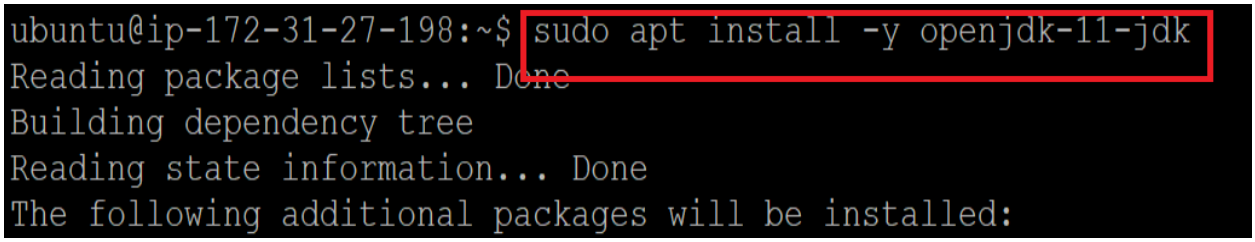
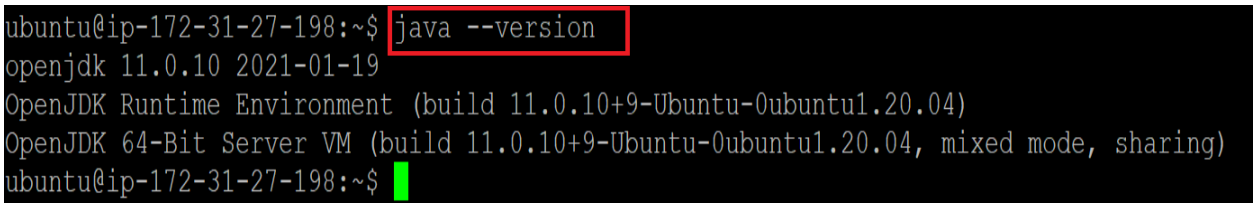
Installing Jenkins

This document covers the steps to install Jenkins. So let's see these steps one by one. Login to your Ubuntu instance and once you reach the terminal, perform the following steps.

1. First you need to install Java, as it is a prerequisite to run Jenkins. Type the following command **sudo apt install -y openjdk-11-jdk** and hit enter**.**

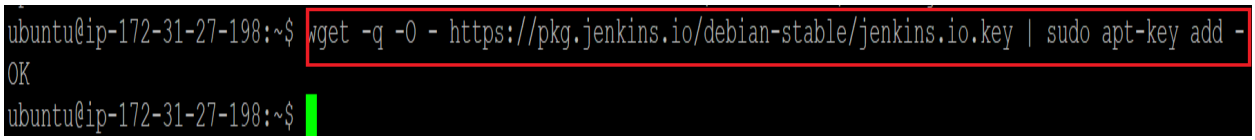


2. Once Java is installed, run the following command **java --version** to check the version of Java installed in our system.



3. Once Java is installed, you need to install Jenkins. After that, run the following command to add the repository key to the system.

   wget -q -O - https://pkg.jenkins.io/debian-stable/jenkins.io.key | sudo apt-key add -



4. Then run the following command,

   sudo sh -c 'echo deb https://pkg.jenkins.io/debian-stable binary/ > /etc/apt/sources.list.d/jenkins.list'

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```
ubuntu@ip-172-31-27-198:~$ sudo sh -c 'echo deb https://pkg.jenkins.io/debian-stable binary/ > /etc/apt/sources.list.d
/jenkins.list'
ubuntu@ip-172-31-27-198:~$
```

5. After that, run the following command to update your packages: **sudo apt-get update**

```
ubuntu@ip-172-31-27-198:~$ sudo apt-get update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports InRelease [101 kB]
```

6. Then finally install Jenkins by running the following command: **sudo apt-get install jenkins**

```
ubuntu@ip-172-31-27-198:~$ sudo apt-get install jenkins
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  daemon net-tools
The following NEW packages will be installed:
  daemon jenkins net-tools
```

7. Once Jenkins is installed, its corresponding version can be checked by running the following command: **vim /var/lib/jenkins/config.xml**.

```
<?xml version='1.1' encoding='UTF-8'?>
<hudson>
  <disabledAdministrativeMonitors/>
  <version>2.277.1</version>
  <numExecutors>2</numExecutors>
  <mode>NORMAL</mode>
  <useSecurity>true</useSecurity>
  <authorizationStrategy class="hudson.security.FullControlOnceLoggedInAuthorizationStrategy">
    <denyAnonymousReadAccess>true</denyAnonymousReadAccess>
  </authorizationStrategy>
  <securityRealm class="hudson.security.HudsonPrivateSecurityRealm">
    <disableSignup>true</disableSignup>
```

8. To come out of this file, first press the escape key. Then write **:q** and

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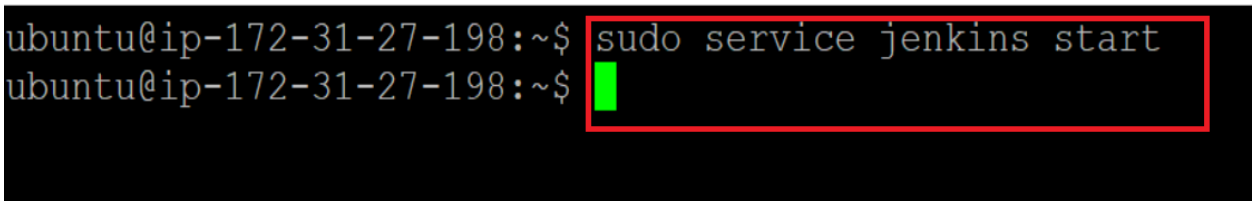
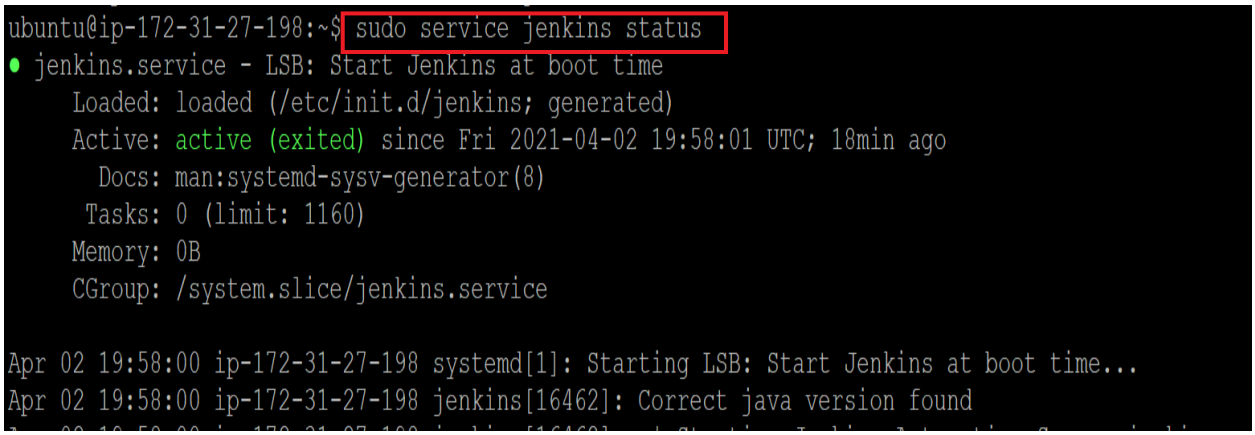
then press enter.

9. Then to start Jenkins, run the following command: **sudo service jenkins start**.



10. Then, you can check the status of Jenkins by running the following command: **sudo service jenkins status.** Here you can see that Jenkins is in a running state.



11. Now, go to your instance console and copy the public IP address of the instance.

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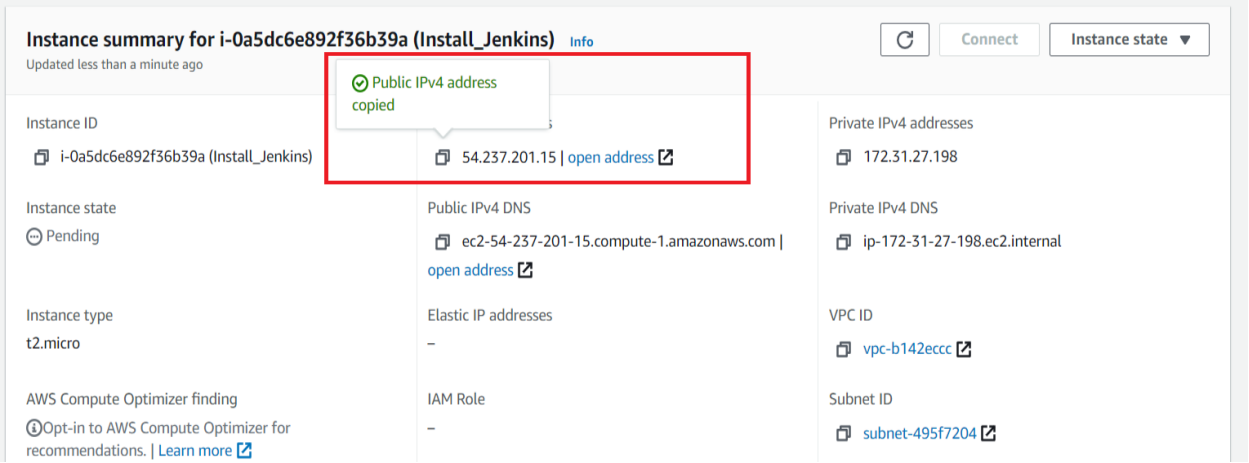

12. After copying the IP address, open your browser and in the address, paste the IP address followed by port number 8080, i.e., **<ip_address:8080>**.
    Then press enter.

13. A window will appear asking to enter the **InitialAdminPassword.** Therefore, enter the password that we have copied over to the text editor.

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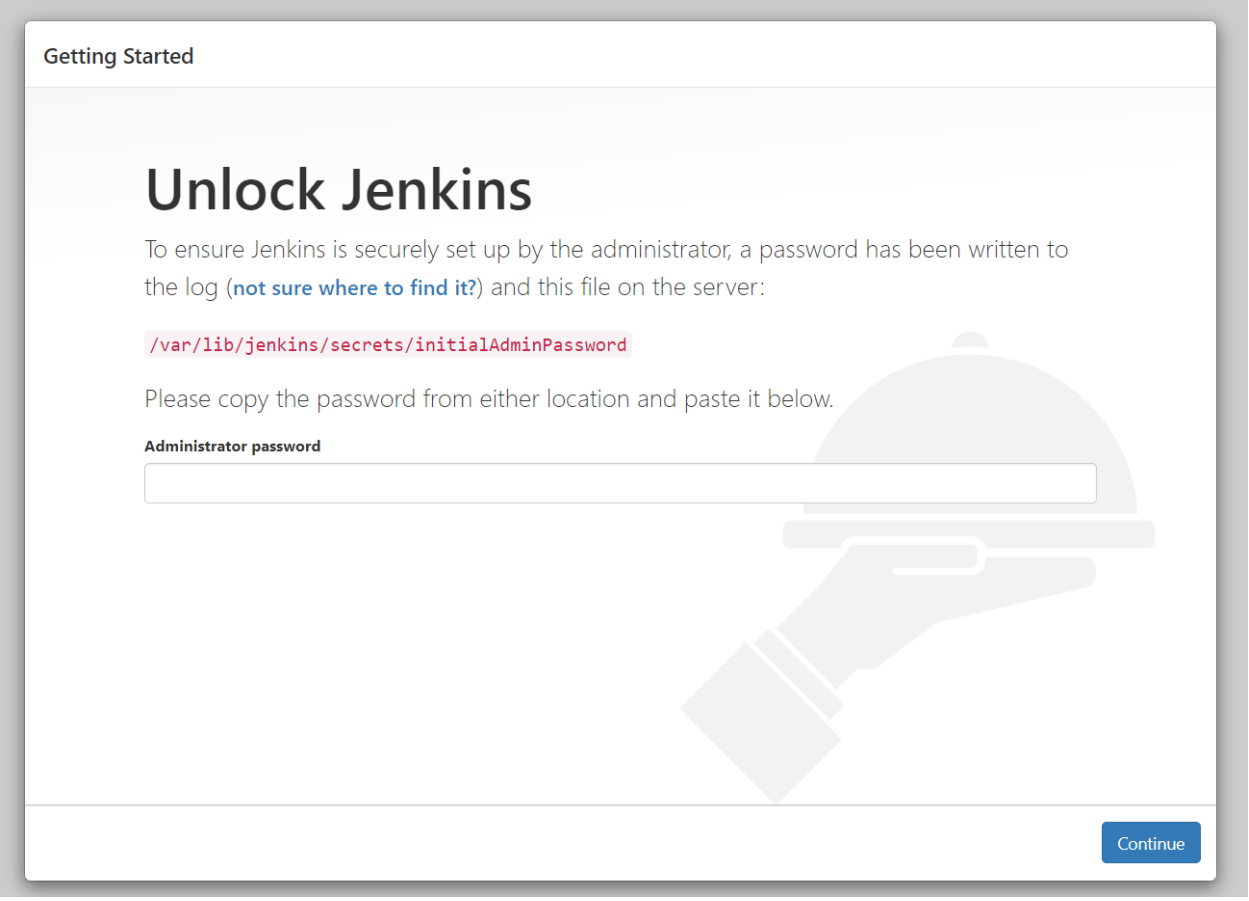

14. Now, run the following command to get the default password provided by Jenkins: **sudo cat /var/lib/jenkins/secrets/initialAdminPassword**

```
ubuntu@ip-172-31-27-198:~$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword
486d353a73a64a1284dcdd7f8c1e48f8
ubuntu@ip-172-31-27-198:~$
```

15. Copy this password and paste it into the **Administrator password**. After that, click on the **Continue** option.

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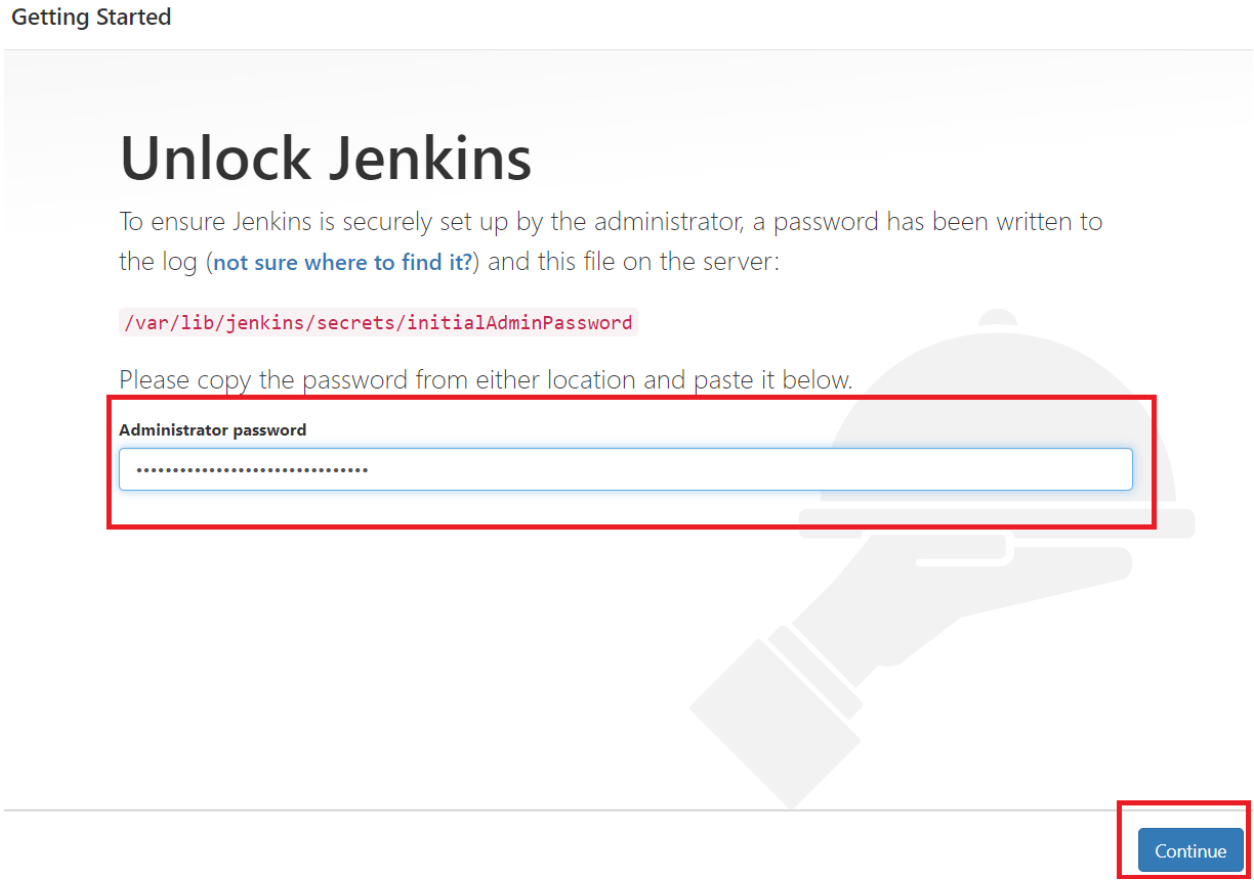

16. Then the **Customize Jenkins** window will appear. Here, click on **Install suggested plugins**.

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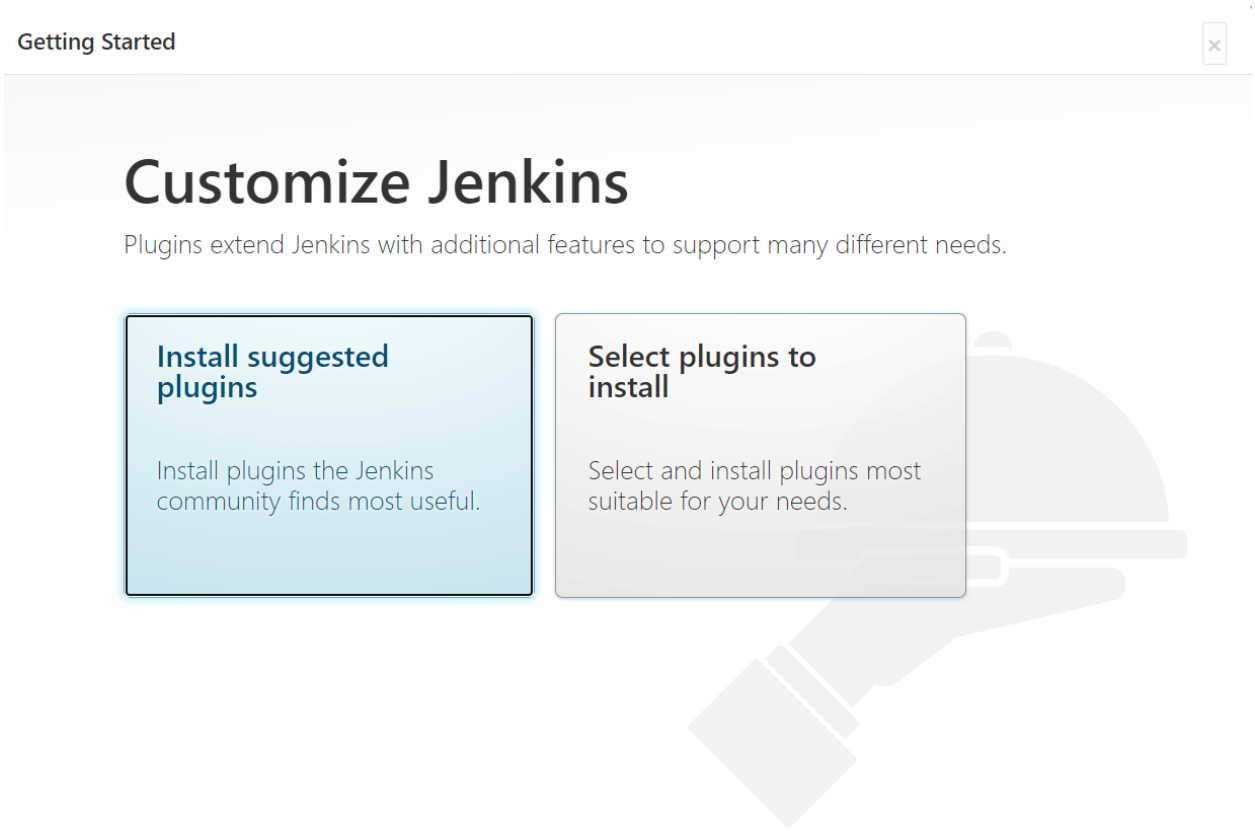

17. Now, the plugins will be installed as shown in the figure below.

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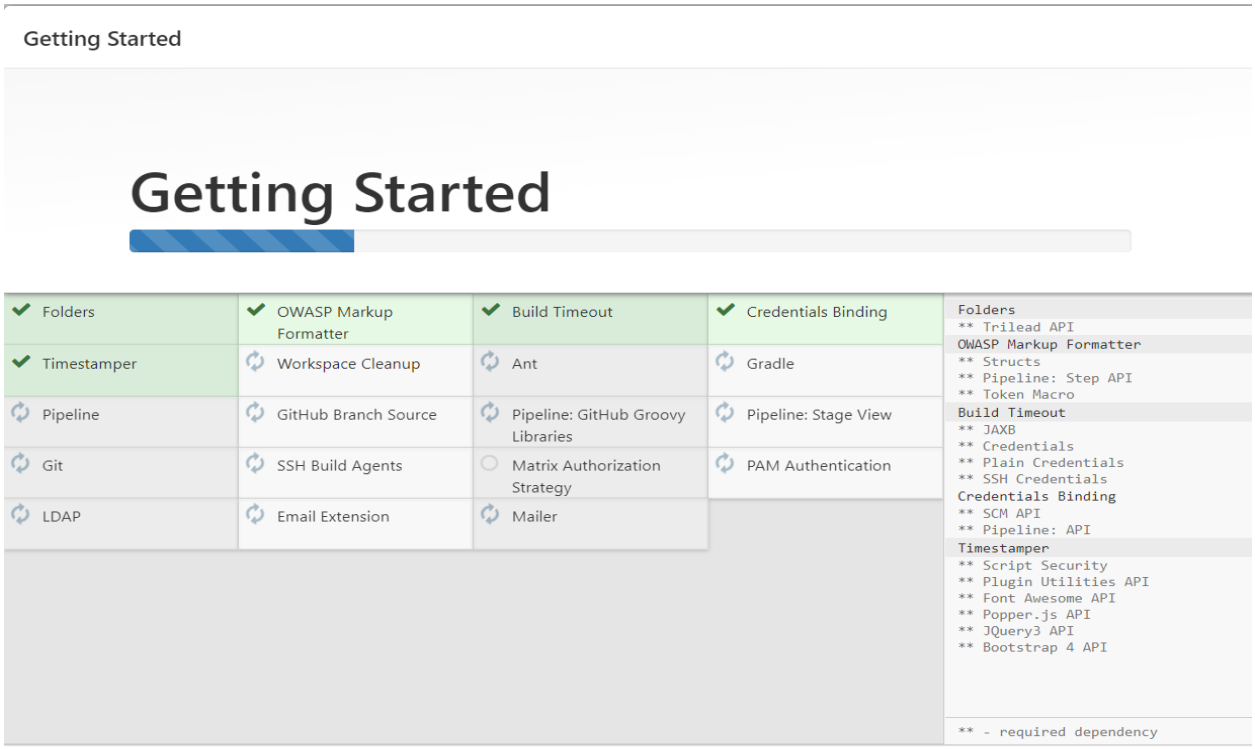
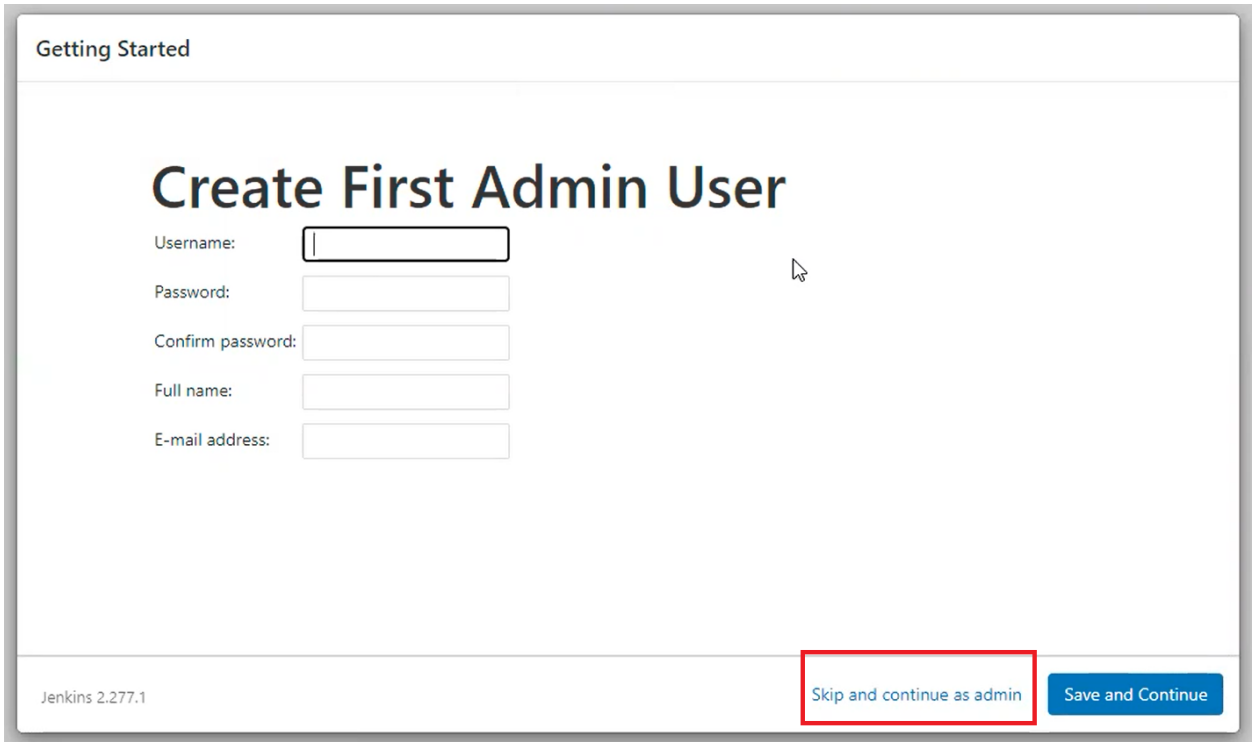


18. Then, a window will appear asking to create the first admin user. For now, select **Skip and continue as admin** option.



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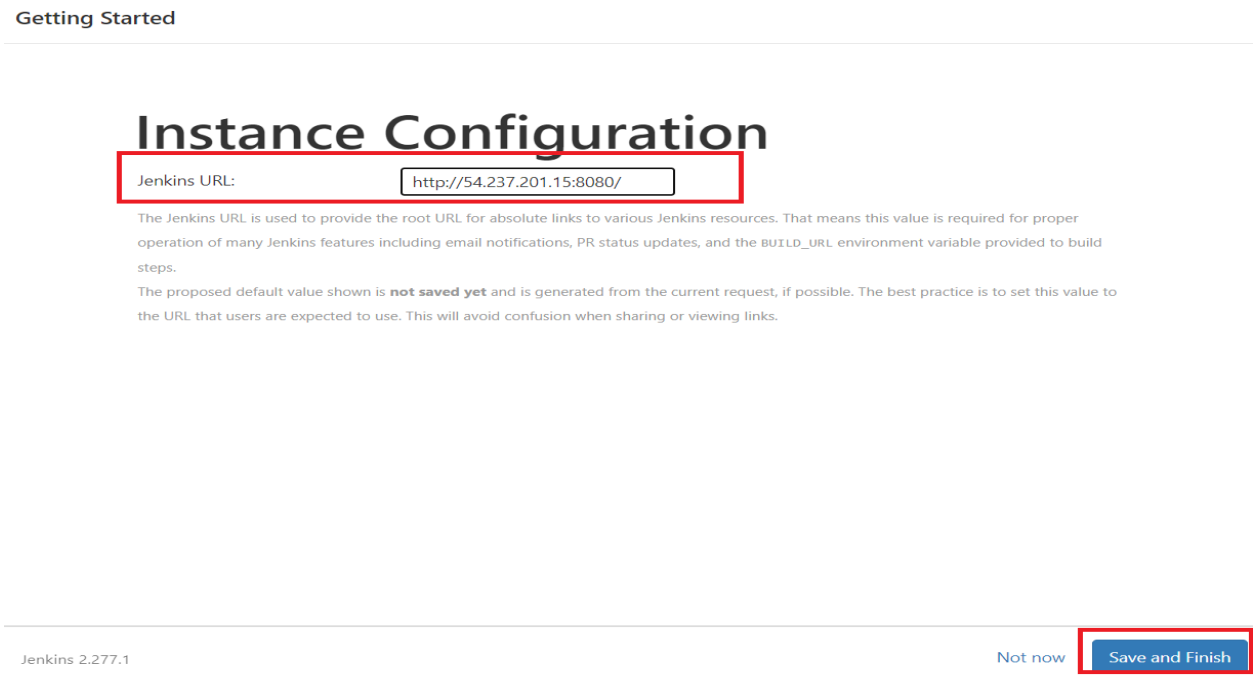
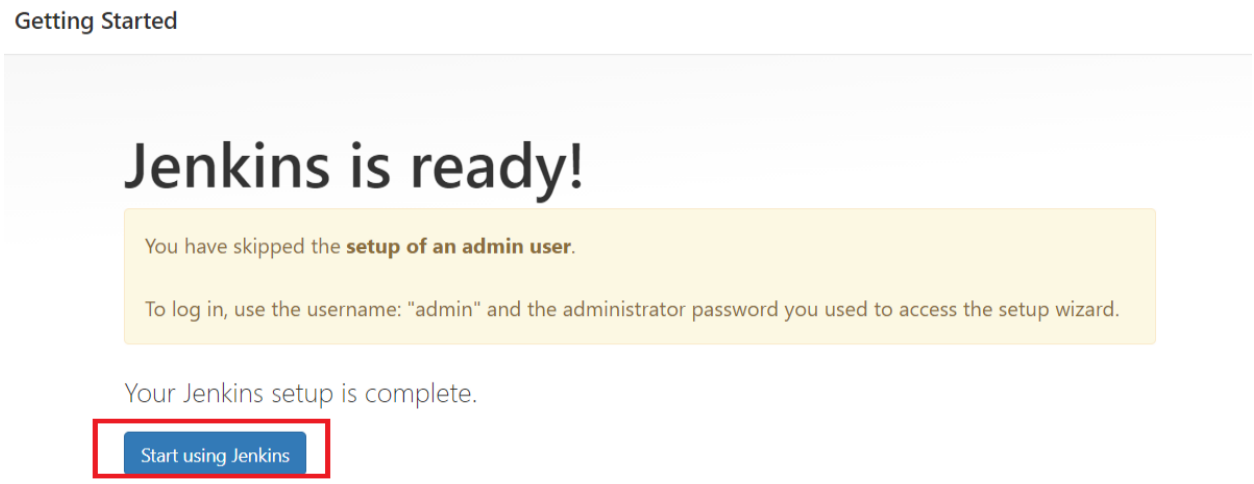
19. Then, the **Instance Configuration** window will appear showing **Jenkins URL**. Click on **Save and Finish**.



20. After that, click on **Start using Jenkins** option.



21. After that, you can see the **Jenkins Dashboard** as shown below.

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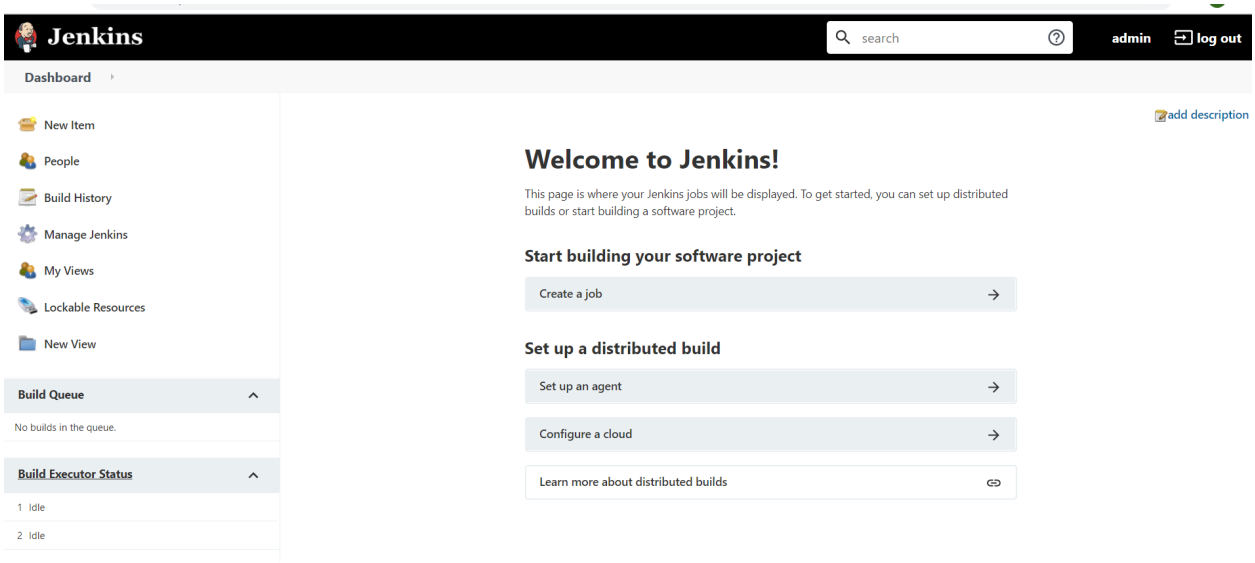

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