Jenkins Installation Guide

Installation Notes

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Connect to an EC2 instance(Ubuntu).

Step 1: Update the Ubuntu repository and install the Java OpenJDK with apt command.

Commands:

apt-get update

apt-get install openjdk-8-jdk

```
root@ip-172-31-84-165:/home/ubuntu# sudo apt-get update
Hit:l http://us-east-l.ec2.archive.ubuntu.com/ubuntu xenial InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates InRelease [
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-backports InRelease
[107 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/main Sources [868 km
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/restricted Sources
4,808 B]
Get:6 http://security.ubuntu.com/ubuntu xenial-security InRelease [107 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/universe Sources [7
728 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/multiverse Sources
L79 kB]
Get:9 http://us-east-l.ec2.archive.ubuntu.com/ubuntu xenial/universe amd64 Pack
root@ip-172-31-84-165:/home/ubuntu# sudo apt-get install openjdk-8-jdk
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  ca-certificates-java fontconfig fontconfig-config fonts-dejavu-core
  fonts-dejavu-extra hicolor-icon-theme java-common libasound2 libasound2-data
  libasyncns0 libatkl.0-0 libatkl.0-data libavahi-client3 libavahi-common-data
  libavahi-common3 libcairo2 libcups2 libdatriel libdrm-amdgpul libdrm-intell
  libdrm-nouveau2 libdrm-radeon1 libflac8 libfontconfig1 libgdk-pixbuf2.0-0
  libgdk-pixbuf2.0-common libgif7 libgll-mesa-dri libgll-mesa-glx
  libglapi-mesa libgraphite2-3 libgtk2.0-0 libgtk2.0-bin libgtk2.0-common
  libharfbuzz0b libice-dev libice6 libjbig0 libjpeg-turbo8 libjpeg8 liblcms2-2
  libllvm6.0 libnspr4 libnss3 libnss3-nssdb libogg0 libpango-1.0-0
```

libpangocairo-1.0-0 libpangoft2-1.0-0 libpciaccess0 libpcsclitel

libpixman-1-0 libpthread-stubs0-dev libpulse0 libsensors4 libsm-dev libsm6 libsndfilel libthai-data libthai0 libtiff5 libtxc-dxtn-s2tc0 libvorbis0a libvorbisenc2 libxll-dev libxll-doc libxll-xcbl libxau-dev libxcb-dri2-0 libxcb-dri3-0 libxcb-glx0 libxcb-present0 libxcb-render0 libxcb-shm0

```
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jarsigner to
ovide /usr/bin/jarsigner (jarsigner) in auto mode
Setting up openjdk-8-jdk:amd64 (8ul81-bl3-0ubuntu0.16.04.1) ...
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/appletviewer
provide /usr/bin/appletviewer (appletviewer) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jconsole to p
vide /usr/bin/jconsole (jconsole) in auto mode
Processing triggers for libc-bin (2.23-0ubuntul0) ...
Processing triggers for systemd (229-4ubuntu21.4) ...
Processing triggers for ureadahead (0.100.0-19) ...
Processing triggers for ca-certificates (20170717~16.04.1) ...
Updating certificates in /etc/ssl/certs...
0 added, 0 removed; done.
Running hooks in /etc/ca-certificates/update.d...
done.
done.
root@ip-172-31-84-165:/home/ubuntu#
```

Step 2: Verify the installation by typing the command below:

Command: java -version

```
root@ip-172-31-84-165:/home/ubuntu# java -version
openjdk version "1.8.0_181"
OpenJDK Runtime Environment (build 1.8.0_181-8u181-b13-0ubuntu0.16.04.1-b13)
OpenJDK 64-Bit Server VM (build 25.181-b13, mixed mode)
root@ip-172-31-84-165:/home/ubuntu#
```

Step 3: Add Jenkins key and repository to the system with the command below:

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

```
root@ip-172-31-84-165:/home/ubuntu# wget -q -O - https://pkg.jenkins.io/debian/jenkins-ci.org.key | sudo apt-key add - OK
```

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

```
root@ip-172-31-84-165:/home/ubuntu# sudo sh -c 'echo deb http://pkg.jenkins.io/debian-stable binary/ > /etc/apt/sources.list.d/jenkins.list'
root@ip-172-31-84-165:/home/ubuntu#
```

Step 4: Installing Jenkins:

sudo apt-get update

sudo apt-get install jenkins

```
root@ip-172-31-84-165:/home/ubuntu# sudo apt-get update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial-backports InRelease
Ign:4 http://pkg.jenkins.io/debian-stable binary/ InRelease
Get:5 http://pkg.jenkins.io/debian-stable binary/ Release [2,042 B]
Get:6 http://pkg.jenkins.io/debian-stable binary/ Release.gpg [181 B]
Hit:7 http://security.ubuntu.com/ubuntu xenial-security InRelease
Get:8 http://pkg.jenkins.io/debian-stable binary/ Packages [13.4 kB]
Fetched 15.6 kB in 0s (50.4 kB/s)
Reading package lists... Done
root@ip-172-31-84-165:/home/ubuntu#
```

```
root@ip-172-31-84-165:/home/ubuntuf sudo apt-get install jenkins
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
    daemon
The following NEW packages will be installed:
    daemon jenkins
0 upgraded, 2 newly installed, 0 to remove and 15 not upgraded.
Need to get 73.7 MB of archives.
After this operation, 76.0 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu xenial/universe amd64 daemon amd64 0.6.4-1 [98.2 kB]
Get:2 http://pkg.jenkins.io/debian-stable binary/ jenkins 2.138.1 [73.6 MB]
```

Step 5: Starting Jenkins

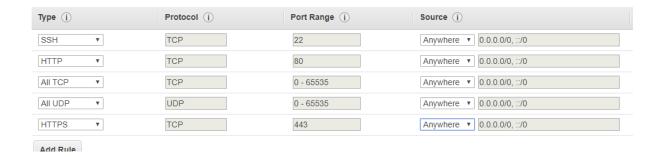
sudo systemctl start jenkins

sudo systemctl status jenkins

```
root@ip-172-31-84-165:/home/ubuntu# sudo systemctl start jenkins
root@ip-172-31-84-165:/home/ubuntu# sudo systemctl status jenkins
• jenkins.service - LSB: Start Jenkins at boot time
    Loaded: loaded (/etc/init.d/jenkins; bad; vendor preset: enabled)
    Active: active (exited) since Fri 2018-09-28 15:11:26 UTC; lmin 41s ago
    Docs: man:systemd-sysv-generator(8)

Sep 28 15:11:25 ip-172-31-84-165 systemd[1]: Starting LSB: Start Jenkins at boot time...
Sep 28 15:11:25 ip-172-31-84-165 jenkins[9178]: Correct java version found
Sep 28 15:11:25 ip-172-31-84-165 su[9212]: Successful su for jenkins Automation Server jenkins
Sep 28 15:11:25 ip-172-31-84-165 su[9212]: Per Proot: Jenkins
Sep 28 15:11:25 ip-172-31-84-165 su[9212]: Per Proot: Jenkins
Sep 28 15:11:26 ip-172-31-84-165 su[9212]: pam_unix(su:session): session opened for user jenkins by (uid=0)
Sep 28 15:11:26 ip-172-31-84-165 systemd[1]: Started LSB: Start Jenkins at boot time.
Sep 28 15:12:49 ip-172-31-84-165 systemd[1]: Started LSB: Start Jenkins at boot time.
root@ip-172-31-84-165:/home/ubuntu#
```

Step 6: Please make sure you have enable the following security ports in your AWS intance



Step 7: You can access Jenkins using your AWS instance Public IP.

http://<public_ip_of_instance>:8080

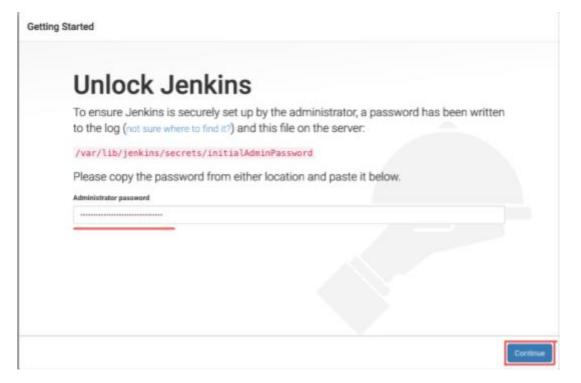
Step 8: Configure Jenkins

To get administrator password, please run the below command:

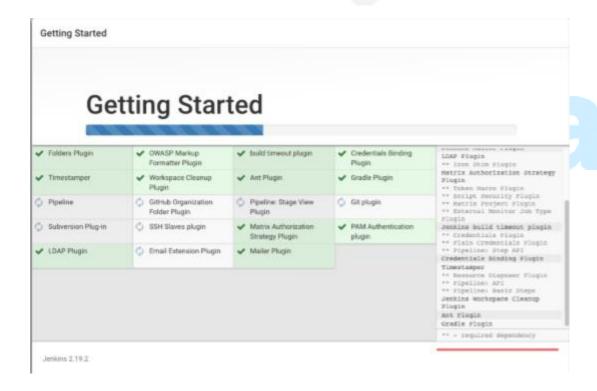
sudo cat /var/lib/jenkins/secrets/initialAdminPassword

root@ip-172-31-84-165:/home/ubuntu# sudo cat /var/lib/jenkins/secrets/initialAdminPassword 7d3993a423cc4e6181854450f0cd8891 root@ip-172-31-84-165:/home/ubuntu#

Copy the password from terminal and paste it



Customize Jenkins Plugins extend Jenkins with additional features to support many different needs. Install suggested plugins Install plugins the Jenkins community finds most useful. Select plugins to install select and install plugins most suitable for your needs.



Now you can start working on Jenkins.