Advance AWS

AWS Assessment Project 7

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Teacher:

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Course:

Advance AWS Cloud Computing with DevOps Fundamentals

Institute:

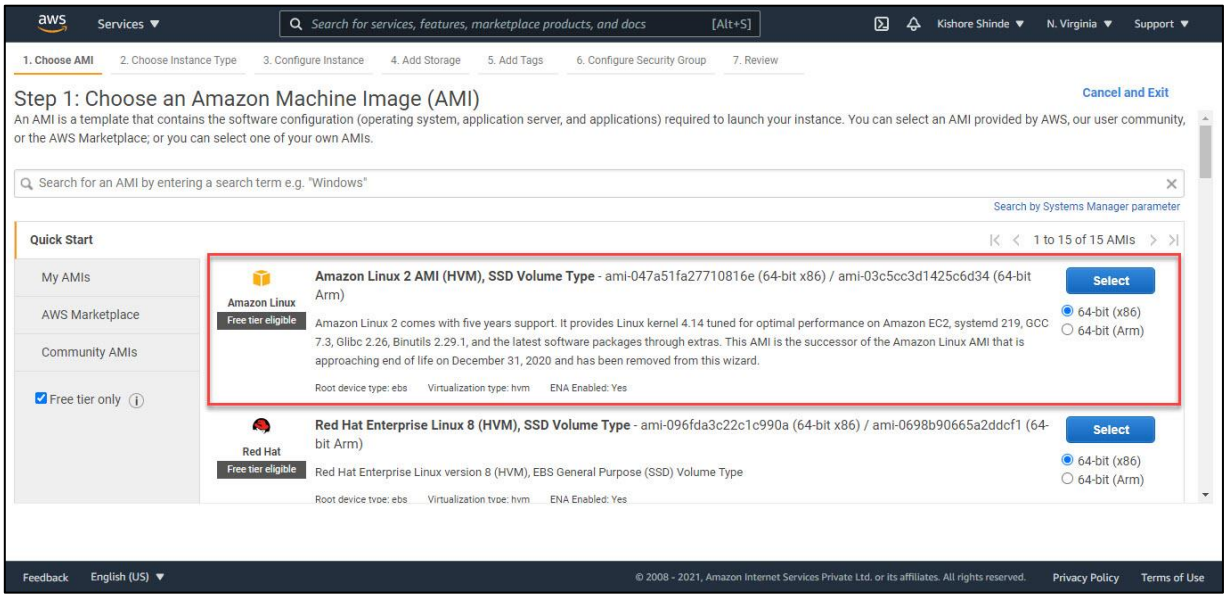
Lets Upgrade

Project: DevOps-Jenkins-Installation and Configuration on Linux

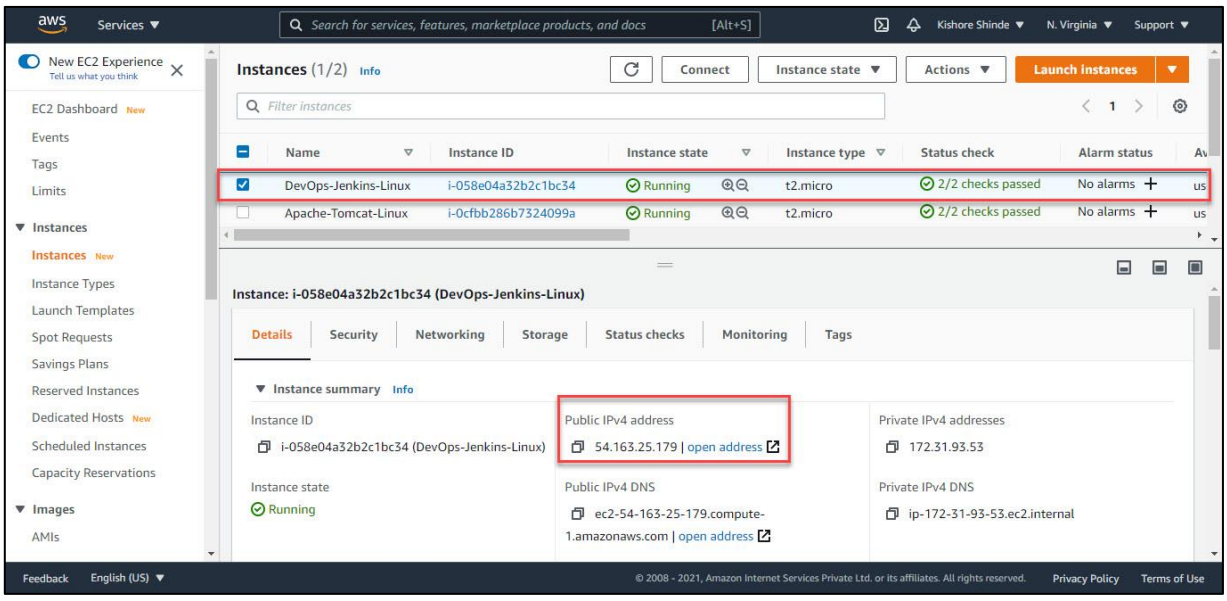
Task 1	Create Linux Instance
Task 2	Install Java
Task 3	Install Jenkins
Task 4	Configure Admin Password
Task 5	Create a New Job & Build the job

TASK 1: Create a Linux Instance

- Select Amazon Linux 2 AMI & Create Instance



- Instance Details



  - **Instance Name:** DevOps-Jenkins-Linux
  - **Public IP:** 54.163.25.179
  - **Private IP:** 172.31.93.53

TASK 2: Install Java

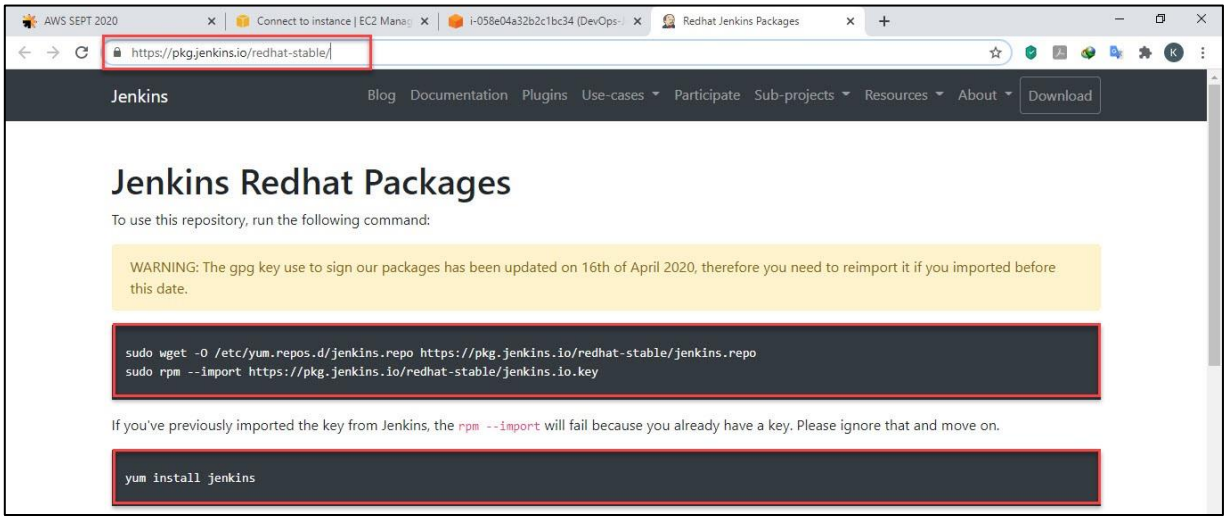
Now connect to instance created:

- *sudo su* – Become Super user
- *yum install java-1.8** – Will install Java

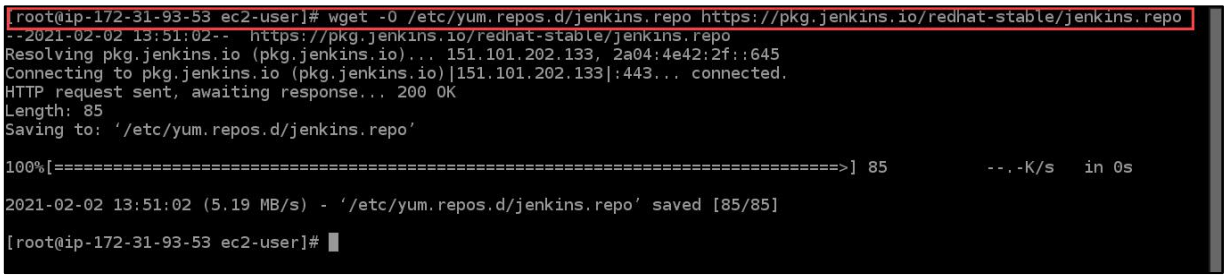
TASK 3: Install Jenkins

Go to the below link to access the Jenkins repository and install it:

- https://pkg.jenkins.io/redhat-stable/

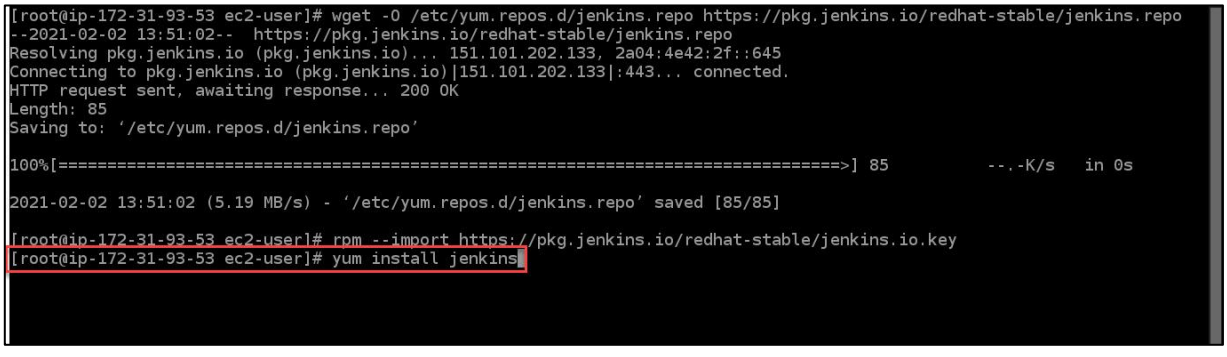


- Get Jenkins repository :
    - *wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat-stable/jenkins.repo*



- Import the Jenkins key :
    - *rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io.key*

- Install Jenkins :
    - yum install jenkins



```
 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]: 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-172-31-93-53 ec2-user]#
```

- After installing the Jenkins, check Jenkins status
    - *service jenkins status*

```
Transaction test succeeded
Running transaction
  Installing : jenkins-2.263.3-1.1.noarch
  Verifying  : jenkins-2.263.3-1.1.noarch

Installed:
  jenkins.noarch 0:2.263.3-1.1

Complete!
[root@ip-172-31-93-53 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-sysv-generator(8)
[root@ip-172-31-93-53 ec2-user]#
```

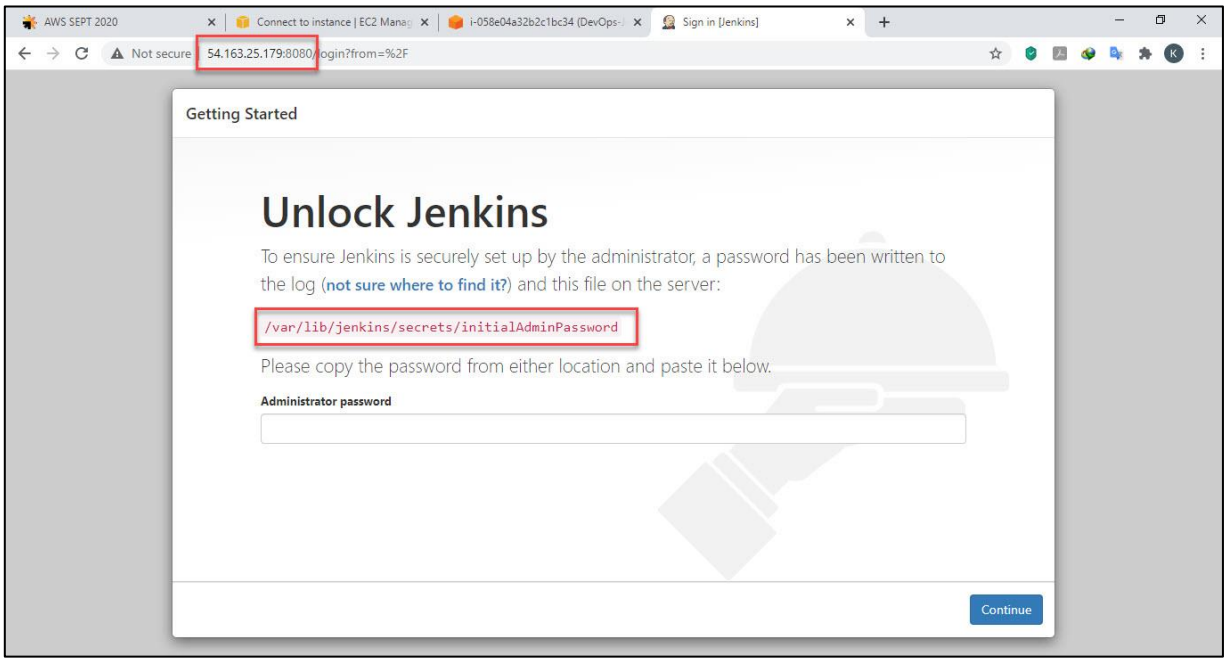
i-058e04a32b2c1bc34 (DevOps-Jenkins-Linux)

Public IPs: 54.163.25.179 Private IPs: 172.31.93.53

You can see in the above image that the Jenkins service is inactive.

- Start the Jenkins service:
    - *service jenkins start*

- To continue jenkins installation, go to the browser and access the instance using the public ip along with the port number (i.e., 54.163.27.179:8080)



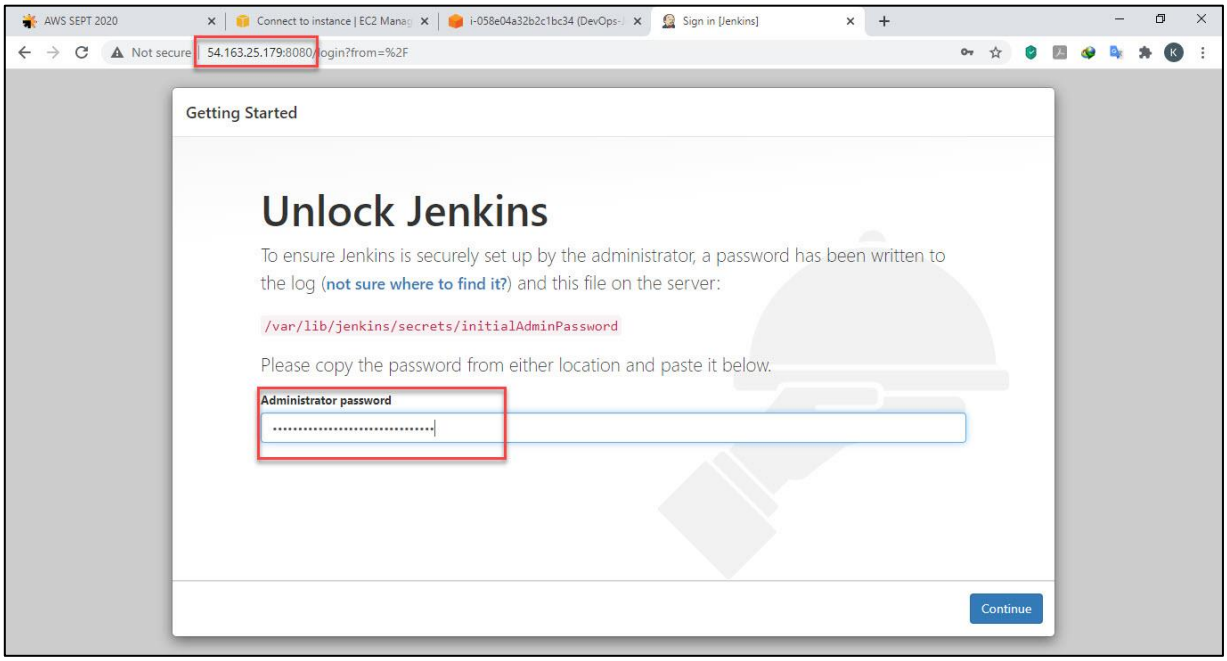
You can see the Unlock Jenkins page asking for Administrator password.

- Copy the path/location of password file mentioned, which we will use to get the administrator password Go back to the instance you connected.
- Path / Location:
    - */var/lib/jenkins/secrets/initialAdminPassword*

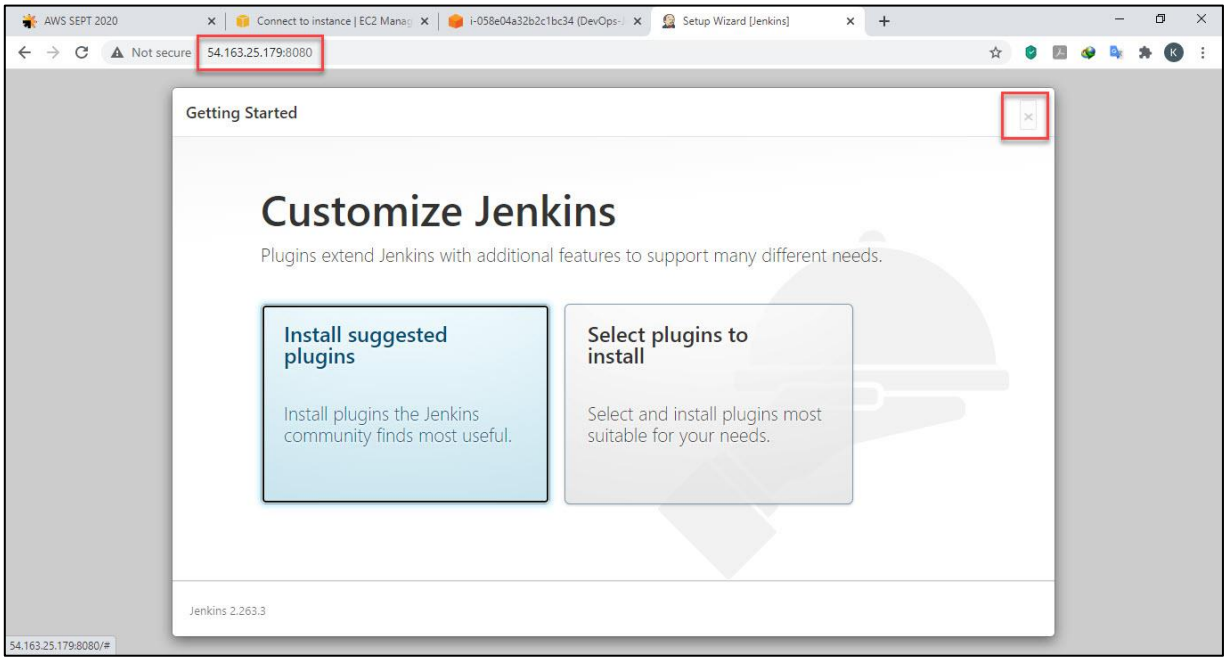
- Open the file with the copied path:
    - *cat /var/lib/jenkins/secrets/initialAdminPassword*

```
[root@ip-172-31-93-53 ec2-user]# cat /var/lib/jenkins/secrets/initialAdminPassword
ab76387fa5f740bca87ba7dfed6ba3b6
[root@ip-172-31-93-53 ec2-user]#
```

- Copy the password and go to back to the ***Unlock Jenkins*** page and paste it

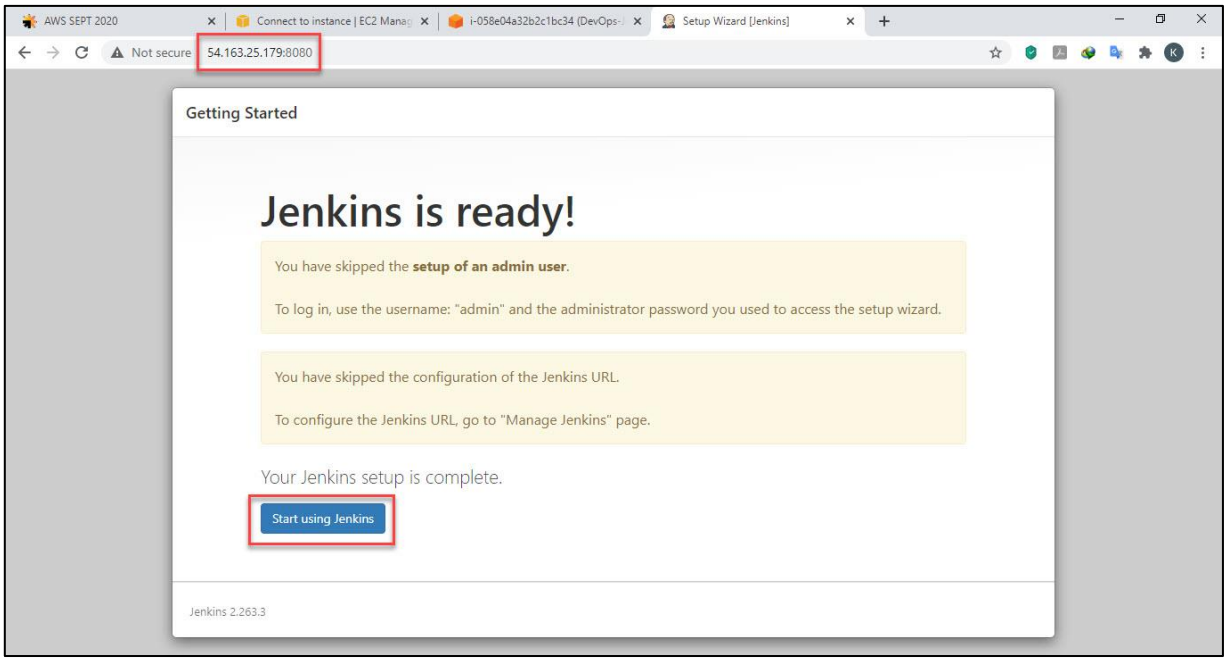


- Click on ***Continue***

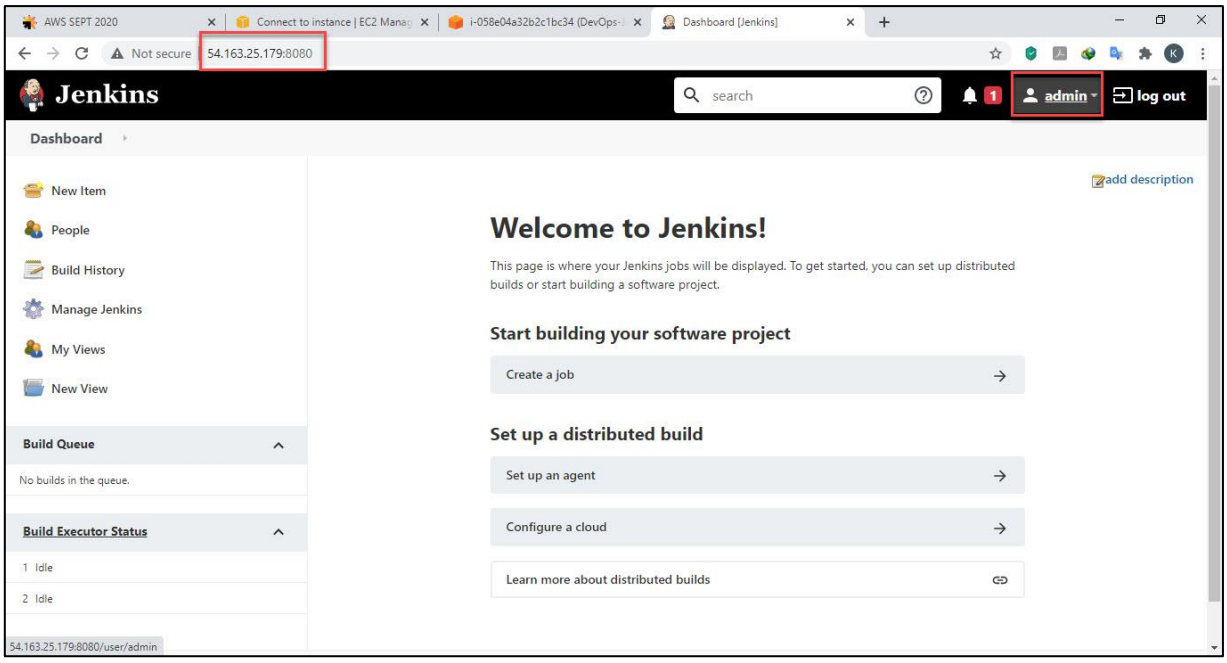


- On the ***Customize Jenkins*** page skip the plugins installation & close it

- You can see a message *"Jenkins is ready!"*. Click on ***Start using Jenkins***



- You can see **Jenkins Dashboard** showing ***Welcome to Jenkins!***

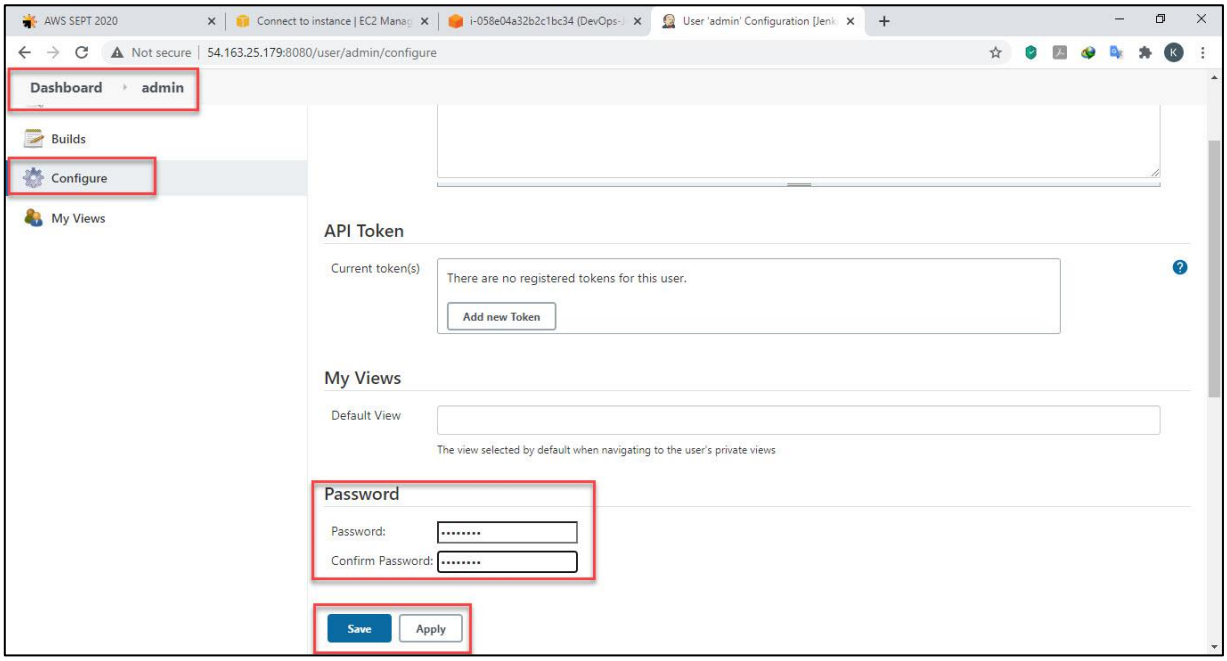


So, you have successfully installed Jenkins.

TASK 4: Configure Admin Password

Now we will change the machine generated Admin Password and set our own password

- Click on ***admin*** as shown in the above image



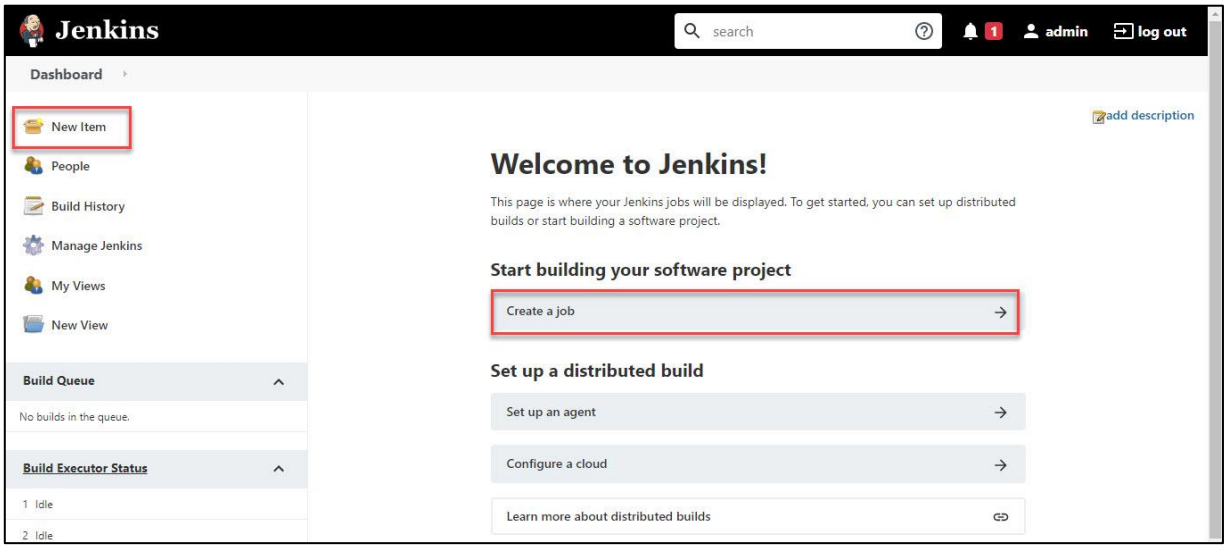
- In **Dashboard -> admin** click on ***Configure***
- In the password section below type in the new password. Click on ***Save*** and then ***Apply.***

You have successfully updated the new password.

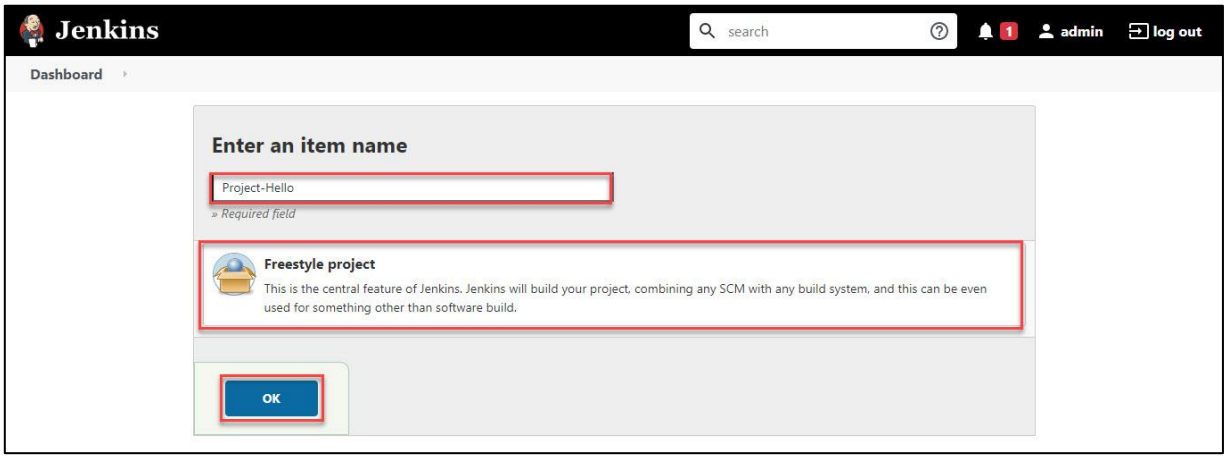
TASK 5: Create a new Job & Build the job

Create a new Job

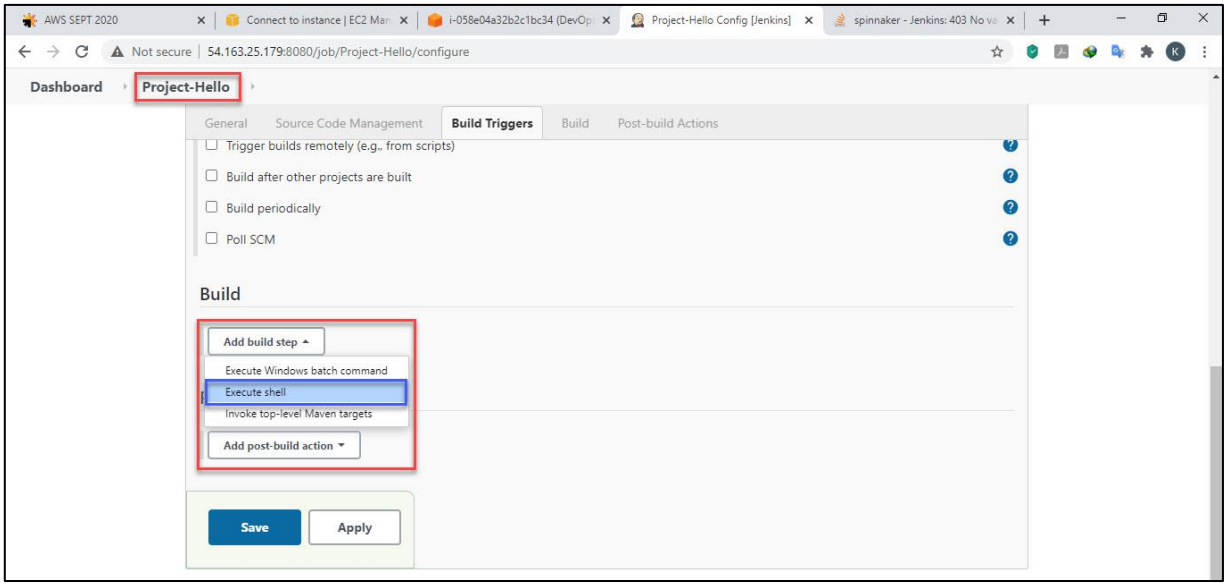
- In the Jenkins Dashboard click on **New Item** and then click on **Create a job**



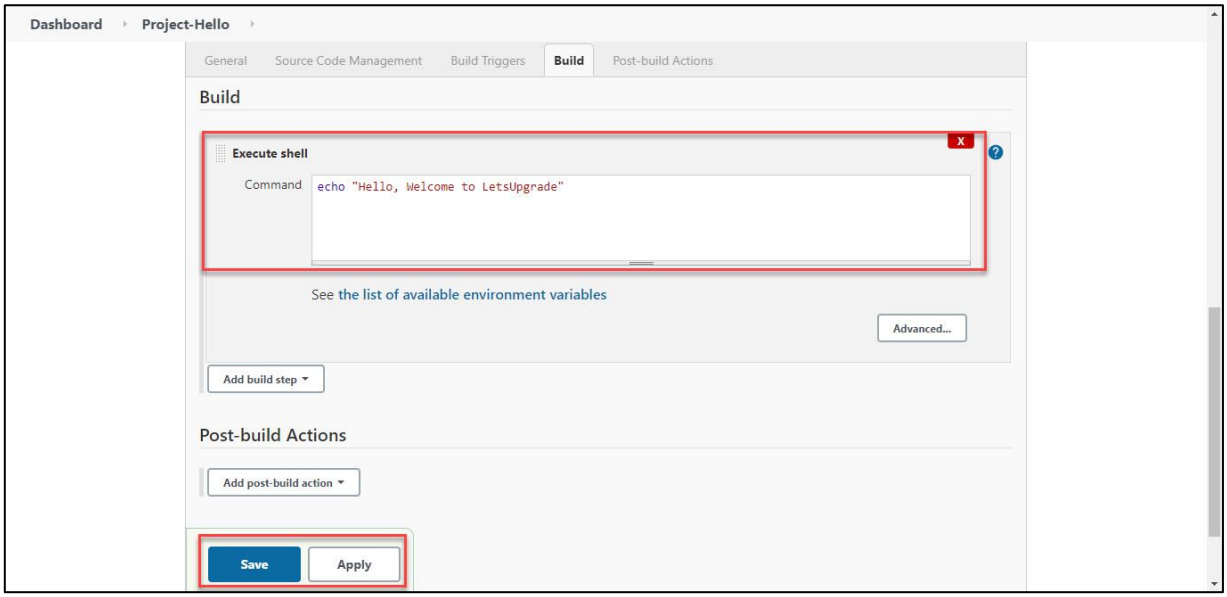
- Enter an item name: **Project-Hello**
- Select **Freestyle project** and click on **OK**



- Build Triggers settings
  - In **Dashboard -> Project-Hello**
  - Click on **Build Triggers** tab then click on **Add build step**
  - Select **Execute shell**



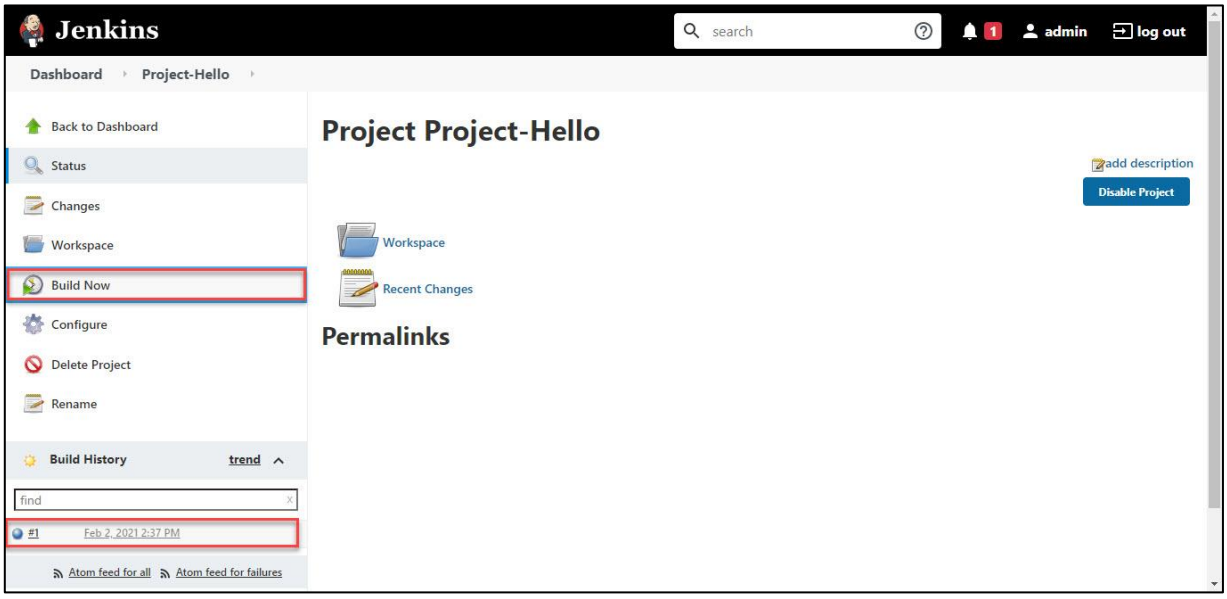
- Build settings
  - Under **Execute shell** in **Command** field enter following command:
    - *echo "Hello, Welcome to LetsUpgrade"*



  - Click on **Save** and then **Apply**

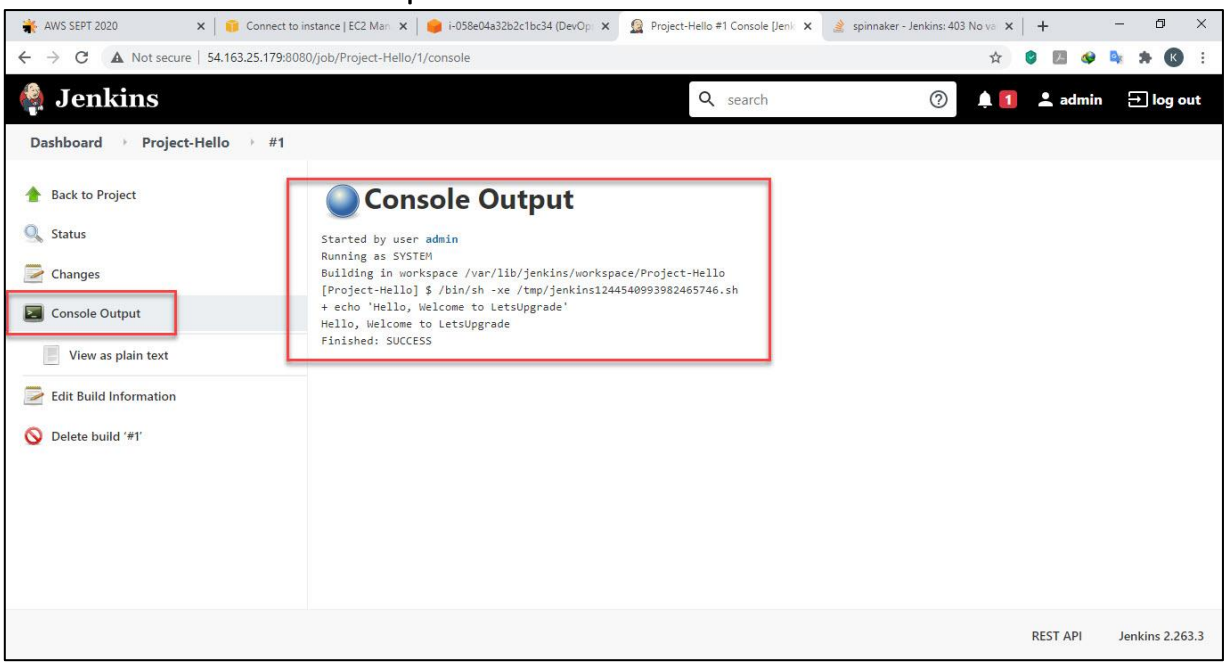
Build the Job

- On the **Dashboard - Project-Hello** click on **Build Now**



- Once the build is complete, click on the Build number (e.g., #1) under **Build History** Section

- Click on **Console Output**



- You can see the output of the job with **SUCCESS** status

So, you have completed the **Project-DevOps-Jenkins** on **Linux** instance

xxx---AWS Assessment Project 7 Ends Here--xxx