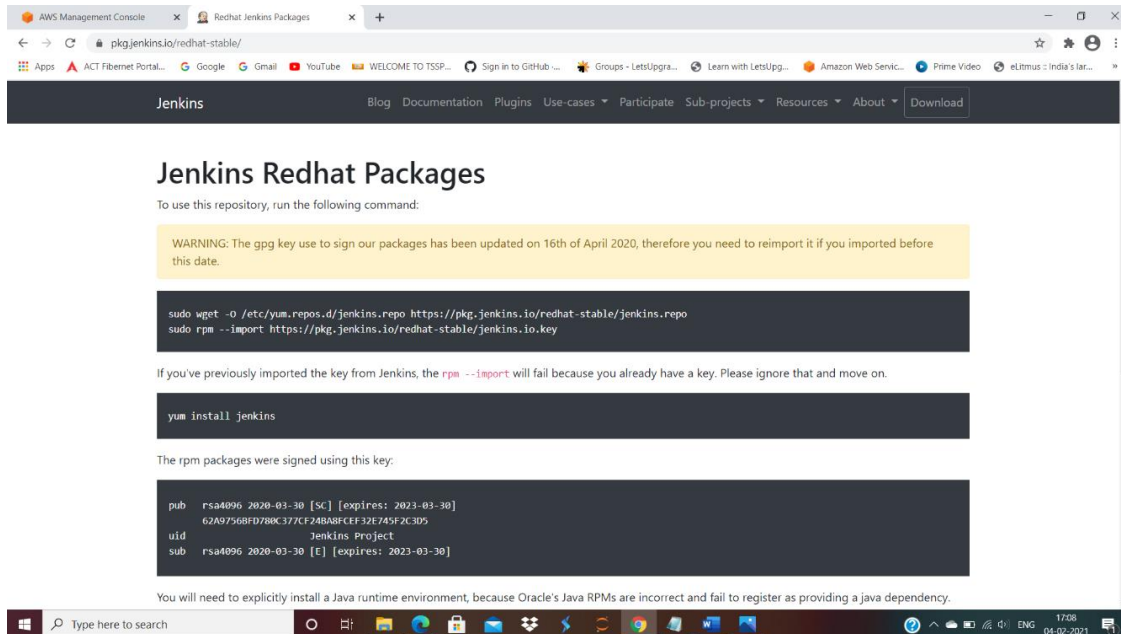


# AWS Project 7

## 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 this, there is another code block with the command:

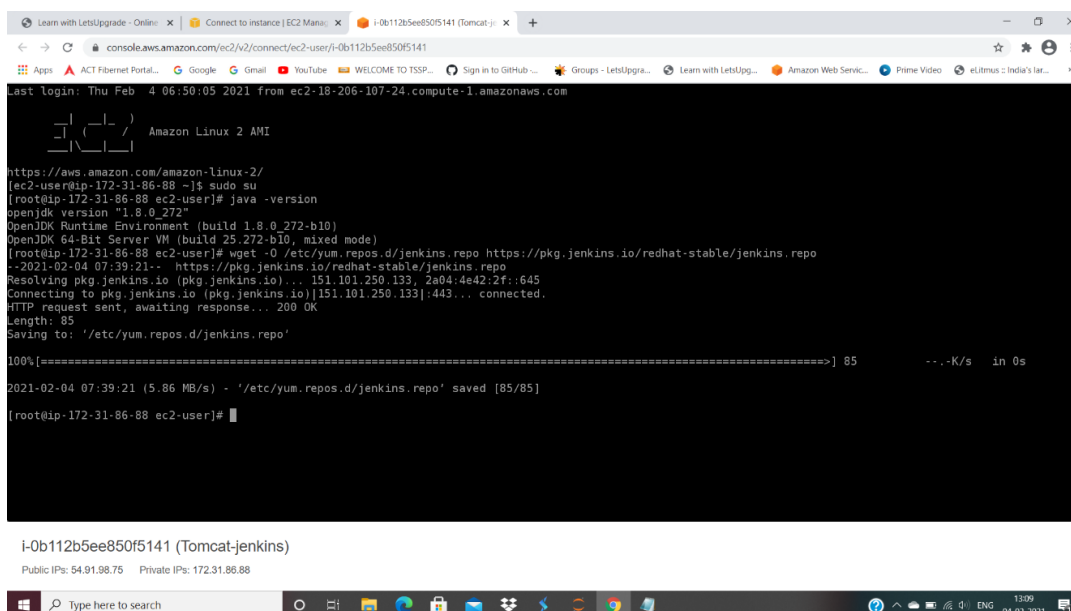
```
yum install jenkins
```

Below the code block, it says "The rpm packages were signed using this key:".

```
pub  rsa4096 2020-03-30 [SC] [expires: 2023-03-30]
     62A97568FD78C377CF24BA8FCE32E745F2C3D5
uid      Jenkins Project
sub  rsa4096 2020-03-30 [E] [expires: 2023-03-30]
```

Below the key information, 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."

**Task 2:** Install java



The screenshot shows a terminal window on an Amazon Linux 2 AMI. The terminal output is as follows:

```
https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-86-88 ~]$ sudo su
[root@ip-172-31-86-88 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-172-31-86-88 ec2-user]# wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat-stable/jenkins.repo
--2021-02-04 07:39:21-- https://pkg.jenkins.io/redhat-stable/jenkins.repo
Resolving pkg.jenkins.io (pkg.jenkins.io)... 151.101.250.133, 2a04:4e42:2f::645
Connecting to pkg.jenkins.io (pkg.jenkins.io)|151.101.250.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 85
Saving to: '/etc/yum.repos.d/jenkins.repo'

100%[=====] 85 --.-K/s in 0s

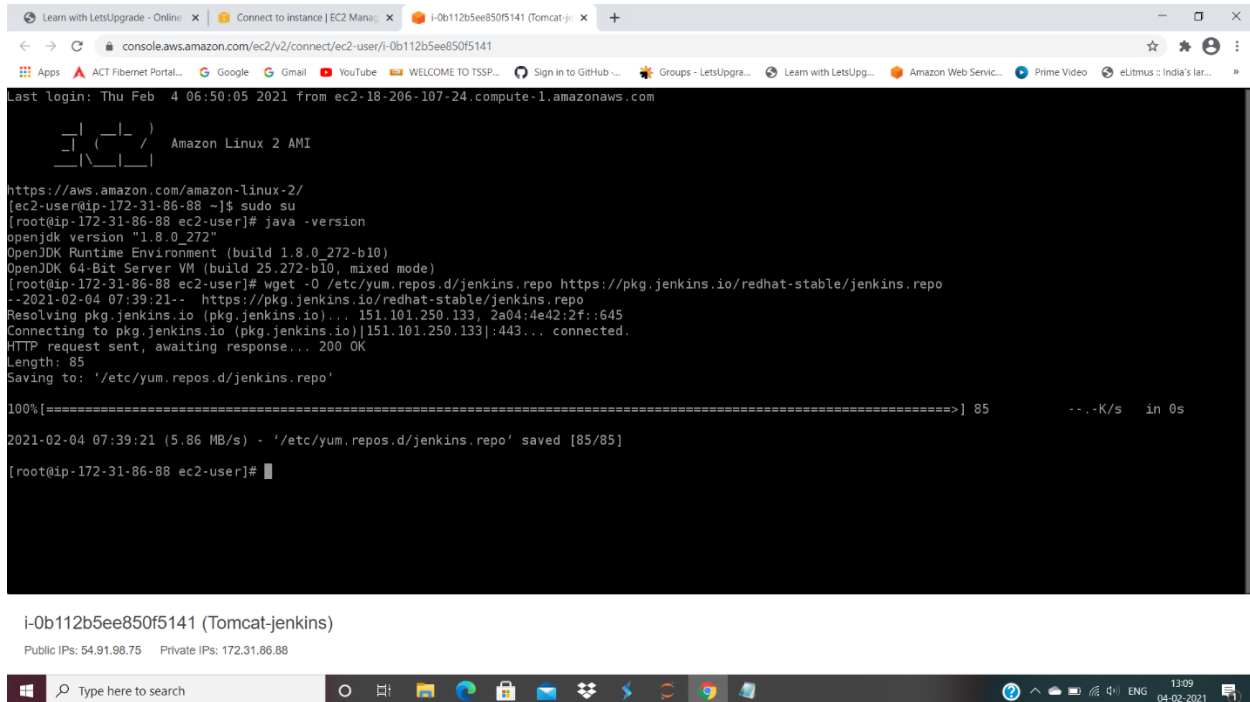
2021-02-04 07:39:21 (5.86 MB/s) - '/etc/yum.repos.d/jenkins.repo' saved [85/85]

[root@ip-172-31-86-88 ec2-user]#
```

Below the terminal output, the instance information is shown:

i-0b112b5ee850f5141 (Tomcat-jenkins)  
Public IPs: 54.91.98.75 Private IPs: 172.31.86.88

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



```
Learn with LetsUpgrade - Online x | Connect to instance | EC2 Manas x | i-0b112b5ee850f5141 (Tomcat-jenkins) x +
console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0b112b5ee850f5141
Last login: Thu Feb 4 06:50:05 2021 from ec2-18-206-107-24.compute-1.amazonaws.com

 _ _ _ _ _
|_| ( _ _ _ _ _ )
|_| \ _ _ _ _ _ |

Amazon Linux 2 AMI

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-86-88 ~]$ sudo su
[root@ip-172-31-86-88 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-172-31-86-88 ec2-user]# wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat-stable/jenkins.repo
--2021-02-04 07:39:21-- https://pkg.jenkins.io/redhat-stable/jenkins.repo
Resolving pkg.jenkins.io (pkg.jenkins.io)... 151.101.250.133, 2a04:4e42:2f::645
Connecting to pkg.jenkins.io (pkg.jenkins.io)|151.101.250.133|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 85
Saving to: '/etc/yum.repos.d/jenkins.repo'

100%[=====] 85 --.-K/s in 0s

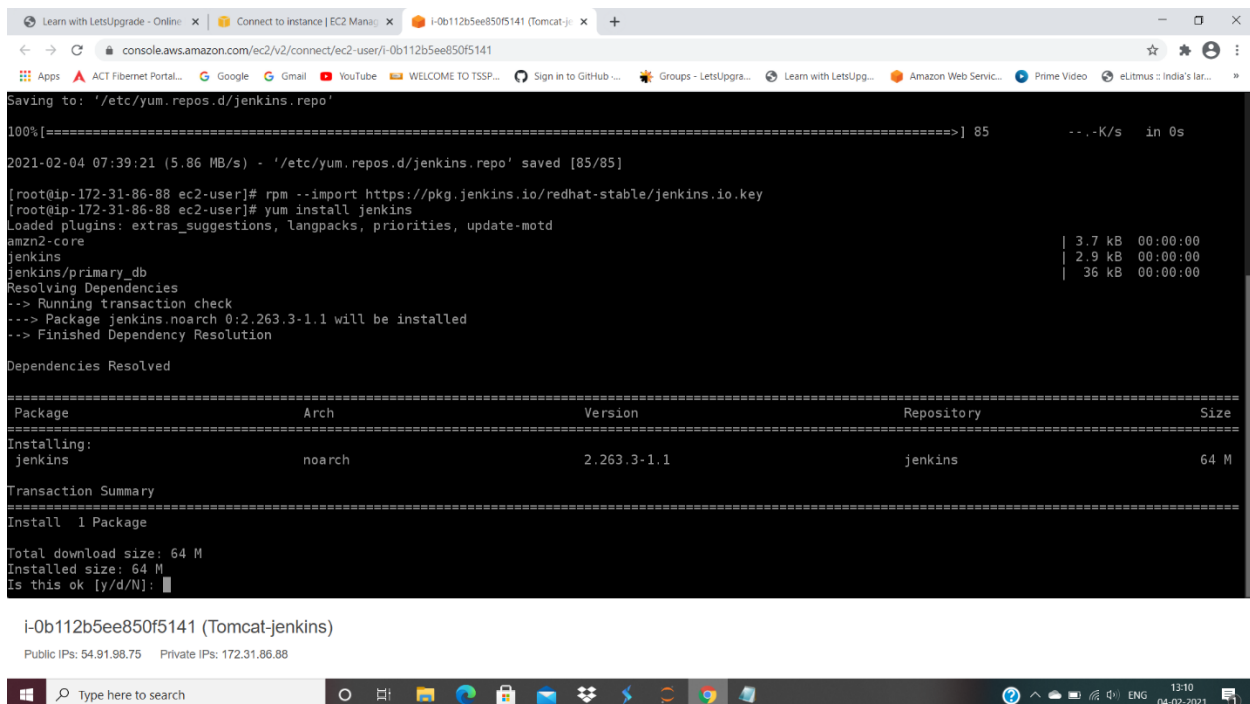
2021-02-04 07:39:21 (5.86 MB/s) - '/etc/yum.repos.d/jenkins.repo' saved [85/85]

[root@ip-172-31-86-88 ec2-user]#
```

i-0b112b5ee850f5141 (Tomcat-jenkins)

Public IPs: 54.91.98.75 Private IPs: 172.31.86.88

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



```
Learn with LetsUpgrade - Online x | Connect to instance | EC2 Manas x | i-0b112b5ee850f5141 (Tomcat-jenkins) x +
console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0b112b5ee850f5141
Saving to: '/etc/yum.repos.d/jenkins.repo'

100%[=====] 85 --.-K/s in 0s

2021-02-04 07:39:21 (5.86 MB/s) - '/etc/yum.repos.d/jenkins.repo' saved [85/85]

[root@ip-172-31-86-88 ec2-user]# rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io.key
[root@ip-172-31-86-88 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-0b112b5ee850f5141 (Tomcat-jenkins)

Public IPs: 54.91.98.75 Private IPs: 172.31.86.88

## Task 5: yum install Jenkins

```
Learn with LetsUpgrade - Online | x | Connect to instance | EC2 Mana: x | i-Ob112b5ee850f5141 (Tomcat-jenkins) x | +
console.aws.amazon.com/ec2/v2/connect/ec2-user/i-Ob112b5ee850f5141
Apps ACT Fiberet Portal... Google Gmail YouTube WELCOME TO TSSP... Sign in to GitHub ... Groups - LetsUpgra... Learn with LetsUpg... Amazon Web Servic... Prime Video eUtmus : India's lar... »
Saving to: '/etc/yum.repos.d/jenkins.repo'
100%[=====] 85 --.-K/s in 0s
2021-02-04 07:39:21 (5.86 MB/s) - '/etc/yum.repos.d/jenkins.repo' saved [85/85]

[root@ip-172-31-86-88 ec2-user]# rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io.key
[root@ip-172-31-86-88 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-Ob112b5ee850f5141 (Tomcat-jenkins)

Public IPs: 54.91.98.75 Private IPs: 172.31.86.88



```
Learn with LetsUpgrade - Online | x | Connect to instance | EC2 Mana: x | i-Ob112b5ee850f5141 (Tomcat-jenkins) x | +
console.aws.amazon.com/ec2/v2/connect/ec2-user/i-Ob112b5ee850f5141
Apps ACT Fiberet Portal... Google Gmail YouTube WELCOME TO TSSP... Sign in to GitHub ... Groups - LetsUpgra... Learn with LetsUpg... Amazon Web Servic... Prime Video eUtmus : India's lar... »
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 00:00:05
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

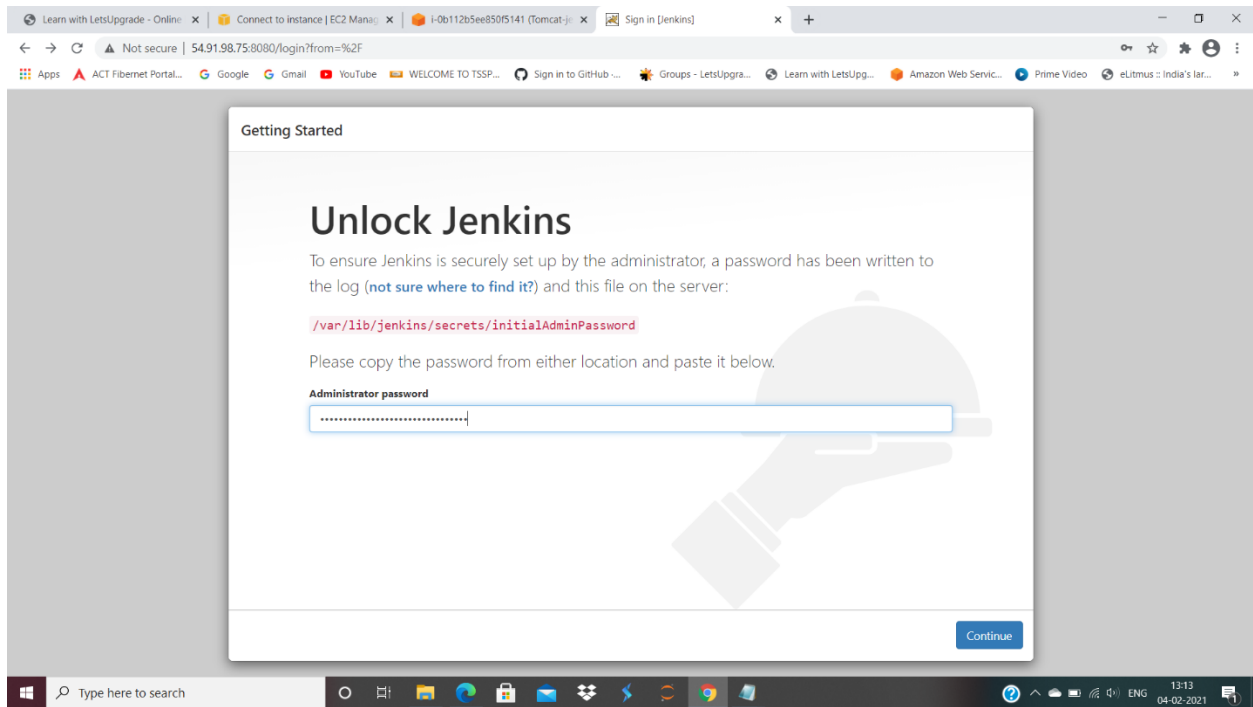
Complete!
[root@ip-172-31-86-88 ec2-user]# service jenkins status
service jenkins status
● jenkins.service - LSB: Jenkins Automation Server
   Loaded: loaded (/etc/rc.d/init.d/jenkins; bad; vendor preset: disabled)
   Active: inactive (dead)
     Docs: man:systemd-sys-generator(8)
[root@ip-172-31-86-88 ec2-user]# service jenkins start
Starting jenkins (via systemctl): [ OK ]
[root@ip-172-31-86-88 ec2-user]#
```

i-Ob112b5ee850f5141 (Tomcat-jenkins)

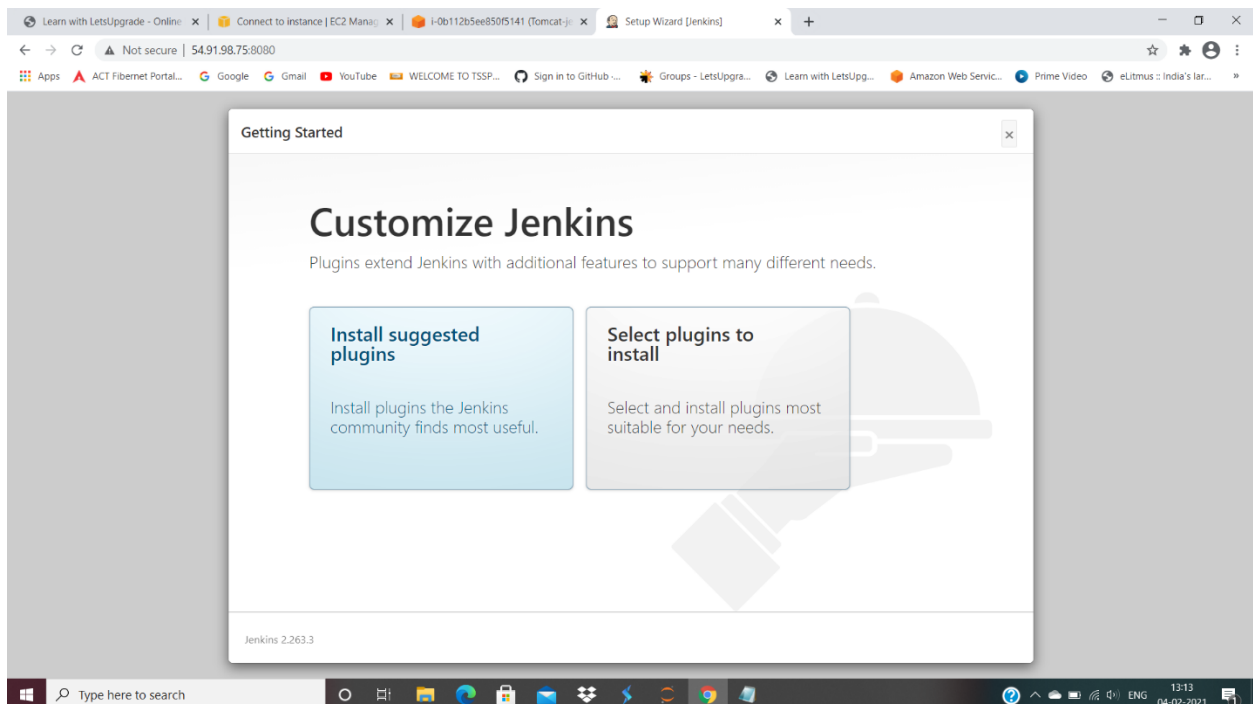
Public IPs: 54.91.98.75 Private IPs: 172.31.86.88



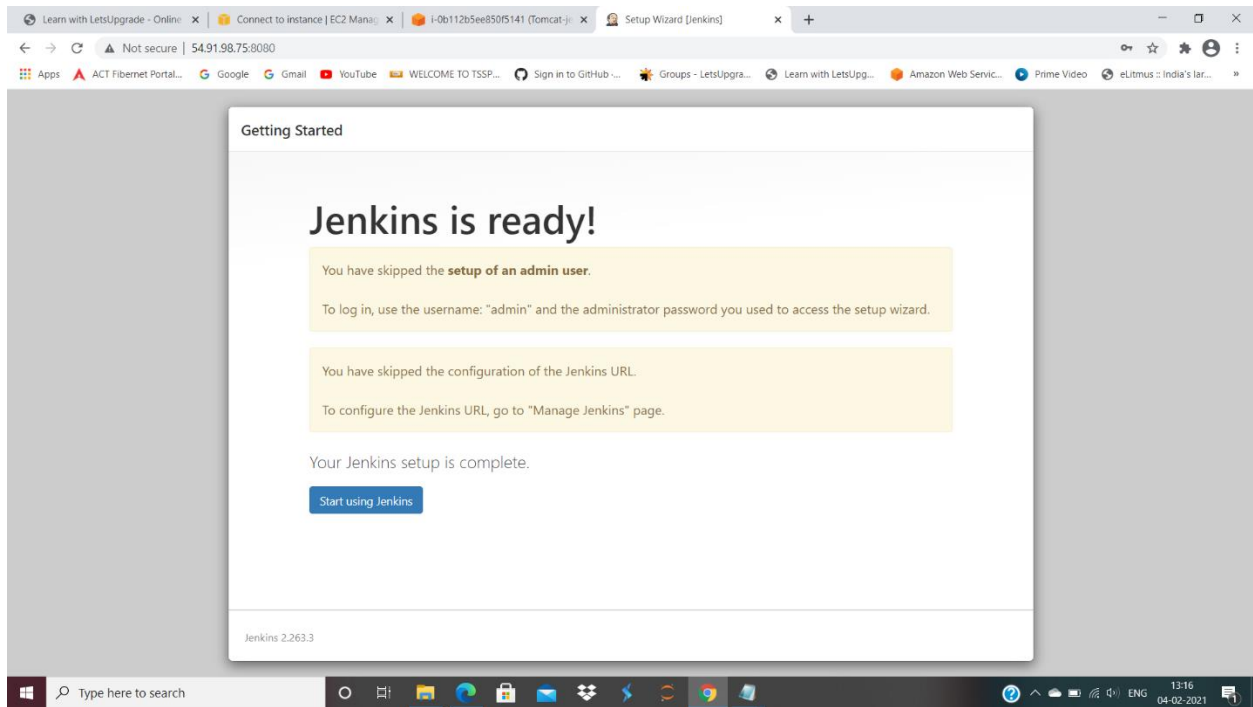
## Task 6: Extract the password from the location



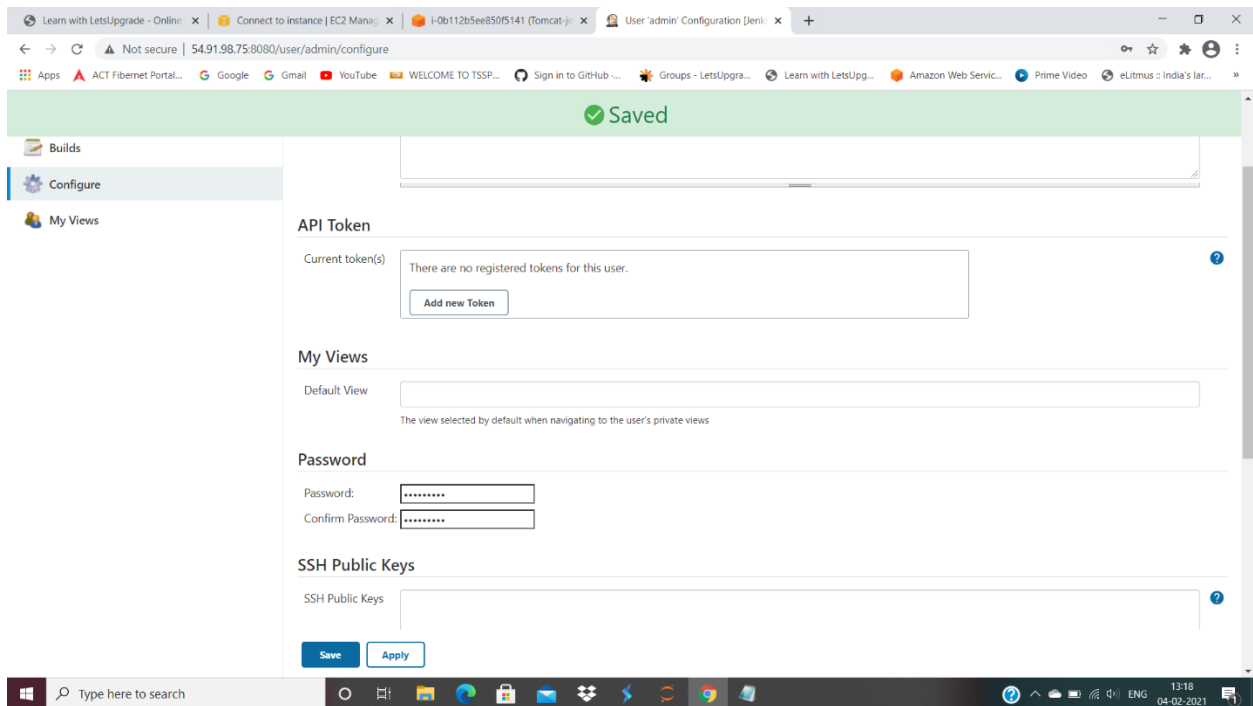
## Task 7: Skip installing plugins



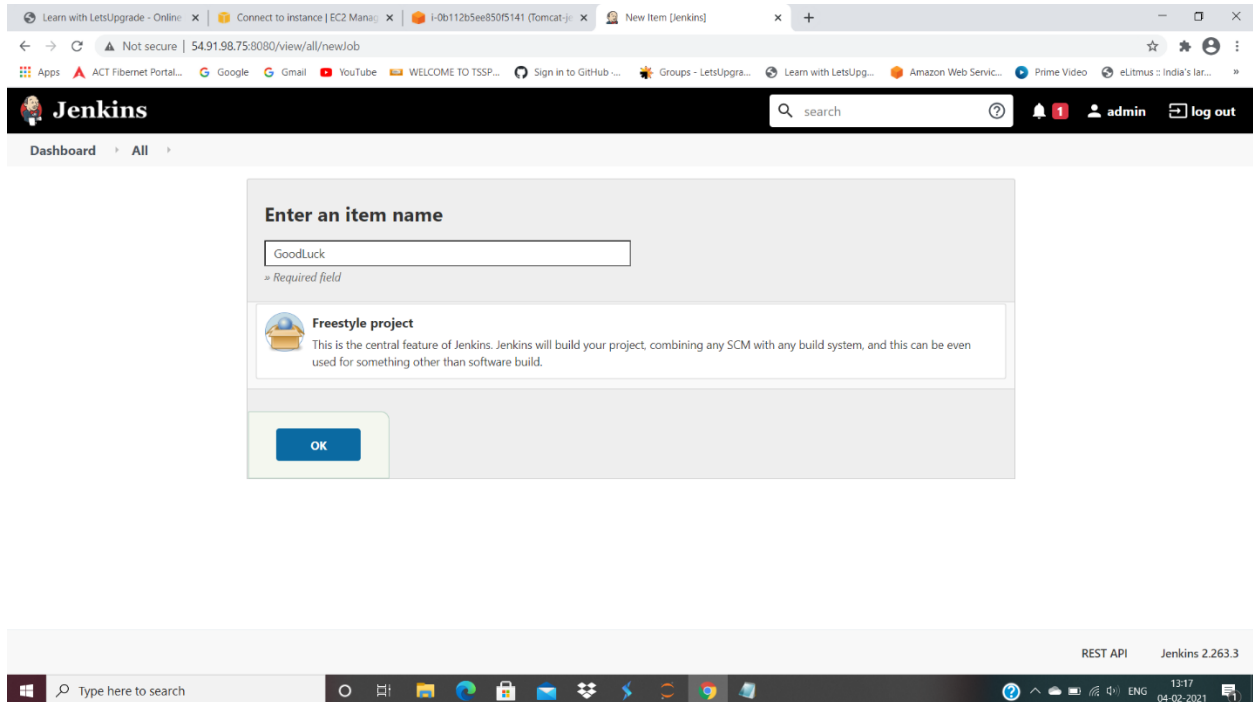
## Task 8: Start using Jenkins



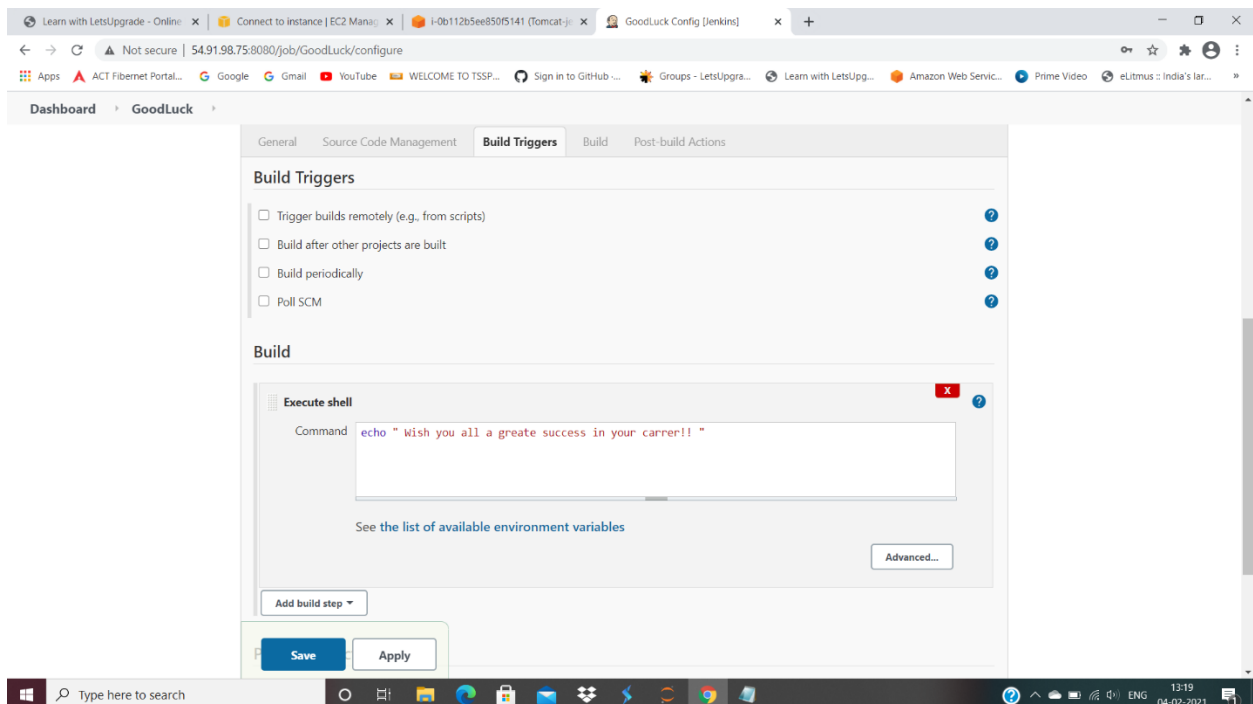
## Task 9: Change the admin password



## 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 address bar shows the URL `54.91.98.75:8080/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.

On the left sidebar, the 'Console Output' option is selected. The main content area, titled 'Console Output', shows the following text:

```
Started by user admin
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/GoodLuck
[GoodLuck] $ /bin/sh -xe /tmp/jenkins2928285575635897239.sh
+ echo 'Wish you all a greates success in your career!! '
Wish you all a greates success in your career!!
Finished: SUCCESS
```

Below the console output, there are links for 'View as plain text', 'Edit Build Information', and 'Delete build '#1''. The bottom of the interface shows the 'REST API' and 'Jenkins 2.263.3' version information. The Windows taskbar at the very bottom shows the search bar and various application icons.