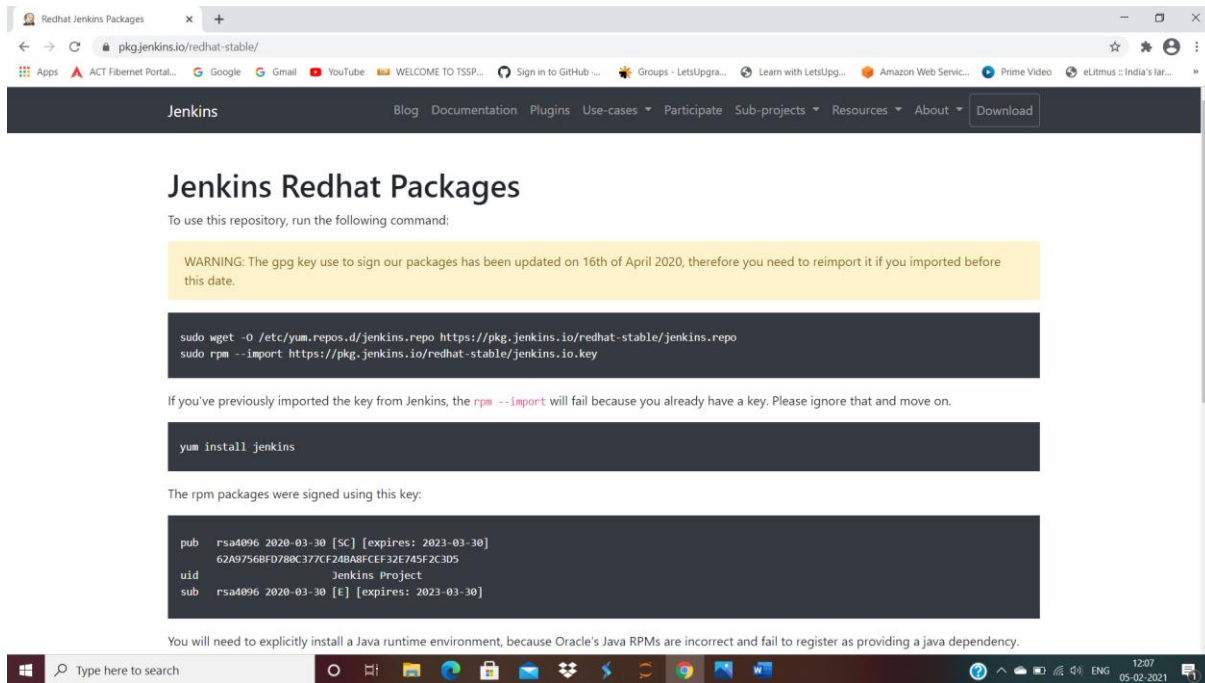


AWS Project 7

Project-DevOps-Jenkins-Installation and Configuration on Linux

Task 1: <https://pkg.jenkins.io/redhat-stable/>



The screenshot shows the Jenkins Redhat Packages website. The page title is "Jenkins Redhat Packages". Below the title, it says "To use this repository, run the following command:". There is a yellow warning box that says "WARNING: The gpg key use to sign our packages has been updated on 16th of April 2020, therefore you need to reimport it if you imported before this date." Below the warning, there is a code block with the following commands:

```
sudo wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat-stable/jenkins.repo
sudo rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io.key
```

 Below the code block, it says "If you've previously imported the key from Jenkins, the `rpm --import` will fail because you already have a key. Please ignore that and move on." Below that, there is another code block with the command:

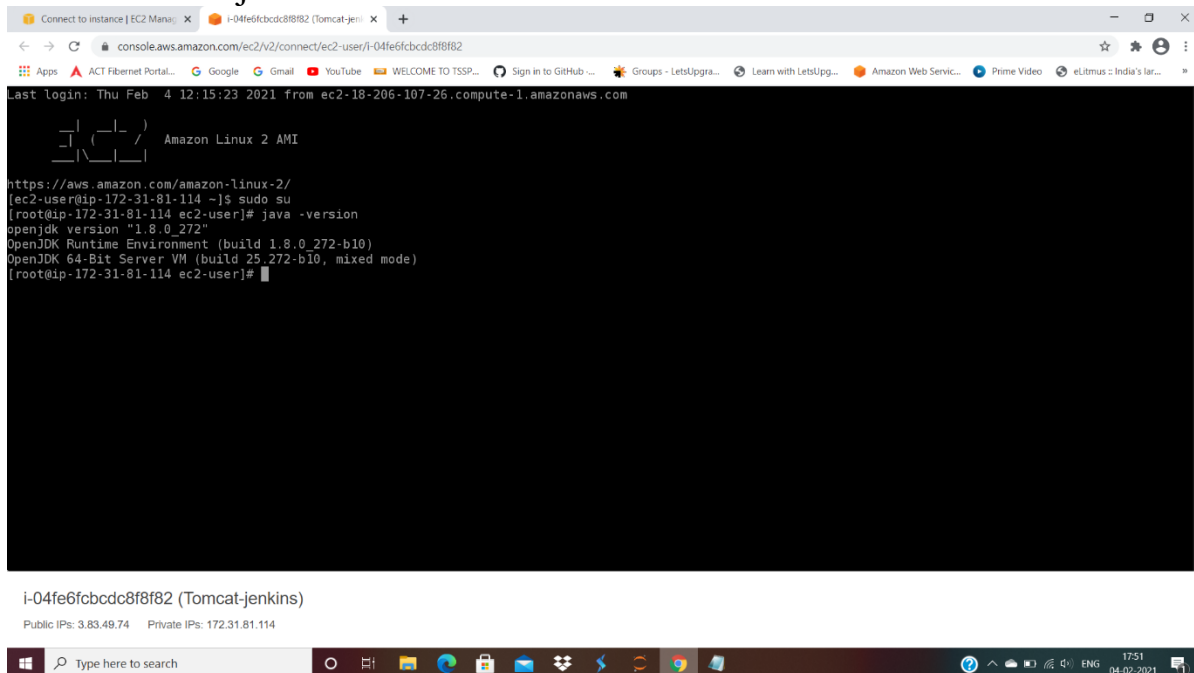
```
yum install jenkins
```

 Below the code block, it says "The rpm packages were signed using this key:". There is a code block with the following output:

```
pub  rsa4096  2020-03-30  [SC]  [expires: 2023-03-30]
      62A9756BFD780C377CF24B8FCE32E745F2C3D5
uid      Jenkins Project
sub  rsa4096  2020-03-30  [E]  [expires: 2023-03-30]
```

 Below the code block, it says "You will need to explicitly install a Java runtime environment, because Oracle's Java RPMs are incorrect and fail to register as providing a java dependency." The page is viewed in a browser window with the address bar showing "pkg.jenkins.io/redhat-stable/".

Task 2: Install java

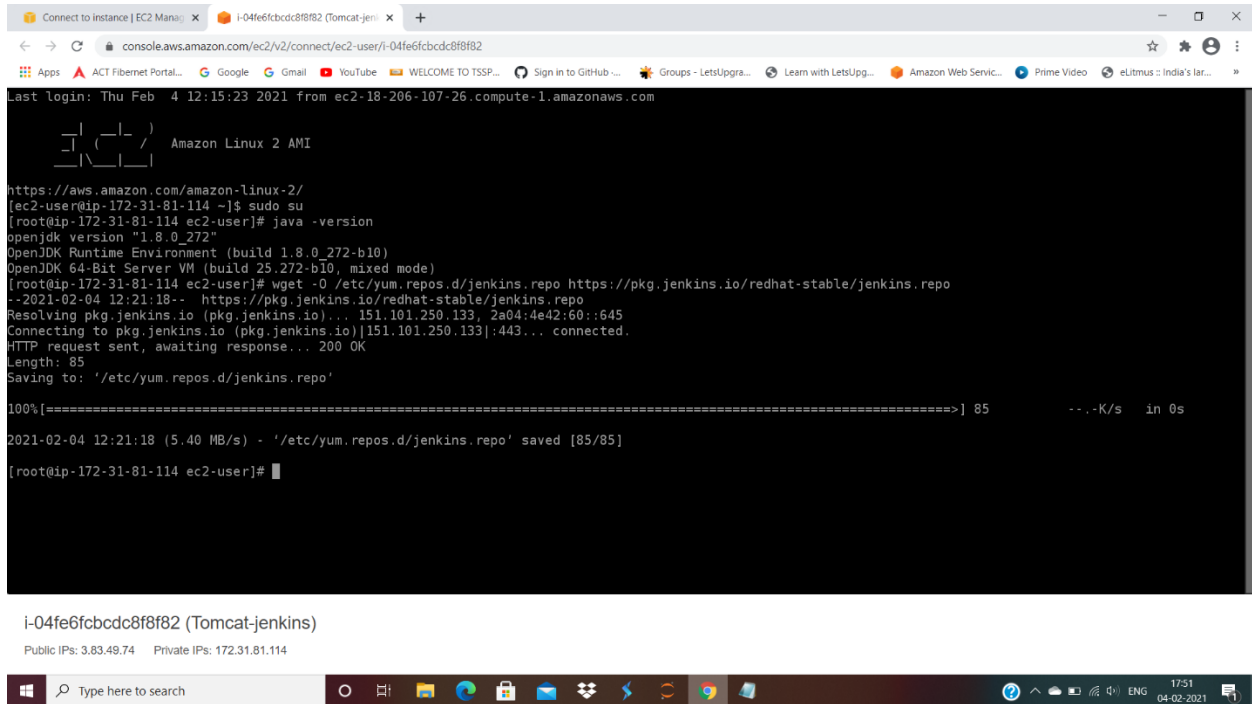


The screenshot shows the AWS Management Console. The top bar shows "Connect to instance [EC2 Manag...]" and "i-04fe6fcbcdc8f8f82 (Tomcat-jen...)". The main content area shows the "console.aws.amazon.com/ec2/v2/connect/ec2-user/i-04fe6fcbcdc8f8f82" page. The console output shows the following commands and output:

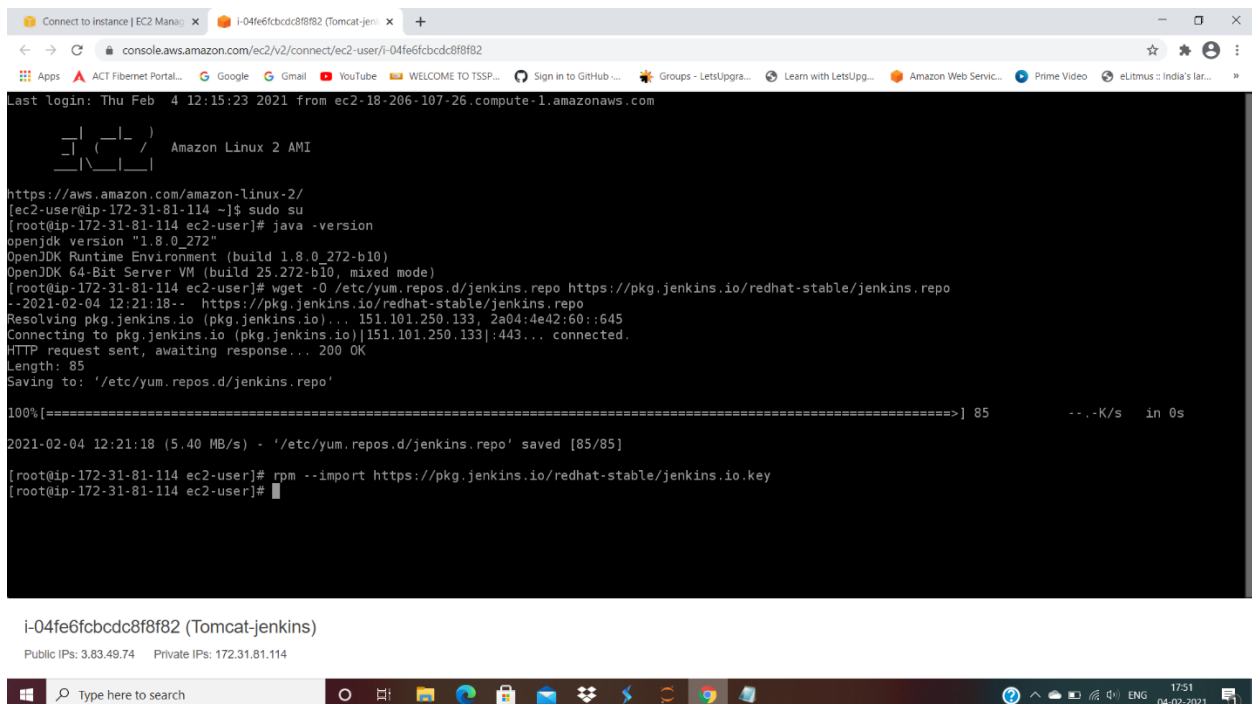
```
https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-81-114 ~]$ sudo su
[root@ip-172-31-81-114 ec2-user]# java -version
openjdk version "1.8.0_272"
OpenJDK Runtime Environment (build 1.8.0_272-b10)
OpenJDK 64-Bit Server VM (build 25.272-b10, mixed mode)
[root@ip-172-31-81-114 ec2-user]#
```

 The console output also shows the instance details: "Amazon Linux 2 AMI", "Last login: Thu Feb 4 12:15:23 2021 from ec2-18-206-107-26.compute-1.amazonaws.com", "Public IPs: 3.83.49.74", and "Private IPs: 172.31.81.114". The page is viewed in a browser window with the address bar showing "console.aws.amazon.com/ec2/v2/connect/ec2-user/i-04fe6fcbcdc8f8f82".

Task 3: `sudo wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat-stable/jenkins.repo`



Task 4: `sudo rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io.key`



Task 5: yum install Jenkins

```
Connect to instance | EC2 Manas | x i-04fe6fcbcdc8f8f82 (Tomcat-jen) x +
console.aws.amazon.com/ec2/v2/connect/ec2-user/i-04fe6fcbcdc8f8f82
Saving to: '/etc/yum.repos.d/jenkins.repo'
100%[=====] 85 --.-K/s in 0s
2021-02-04 12:21:18 (5.40 MB/s) - '/etc/yum.repos.d/jenkins.repo' saved [85/85]
[root@ip-172-31-81-114 ec2-user]# rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io.key
[root@ip-172-31-81-114 ec2-user]# yum install jenkins
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core | 3.7 kB 00:00:00
jenkins | 2.9 kB 00:00:00
jenkins/primary_db | 36 kB 00:00:00
Resolving Dependencies
--> Running transaction check
--> Package jenkins.noarch 0:2.263.3-1.1 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package Arch Version Repository Size
=====
Installing:
jenkins noarch 2.263.3-1.1 jenkins 64 M
=====
Transaction Summary
=====
Install 1 Package

Total download size: 64 M
Installed size: 64 M
Is this ok [y/d/N]:

i-04fe6fcbcdc8f8f82 (Tomcat-jenkins)
Public IPs: 3.83.49.74 Private IPs: 172.31.81.114
```

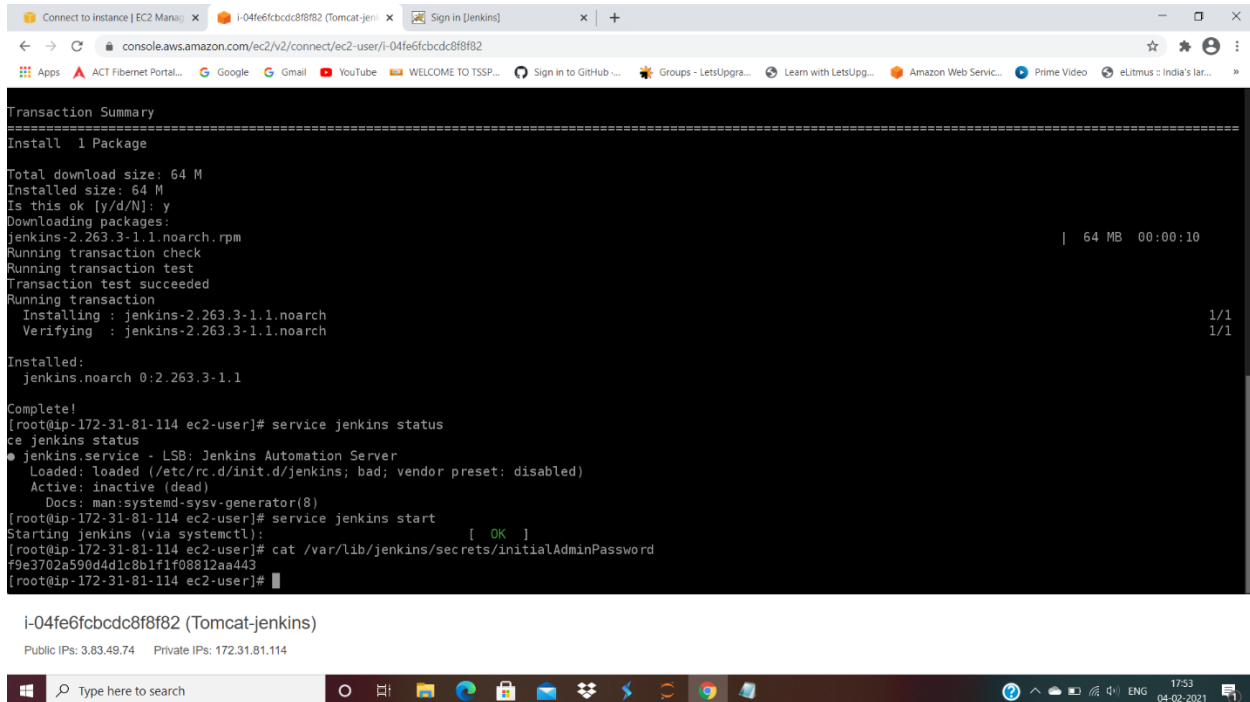
```
Connect to instance | EC2 Manas | x i-04fe6fcbcdc8f8f82 (Tomcat-jen) x +
console.aws.amazon.com/ec2/v2/connect/ec2-user/i-04fe6fcbcdc8f8f82
Installing:
jenkins noarch 2.263.3-1.1 jenkins 64 M
Transaction Summary
=====
Install 1 Package

Total download size: 64 M
Installed size: 64 M
Is this ok [y/d/N]: y
Downloading packages:
jenkins-2.263.3-1.1.noarch.rpm | 64 MB 00:00:10
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
Installing : jenkins-2.263.3-1.1.noarch 1/1
Verifying : jenkins-2.263.3-1.1.noarch 1/1
Installed:
jenkins.noarch 0:2.263.3-1.1

Complete!
[root@ip-172-31-81-114 ec2-user]# service jenkins status
ce jenkins status
● jenkins.service - LSB: Jenkins Automation Server
Loaded: loaded (/etc/rc.d/init.d/jenkins; bad; vendor preset: disabled)
Active: inactive (dead)
Docs: man:systemd-sysv-generator(8)
[root@ip-172-31-81-114 ec2-user]# service jenkins start
Starting jenkins (via systemctl): [ OK ]
[root@ip-172-31-81-114 ec2-user]#

i-04fe6fcbcdc8f8f82 (Tomcat-jenkins)
Public IPs: 3.83.49.74 Private IPs: 172.31.81.114
```

Task 6: Extract the password from the location



The screenshot shows a terminal window with the following content:

```
Transaction Summary
=====
Install 1 Package

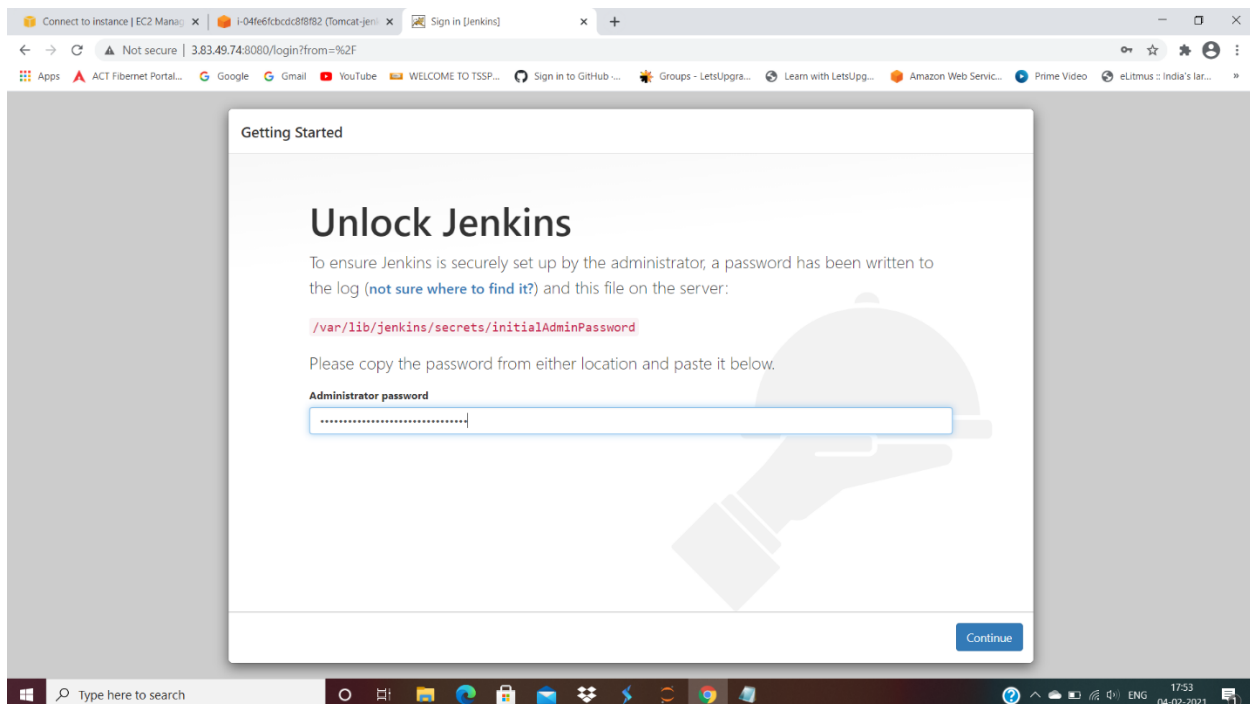
Total download size: 64 M
Installed size: 64 M
Is this ok [y/d/N]: y
Downloading packages:
jenkins-2.263.3-1.1.noarch.rpm | 64 MB 00:00:10
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : jenkins-2.263.3-1.1.noarch 1/1
  Verifying : jenkins-2.263.3-1.1.noarch 1/1

Installed:
  jenkins.noarch 0:2.263.3-1.1

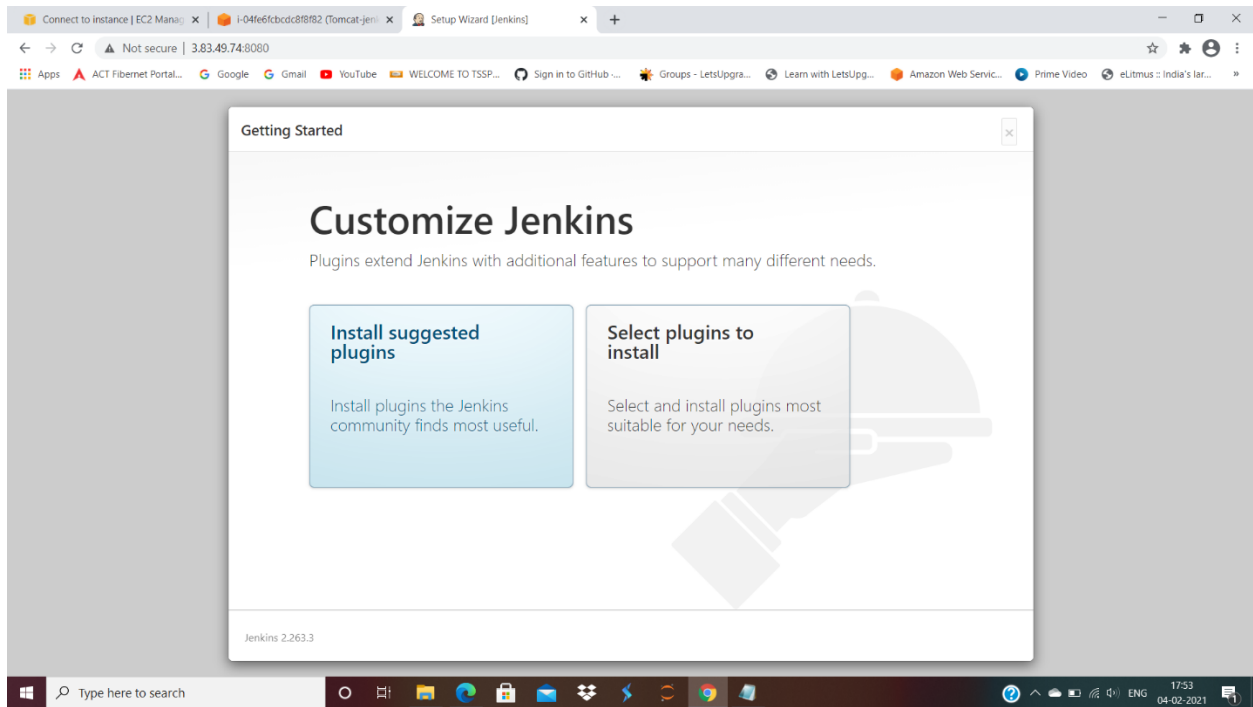
Complete!
[root@ip-172-31-81-114 ec2-user]# service jenkins status
ce jenkins status
● jenkins.service - LSB: Jenkins Automation Server
   Loaded: loaded (/etc/rc.d/init.d/jenkins; bad; vendor preset: disabled)
   Active: inactive (dead)
     Docs: man:systemd-sys-generator(8)
[root@ip-172-31-81-114 ec2-user]# service jenkins start
Starting jenkins (via systemctl): [ OK ]
[root@ip-172-31-81-114 ec2-user]# cat /var/lib/jenkins/secrets/initialAdminPassword
f9e3702c590d4d1c8b1f1f08812aa443
[root@ip-172-31-81-114 ec2-user]#
```

Below the terminal output, the instance details for **i-04fe6fcbdc8f8f82 (Tomcat-jenkins)** are shown:

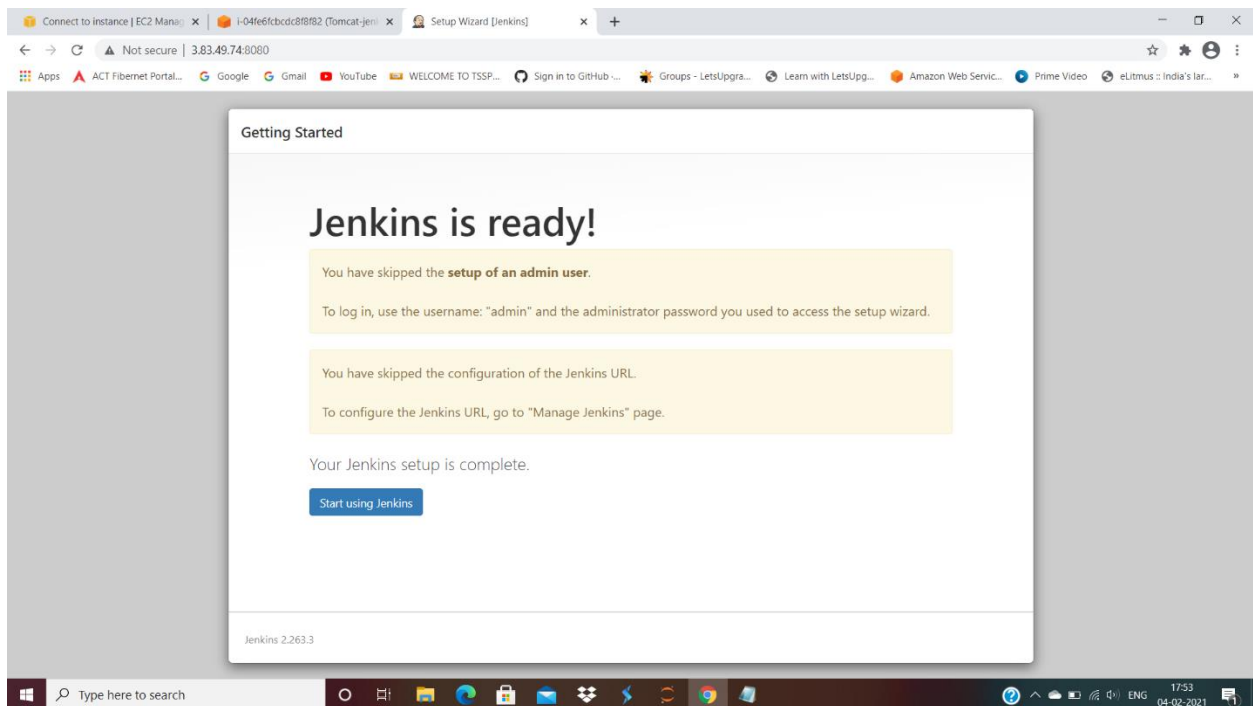
- Public IPs: 3.83.49.74
- Private IPs: 172.31.81.114



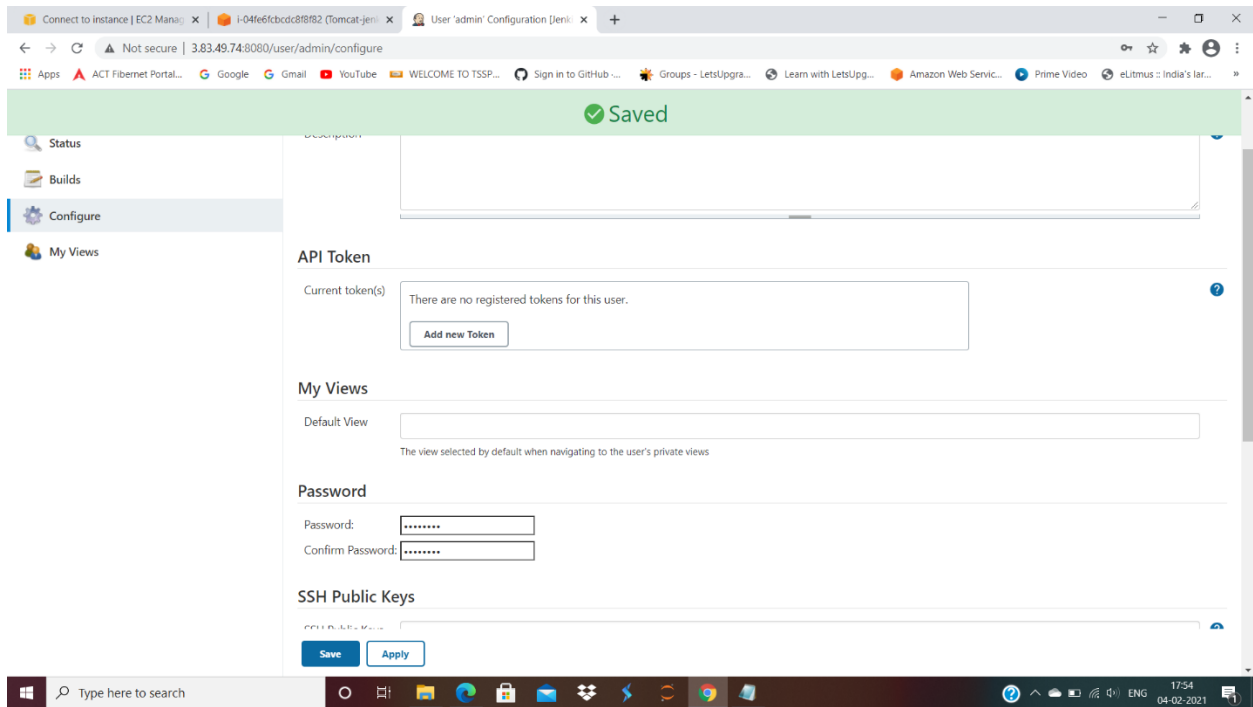
Task 7: Skip installing plugins



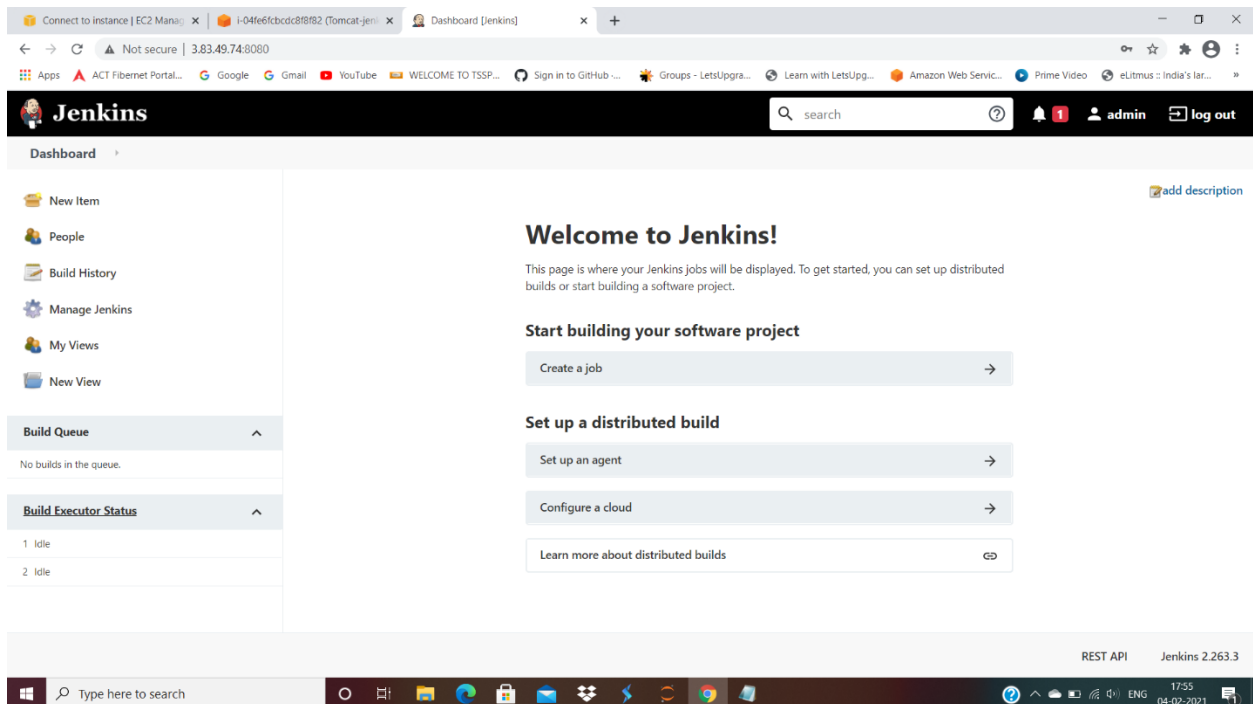
Task 8: Start using Jenkins

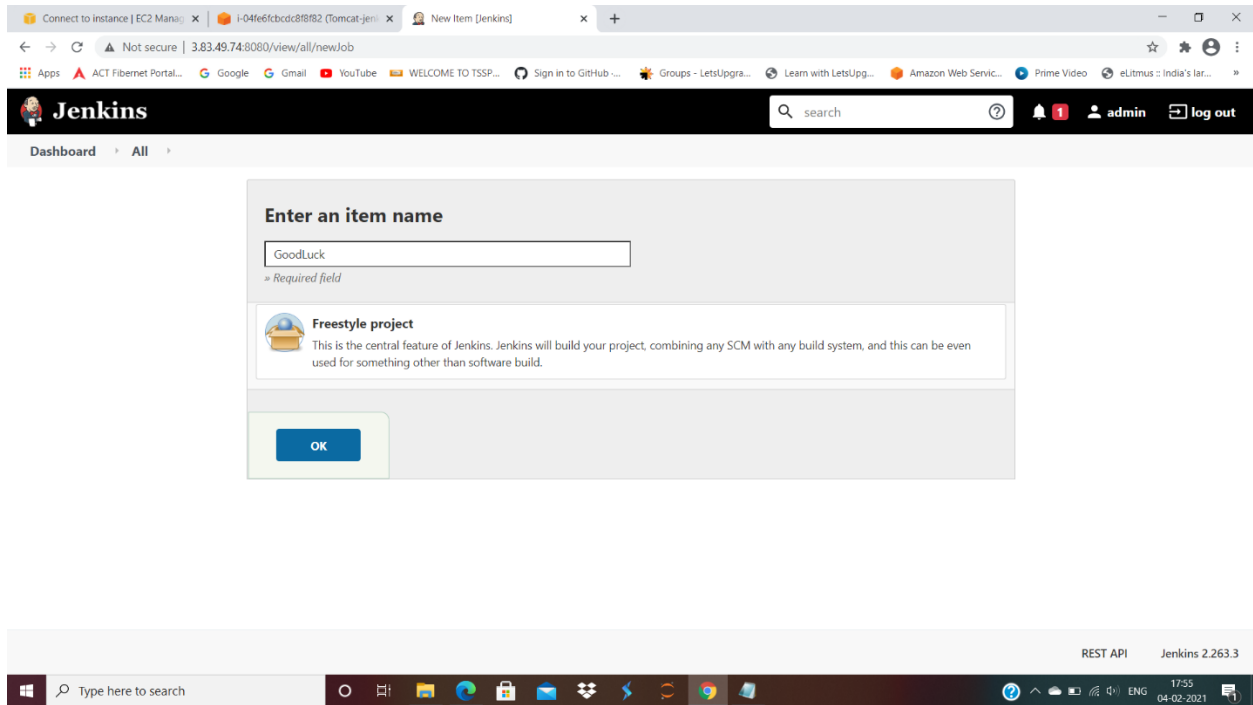


Task 9: Change the admin password

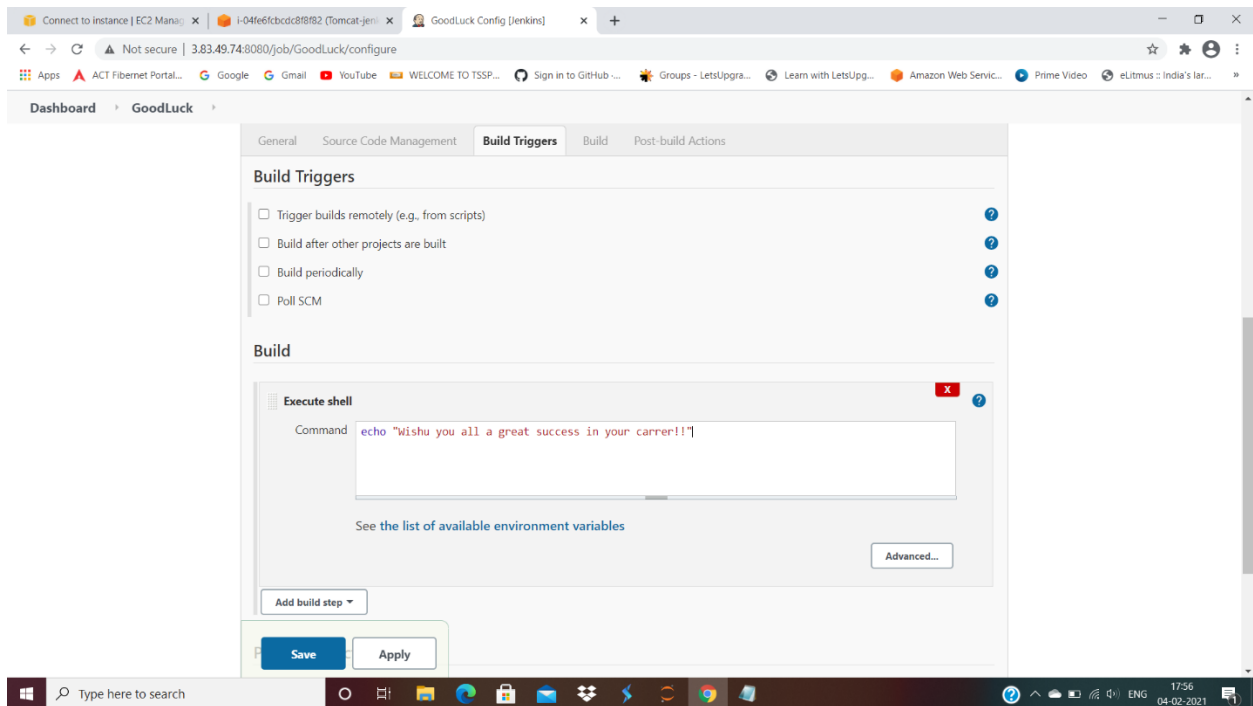


Task 10: Create a new job





Task 11: Build step: execute shell and echo "Wish you all a very great success in your career"



Task 12: Build the job

The screenshot displays the Jenkins web interface in a browser window. The browser's address bar shows the URL `3.83.49.74:8080/job/GoodLuck/1/console`. The Jenkins header includes the logo, a search bar, and user information for 'admin' with a 'log out' link. The breadcrumb navigation indicates the path: Dashboard > GoodLuck > #1.

The left sidebar contains a list of links: 'Back to Project', 'Status', 'Changes', 'Console Output' (which is selected), 'View as plain text', 'Edit Build Information', and 'Delete build '#1''. The main content area is titled 'Console Output' and shows the following text:

```
Started by user admin
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/GoodLuck
[GoodLuck] $ /bin/sh -xe /tmp/jenkins864932672935206557.sh
+ echo 'Wishu you all a great success in your career!!'
Wishu you all a great success in your career!!
Finished: SUCCESS
```

At the bottom of the Jenkins interface, there are links for 'REST API' and 'Jenkins 2.263.3'. The Windows taskbar at the very bottom shows the search bar, taskbar icons, and system tray with the time '17:56' and date '04-02-2021'.