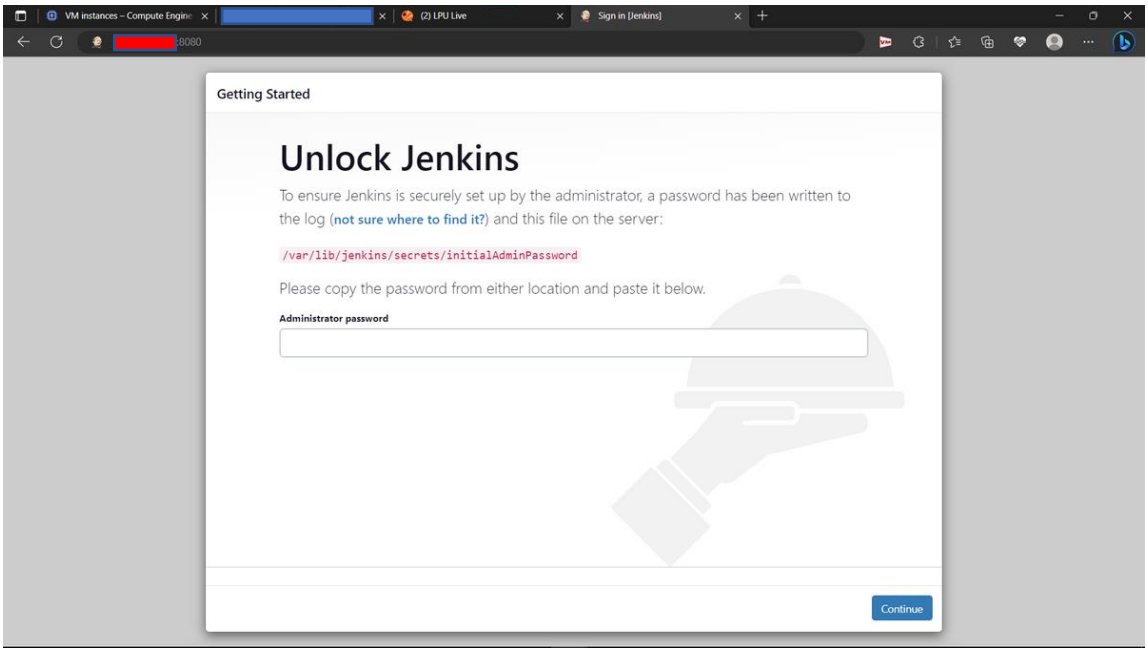
following is example of GCP







- Now go to the browser run (“public_ip:8080”)
  example (24.19.337.233:8080)



- Go to the file **/var/lib/jenkins/secrets/initialAdminPassword** here you will find your initial admin password which will allow you to enter into jenkins and create your personal account .

Now rest of the steps are easy just setup the personal details and you are good to go !

I Hope this resolves the issue 😊.

(Chirag Awasthi)