

# Jenkins

## Demonstration 1 – Jenkins Installation Guide

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### Installation Steps:

**Step 1:** You should have java 7 or Java 8 installed in your system before starting the installation of Jenkins. Check if installed by using below command

**java -version**

```
root@edureka-VirtualBox:~# java -version
openjdk version "1.8.0_171"
OpenJDK Runtime Environment (build 1.8.0_171-8u171-b11-0ubuntu0.17.10.1-b11)
OpenJDK 64-Bit Server VM (build 25.171-b11, mixed mode)
root@edureka-VirtualBox:~#
```

**Step 2:** If it's not showing java version installed then you have to download it for your machine. Use below commands for that.

**sudo apt-get update && apt-get upgrade**

**sudo apt-get install default-jdk**

**Step 3:** To use the Debian package repository you need to add a key. Use the command given below.

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

Change the (–) command after key add in the terminal or it will cause some issue.

```
File Edit View Search Terminal Help
root@edureka-VirtualBox:~# wget -q -O - https://pkg.jenkins.io/debian/jenkins.io
.key | sudo apt-key add -
OK
root@edureka-VirtualBox:~#
```

**Step 4:** Then you need to add the below entry in `/etc/apt/sources.list`. Use the below command to complete the required job:

**echo 'deb <https://pkg.jenkins.io/debian binary/>' >> /etc/apt/sources.list**

Please change the single quotes on terminal otherwise it will cause some issue.

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```
root@edureka-VirtualBox: ~
File Edit View Search Terminal Help
root@edureka-VirtualBox:~# echo 'deb https://pkg.jenkins.io/debian binary/' >> /etc/apt/sources.list
root@edureka-VirtualBox:~# █
```

**Step 5:** Now you need to update local package index and then you have to install Jenkins by using below commands:

**sudo apt-get update**

```
root@edureka-VirtualBox: ~
File Edit View Search Terminal Help
root@edureka-VirtualBox:~# apt-get update
Hit:1 http://security.ubuntu.com/ubuntu artful-security InRelease
Hit:2 http://in.archive.ubuntu.com/ubuntu artful InRelease
Hit:3 http://in.archive.ubuntu.com/ubuntu artful-updates InRelease
Hit:4 http://in.archive.ubuntu.com/ubuntu artful-backports InRelease
Ign:5 https://pkg.jenkins.io/debian binary/ InRelease
Hit:6 https://pkg.jenkins.io/debian binary/ Release
Reading package lists... Done
```

**sudo apt-get install jenkins**

```
root@edureka-VirtualBox: ~  
File Edit View Search Terminal Help  
root@edureka-VirtualBox:~# apt-get install jenkins  
Reading package lists... Done  
Building dependency tree  
Reading state information... Done  
The following NEW packages will be installed:  
  jenkins  
0 upgraded, 1 newly installed, 0 to remove and 10 not upgraded.  
Need to get 0 B/75.5 MB of archives.  
After this operation, 75.9 MB of additional disk space will be used.  
Selecting previously unselected package jenkins.  
(Reading database ... 131865 files and directories currently installed.)  
Preparing to unpack .../archives/jenkins_2.144_all.deb ...  
Unpacking jenkins (2.144) ...  
Setting up jenkins (2.144) ...  
Processing triggers for ureadahead (0.100.0-20) ...  
Processing triggers for systemd (234-2ubuntu12.4) ...  
root@edureka-VirtualBox:~#
```

**Step 6:** Now you need to start the Jenkins service and you check the status of Jenkins if its running or not. Use the command given below:

**service jenkins start**

**systemctl status jenkins**

```
root@edureka-VirtualBox:~# service jenkins start  
root@edureka-VirtualBox:~# systemctl status jenkins  
● jenkins.service - LSB: Start Jenkins at boot time  
   Loaded: loaded (/etc/init.d/jenkins; generated; vendor preset: enabled)  
   Active: active (exited) since Thu 2018-10-04 11:36:32 IST; 1min 43s ago  
     Docs: man:systemd-sysv-generator(8)  
  
Oct 04 11:36:31 edureka-VirtualBox systemd[1]: Starting LSB: Start Jenkins at boot time...  
Oct 04 11:36:31 edureka-VirtualBox jenkins[6664]: Correct java version found  
Oct 04 11:36:31 edureka-VirtualBox jenkins[6664]: * Starting Jenkins Automation Server jenkins  
Oct 04 11:36:31 edureka-VirtualBox su[6697]: Successful su for jenkins by root  
Oct 04 11:36:31 edureka-VirtualBox su[6697]: + ??? root:jenkins  
Oct 04 11:36:31 edureka-VirtualBox su[6697]: pam_unix(su:session): session opened for user jenkins by (uid=0)  
Oct 04 11:36:32 edureka-VirtualBox jenkins[6664]: ...done.  
Oct 04 11:36:32 edureka-VirtualBox systemd[1]: Started LSB: Start Jenkins at boot time.  
root@edureka-VirtualBox:~#
```

**Step 7:** Go to your browser and go to `ipaddress:8080`. In my case it's `192.168.56.101:8080`. The port on which Jenkins is running is 8080.

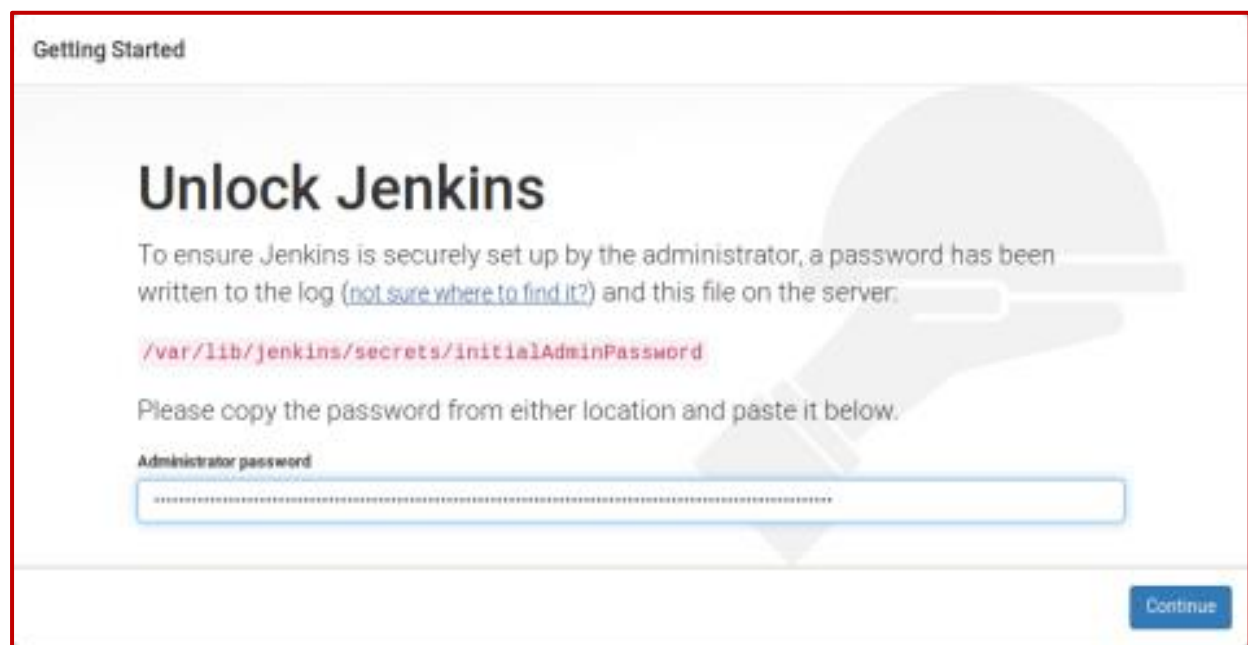


**Step 8:** Now use the below command to get the password, copy it and paste it within the box shown above.

```
cat /var/lib/jenkins/secrets/initialAdminPassword
```

Now you can start working on Jenkins.

```
root@edureka-VirtualBox: ~  
File Edit View Search Terminal Help  
root@edureka-VirtualBox:~# cat /var/lib/jenkins/secrets/initialAdminPassword  
07e5c3266cf2482a880d671812231270  
root@edureka-VirtualBox:~#
```



## Conclusion

We have successfully installed Jenkins on our system