

Create an Ubuntu machine ["Ubuntu Server 16.04 LTS (HVM), SSD Volume Type"] with ALL TCP enabled in the security group.

- **Launched ubuntu instance**

```
ubuntu@ip-172-31-18-57: ~
login as: ubuntu
Authenticating with public key "imported-openssh-key"
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 4.4.0-1128-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

0 packages can be updated.
0 of these updates are security updates.

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-172-31-18-57:~$
```

- **Login into it server as 'ubuntu' user & switch as a 'root' user.**

cmd : **sudo su -**

Jenkins Pre-Requisite: Java installation:

=====

1) sudo add-apt-repository ppa:webupd8team/java

```
root@ip-172-31-18-57:~#
ubuntu@ip-172-31-18-57:~$ sudo su -
root@ip-172-31-18-57:~# ^C
root@ip-172-31-18-57:~# sudo add-apt-repository ppa:webupd8team/java
The Oracle JDK License has changed for releases starting April 16, 2019.

The new Oracle Technology Network License Agreement for Oracle Java SE is substantially different from prior Oracle JDK licenses. The new license permits certain uses, such as personal use and development use, at no cost -- but other uses authorized under prior Oracle JDK licenses may no longer be available. Please review the terms carefully before downloading and using this product. An FAQ is available here: https://www.oracle.com/technetwork/java/javase/overview/oracle-jdk-faqs.html

Oracle Java downloads now require logging in to an Oracle account to download Java updates, like the latest Oracle Java 8u211 / Java SE 8u212. Because of this I cannot update the PPA with the latest Java (and the old links were broken by Oracle).

For this reason, THIS PPA IS DISCONTINUED.

For Oracle Java 11, see a different PPA -> https://www.linuxuprising.com/2019/06/new-oracle-java-11-installer-for-ubuntu.html

That same PPA also has Oracle Java 13 -> https://www.linuxuprising.com/2019/09/install-oracle-java-13-on-ubuntu-linux.html

and Oracle Java 14 -> https://www.linuxuprising.com/2020/03/how-to-install-oracle-java-14-jdk14-on.html

Old description:

Oracle Java (JDK) Installer (automatically downloads and installs Oracle JDK8). There are no actual Java files in this PPA.

Important -> Why Oracle Java 7 And 6 Installers No Longer Work: http://www.webupd8.org/2017/06/why-oracle-java-7-and-6-installers-no.html

Update: Oracle Java 9 has reached end of life: http://www.oracle.com/technetwork/java/javase/downloads/jdk9-downloads-3048520.html

The PPA supports Ubuntu 18.10, 18.04, 16.04, 14.04 and 12.04.

More info (and Ubuntu installation instructions):
- http://www.webupd8.org/2012/09/install-oracle-java-8-in-ubuntu-via-ppa.html

Debian installation instructions:
- Oracle Java 8: http://www.webupd8.org/2014/03/how-to-install-oracle-java-8-in-debian.html
- More info: https://lauchpad.net/~webupd8team/archive/ubuntu/java
Press [ENTER] to continue or ctrl-c to cancel adding it

gpg: keyring '/tmp/tmpdmza3h06/secring.gpg' created
gpg: keyring '/tmp/tmpdmza3h06/pubring.gpg' created
gpg: requesting key EEA14086 from hkp server keyserver.ubuntu.com
gpg: /tmp/tmpdmza3h06/trustdb.gpg: trustdb created
gpg: key EEA14086: public key "Launchpad VLC" imported
gpg: no ultimately trusted keys found
gpg: Total number processed: 1
gpg:           imported: 1  (RSA: 1)
OK
root@ip-172-31-18-57:~#
```

2) sudo apt-get update(refreshing the environment with update cmd)

```
OK
root@ip-172-31-18-57:~# sudo apt-get update
Hit:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial InRelease
Get:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates InRelease [109 kB]
Get:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-backports InRelease [107 kB]
Get:4 http://security.ubuntu.com/ubuntu xenial-security InRelease [100 kB]
Get:5 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial/universe amd64 Packages [7,532 kB]
Get:6 http://ppa.launchpad.net/webupd8team/java/ubuntu xenial/main amd64 Packages [17,6 kB]
Get:7 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial/universe Translation-en [4,354 kB]
Get:8 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial/multiverse amd64 Packages [144 kB]
Get:9 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial/multiverse Translation-en [106 kB]
Get:10 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/main amd64 Packages [2,049 kB]
Get:11 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/main Translation-en [482 kB]
Get:12 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/universe amd64 Packages [1,219 kB]
Get:13 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/universe Translation-en [358 kB]
Get:14 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/multiverse amd64 Packages [22,6 kB]
Get:15 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates/multiverse Translation-en [8,476 B]
Get:16 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-backports/main amd64 Packages [9,812 B]
Get:17 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-backports/main Translation-en [4,456 B]
Get:18 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-backports/universe amd64 Packages [11,3 kB]
Get:19 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-backports/universe Translation-en [4,476 B]
Get:20 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-security/main amd64 Packages [1,664 kB]
Get:21 http://security.ubuntu.com/ubuntu xenial-security/main Translation-en [380 kB]
Get:22 http://security.ubuntu.com/ubuntu xenial-security/universe amd64 Packages [785 kB]
Get:23 http://security.ubuntu.com/ubuntu xenial-security/universe Translation-en [225 kB]
Get:24 http://security.ubuntu.com/ubuntu xenial-security/multiverse amd64 Packages [7,864 B]
Get:25 http://security.ubuntu.com/ubuntu xenial-security/multiverse Translation-en [2,672 B]
Fetched 19.7 MB in 3s (4,962 kB/s)
Reading package lists... Done
root@ip-172-31-18-57:~#
```

3) sudo apt install openjdk-8-jdk

4) java -version

```

root@ip-172-31-18-57:~#
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/jre/bin/policytool to provide /usr/bin/policytool (policytool) in auto mode
Setting up openjdk-8-jdk-headless:amd64 (8u292-b10-Ubuntu16.04.1) ...
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/idilj to provide /usr/bin/idilj (idlj) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jdeps to provide /usr/bin/jdeps (jdeps) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/wsimport to provide /usr/bin/wimport (wimport) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/rmic to provide /usr/bin/rmic (rmic) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jinfo to provide /usr/bin/jinfo (jinfo) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jadecbugd to provide /usr/bin/jadecbugd (jadecbugd) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/native2ascii to provide /usr/bin/native2ascii (native2ascii) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/nls_charsetconv to provide /usr/bin/nls_charsetconv (nls_charsetconv) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/javac to provide /usr/bin/javac (javac) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/javah to provide /usr/bin/javah (javah) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/hsd2 to provide /usr/bin/hsd2 (hsd2) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/clhsdb to provide /usr/bin/clhsdb (clhsdb) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jps to provide /usr/bin/jps (jps) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jstack to provide /usr/bin/jstack (jstack) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jrunscript to provide /usr/bin/jrunscript (jrunscript) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/javadoc to provide /usr/bin/javadoc (javadoc) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/javadoc to provide /usr/bin/javadoc (javadoc) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jar to provide /usr/bin/jar (jar) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jar to provide /usr/bin/excheck (excheck) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jar to provide /usr/bin/excheck (excheck) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jar to provide /usr/bin/jar (jar) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jar to provide /usr/bin/jar (jar) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jar to provide /usr/bin/jar (jar) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jmap to provide /usr/bin/jmap (jmap) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jstatd to provide /usr/bin/jstatd (jstatd) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jhat to provide /usr/bin/jhat (jhat) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jdb to provide /usr/bin/jdb (jdb) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/serialver to provide /usr/bin/serialver (serialver) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jfr to provide /usr/bin/jfr (jfr) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/wsgen to provide /usr/bin/wsgen (wsgen) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jcmd to provide /usr/bin/jcmd (jcmd) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jarsigner to provide /usr/bin/jarsigner (jarsigner) in auto mode
Setting up openjdk-8-jdk:amd64 (8u292-b10-Ubuntu16.04.1) ...
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/appletviewer to provide /usr/bin/appletviewer (appletviewer) in auto mode
update-alternatives: using /usr/lib/jvm/java-8-openjdk-amd64/bin/jconsole to provide /usr/bin/jconsole (jconsole) in auto mode
Processing triggers for ureadahead (0.100.0-19.1) ...
Processing triggers for systemd (229-4ubuntu21.31) ...
Processing triggers for ca-certificates (20210119-16.04.1) ...
Updating certificates in /etc/ssl/certs...
0 added, 0 removed; done.
Running hooks in /etc/ca-certificates/update.d...

done.
done.
root@ip-172-31-18-57:~# java -version
openjdk version "1.8.0_292"
OpenJDK Runtime Environment (build 1.8.0_292-8u292-b10-Ubuntu16.04.1-b10)
OpenJDK 64-Bit Server VM (build 25.292-b10, mixed mode)
root@ip-172-31-18-57:~#

```

Jenkins Installation:

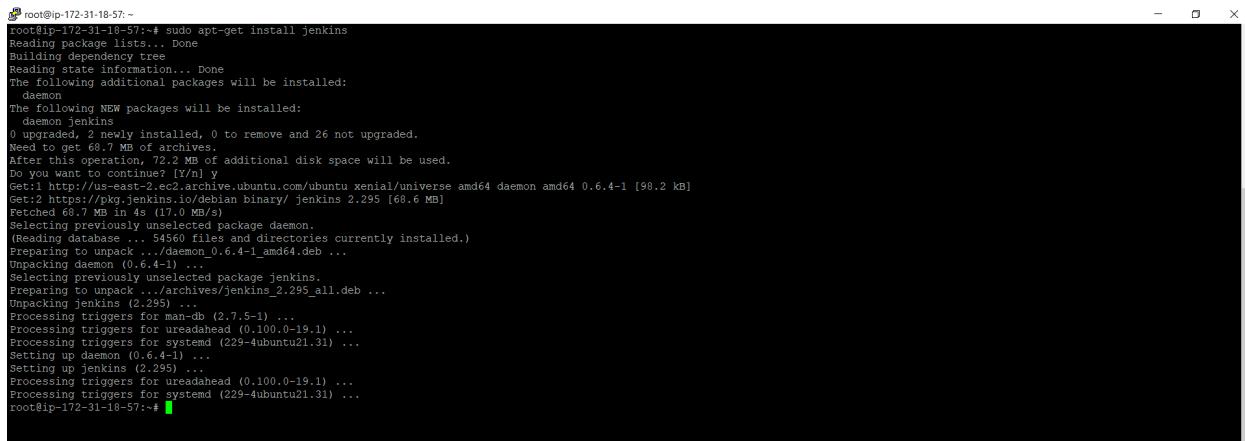
- 1) wget -q -O - https://pkg.jenkins.io/debian/jenkins.io.key | sudo apt-key add -
- 2) sudo sh -c 'echo deb https://pkg.jenkins.io/debian binary/ > /etc/apt/sources.list.d/jenkins.list'
- 3) sudo apt-get update

```

root@ip-172-31-18-57:~#
root@ip-172-31-18-57:~# wget -q -O - https://pkg.jenkins.io/debian/jenkins.io.key | sudo apt-key add -
OK
root@ip-172-31-18-57:~# sudo sh -c 'echo deb https://pkg.jenkins.io/debian binary/ > /etc/apt/sources.list.d/jenkins.list'
root@ip-172-31-18-57:~# sudo apt-get update
Hit:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial InRelease
Get:2 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-updates InRelease [109 kB]
Get:3 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial-backports InRelease [107 kB]
Hit:4 http://security.ubuntu.com/ubuntu xenial-security InRelease
Ign:5 https://pkg.jenkins.io/debian binary/ InRelease
Hit:6 http://ppa.launchpad.net/webupd8team/java/ubuntu xenial InRelease
Get:7 https://pkg.jenkins.io/debian binary/ Release [2,044 B]
Get:8 https://pkg.jenkins.io/debian binary/ Release.gpg [833 B]
Get:9 https://pkg.jenkins.io/debian binary/ Packages [36.5 kB]
Fetched 255 kB in 0s (509 kB/s)
Reading package lists... Done
root@ip-172-31-18-57:~#

```

4) sudo apt-get install jenkins



```
root@ip-172-31-18-57:~# 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 26 not upgraded.
Need to get 68.7 MB of archives.
After this operation, 72.2 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us-east-2.ec2.archive.ubuntu.com/ubuntu xenial/universe amd64 daemon amd64 0.6.4-1 [98.2 kB]
Get:2 https://pkgs.jenkins.io/debian binary/ Jenkins 2.295 [68.6 kB]
Fetched 166 MB in 4s (11.4 MB/s)
Selecting previously unselected package daemon.
(Reading database ... 54560 files and directories currently installed.)
Preparing to unpack .../daemon_0.6.4-1_amd64.deb ...
Unpacking daemon (0.6.4-1) ...
Selecting previously unselected package jenkins.
Preparing to unpack .../archives/jenkins_2.295_all.deb ...
Unpacking jenkins (2.295) ...
Processing triggers for man-db (2.7.5-1) ...
Processing triggers for ureadahead (0.100.0-19.1) ...
Processing triggers for systemd (229-4ubuntu21.31) ...
Setting up daemon (0.6.4-1) ...
Setting up jenkins (2.295) ...
Processing triggers for ureadahead (0.100.0-19.1) ...
Processing triggers for systemd (229-4ubuntu21.31) ...
root@ip-172-31-18-57:~#
```

Jenkins is a demon process

Default port no for jenkins: 8080

Default jenkins file path: /etc/default

Jenkins: 8080 (file)

5) Verify:-

(i) ps -ef | grep jenkins

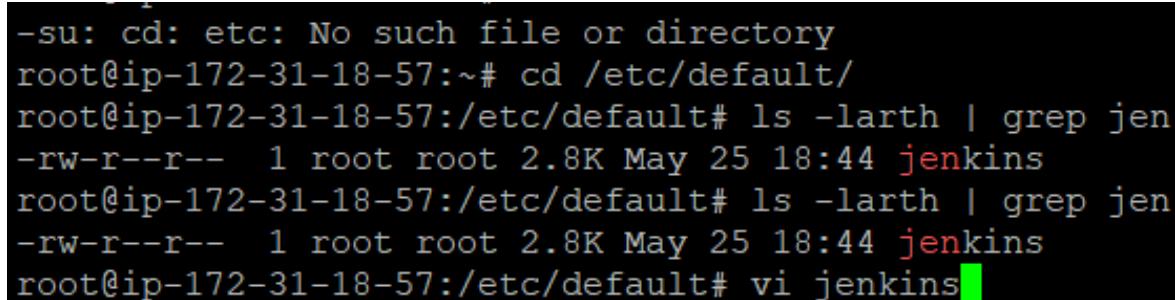


```
root@ip-172-31-18-57:~# ps -ef | grep jenkins
root 9319 1 0 18:36 ? 00:00:00 /lib/systemd/systemd --user
jenkins 9321 9319 0 18:36 ? 00:00:00 (sd-pam)
jenkins 9333 1 0 18:36 ? 00:00:00 /usr/bin/daemon --name=jenkins --inherit --env=JENKINS_HOME=/var/lib/jenkins --output=/var/log/jenkins/jenkins.log --pidfile=/var/run/jenkins/jenkins.pid -- /usr/bin/java -Djava.awt.headless=true -jar /usr/share/jenkins/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080
jenkins 9334 9333 19 18:36 ? 00:00:33 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/jenkins/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080
root 9458 2013 0 18:39 pts/0 00:00:00 grep --color=auto jenkins
root@ip-172-31-18-57:~#
```

(ii) Jenkins will be launched as a daemon up on start -

Check under /etc/init.d/jenkins

ls -larth | grep jen



```
-su: cd: etc: No such file or directory
root@ip-172-31-18-57:~# cd /etc/default/
root@ip-172-31-18-57:/etc/default# ls -larth | grep jen
-rw-r--r-- 1 root root 2.8K May 25 18:44 jenkins
root@ip-172-31-18-57:/etc/default# ls -larth | grep jen
-rw-r--r-- 1 root root 2.8K May 25 18:44 jenkins
root@ip-172-31-18-57:/etc/default# vi jenkins
```

```
root@ip-172-31-18-57:~# cd /etc/default/
root@ip-172-31-18-57:/etc/default# ls -larth | grep jen
-rw-r--r-- 1 root root 2.8K May 25 18:44 jenkins
root@ip-172-31-18-57:/etc/default# ls -larth | grep jen
-rw-r--r-- 1 root root 2.8K May 25 18:44 jenkins
root@ip-172-31-18-57:/etc/default# vi jenkins
root@ip-172-31-18-57:/etc/default# vi jenkins
root@ip-172-31-18-57:/etc/default# cd /etc/init.d/
root@ip-172-31-18-57:/etc/init.d# ls -larth
total 320K
```

```
root@ip-172-31-18-57:/etc/init.d#
-rwxr-xr-x 1 root root 3.1K Jan 19 2016 urandom
-rwxr-xr-x 1 root root 1.9K Jan 19 2016 umountroot
-rwxr-xr-x 1 root root 2.2K Jan 19 2016 umountnfs.sh
-rwxr-xr-x 1 root root 2.7K Jan 19 2016 umountfs
-rw-r--r-- 1 root root 1.1K Jan 19 2016 skeleton
-rwxr-xr-x 1 root root 661 Jan 19 2016 reboot
-rwxr-xr-x 1 root root 820 Jan 19 2016 rc.local
-rwxr-xr-x 1 root root 2.4K Jan 19 2016 mountnfs.sh
-rwxr-xr-x 1 root root 780 Jan 19 2016 mountnfs-bootclean.sh
-rwxr-xr-x 1 root root 6.6K Jan 19 2016 mountdevsubfs.sh
-rwxr-xr-x 1 root root 1.5K Jan 19 2016 mountdevsubfs.sh
-rwxr-xr-x 1 root root 2.3K Jan 19 2016 mountall.sh
-rwxr-xr-x 1 root root 1.3K Jan 19 2016 killprocs
-rwxr-xr-x 1 root root 1.4K Jan 19 2016 hostname.sh
-rwxr-xr-x 1 root root 1.4K Jan 19 2016 halt
-rwxr-xr-x 1 root root 9.2K Jan 19 2016 checkroot.sh
-rwxr-xr-x 1 root root 1.1K Jan 19 2016 checkroot-bootclean.sh
-rwxr-xr-x 1 root root 3.8K Jan 19 2016 checkfs.sh
-rwxr-xr-x 1 root root 1.3K Jan 19 2016 bootmisc.sh
-rwxr-xr-x 1 root root 2.8K Feb 3 2016 rsyslog
-rwxr-xr-x 1 root root 2.2K Feb 9 2016 acpid
-rwxr-xr-x 1 root root 1.8K Mar 19 2016 hwclock.sh
-rwxr-xr-x 1 root root 1.8K Mar 4 2016 keyboard-setup
-rwxr-xr-x 1 root root 1.4K Apr 4 2016 console-setup
-rwxr-xr-x 1 root root 3.0K Apr 5 2016 cron
-rwxr-xr-x 1 root root 2.4K Apr 11 2016 iropbalance
-rwxr-xr-x 1 root root 6.0K Apr 12 2016 udev
-rwxr-xr-x 1 root root 2.7K Jan 20 2017 x11-common
-rwxr-xr-x 1 root root 6.1K Mar 3 2017 apparmor
-rwxr-xr-x 1 root root 2.4K Oct 9 2017 mdadm
-rwxr-xr-x 1 root root 2.4K Nov 9 2017 lxcfs
-rwxr-xr-x 1 root root 1.7K Nov 20 2017 hibagent
-rwxr-xr-x 1 root root 2.5K Dec 7 2017 lxd
-rwxr-xr-x 1 root root 1.9K Mar 22 2018 open-vm-tools
-rwxr-xr-x 1 root root 2.0K Aug 2 2018 open-iscsi
-rwxr-xr-x 1 root root 2.4K Aug 2 2018 open-iscsi
-rwxr-xr-x 1 root root 2.8K Oct 7 2019 dbus
-rwxr-xr-x 1 root root 1.3K Jan 27 2020 uidd
-rwxr-xr-x 1 root root 4.3K Feb 14 2020 rsync
-rwxr-xr-x 1 root root 4.0K May 13 2020 ssh
-rwxr-xr-x 1 root root 1.1K Aug 24 2020 grub-common
-rwxr-xr-x 1 root root 2.9K Jan 27 13:31 apport
-rwxr-xr-x 1 root root 1.4K Feb 24 01:21 unattended-upgrades
-rwxr-xr-x 1 root root 8.0K May 25 18:44 jenkins
drwxr-xr-x 2 root root 4.0K May 28 18:36 .
drwxr-xr-x 97 root root 4.0K May 28 18:36 ..
-rw-r--r-- 1 root root 1.1K May 28 18:36 .depend.stop
-rw-r--r-- 1 root root 1.1K May 28 18:36 .depend.start
-rw-r--r-- 1 root root 1.3K May 28 18:36 .depend.boot
root@ip-172-31-18-57:/etc/init.d#
```

```
root@ip-172-31-18-57:/etc/init.d#
if [ "$JENKINS_ENABLE_ACCESS_LOG" = "yes" ]; then
    JENKINS_ARGS="$JENKINS_ARGS --accessLoggerClassName=winstone.accesslog.SimpleAccessLogger --simpleAccessLogger.format=combined --simpleAccessLogger.file=/var/log/$NAME/access_log"
fi

SU=/bin/su

# Exit if the package is not installed
if ! -x "$DAEMON"; then
    echo "daemon package not installed" >&2
    exit 1
fi

# Exit if not supposed to run standalone
if [ "$RUN_STANDALONE" = "false" ]; then
    echo "Not configured to run standalone" >&2
    exit 1
fi

# Make sure there exists a java executable, it may not be always the case
if [ -z "$JAVA" ]; then
    echo "ERROR: No Java executable found in current PATH: $PATH" >&2
    echo "If you actually have java installed on the system make sure the executable is in the aforementioned path and that 'type -p java' returns the java executable path" >&2
    exit 1
fi

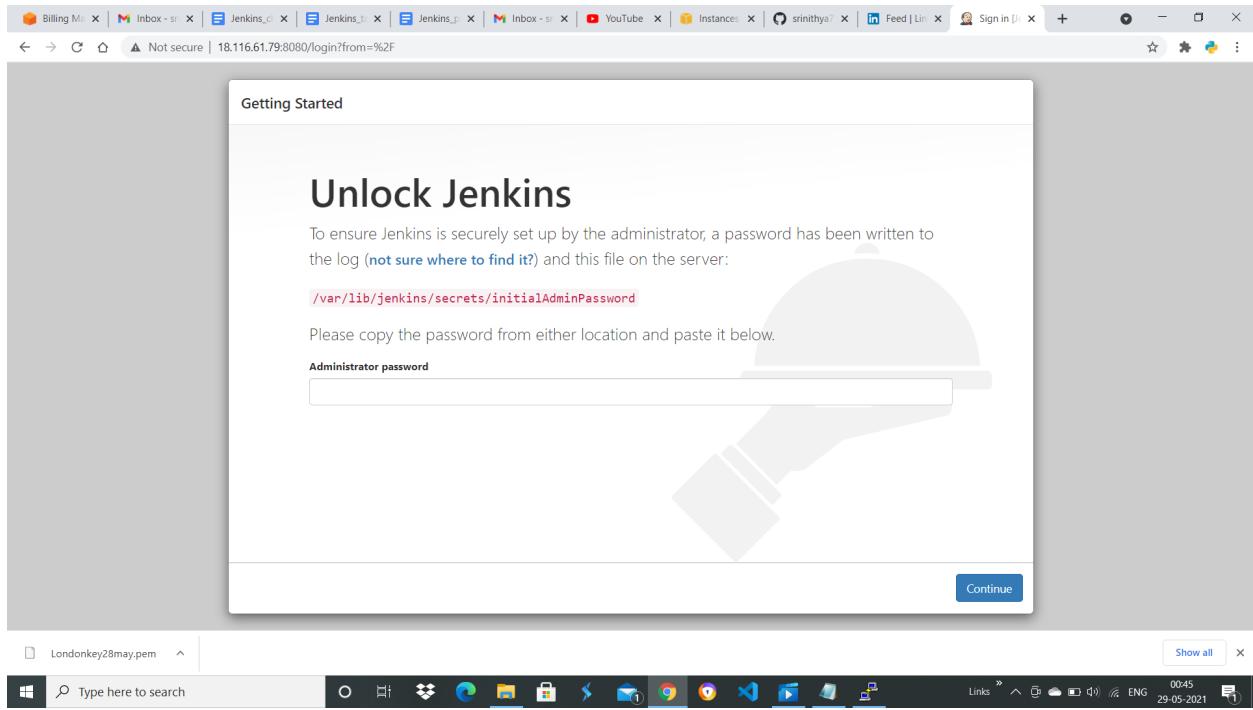
# Which Java versions can be used to run Jenkins
JAVA_ALLOWED_VERSIONS=( "1.8" "1.1" )
# Work out the JAVA version we are working with
JAVA_VERSION=${JAVA:-version} >&1 | sed -n 's/.*/ version "\(\([0-9]\{2,\}\)\|([0-9]\{1\})\)\..*\..*/\1/p;'"

if [[ ${JAVA_ALLOWED_VERSIONS[*]} =~ ${JAVA_VERSION} ]]; then
    echo "correct java version found" >&2
else
    echo "Found an incorrect Java version" >&2
    echo "Java version found:" >&2
    echo ${JAVA:-version} >&2
    echo "Aborting" >&2
    exit 1
fi

# load environments
if [ -r /etc/default/locale ]; then
    . /etc/default/locale
    export LANG LANGUAGE
elif [ -r /etc/environment ]; then
    . /etc/environment
    export LANG LANGUAGE
fi
```

(iii) /etc/default/jenkins will capture configuration parameters for the launch like e.g JENKINS_HOME.

6) launch the Jenkins URLs in the browser:-
<ubuntu_ip_address>:8080

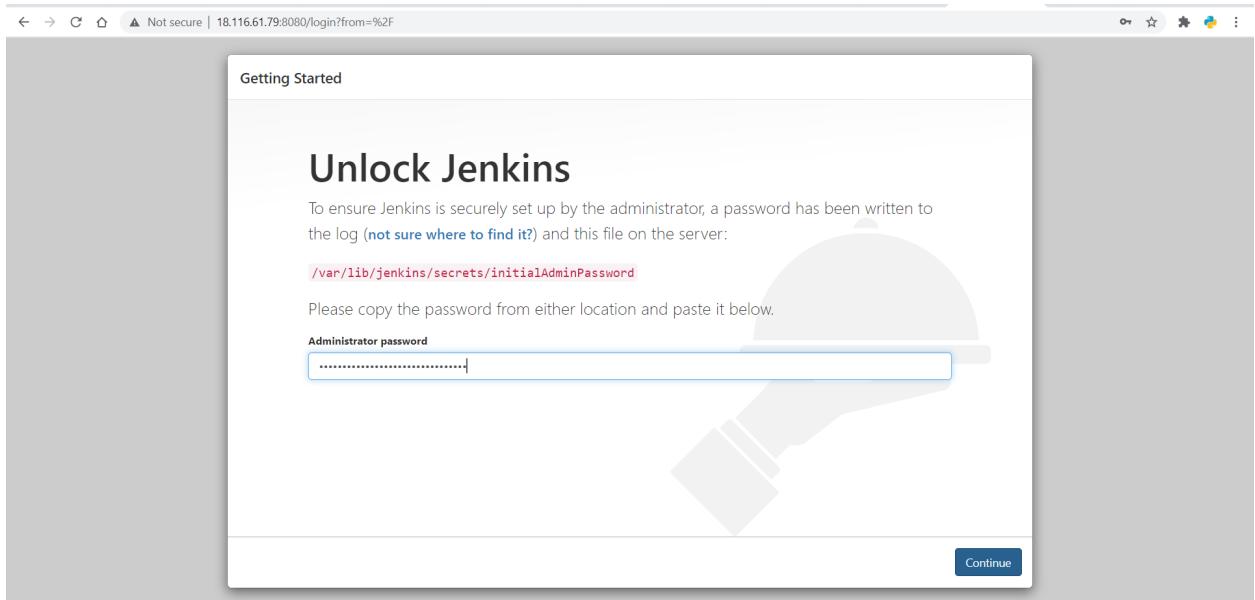


7) Get the Password from the path : /var/lib/jenkins/secrets/initialAdminPassword

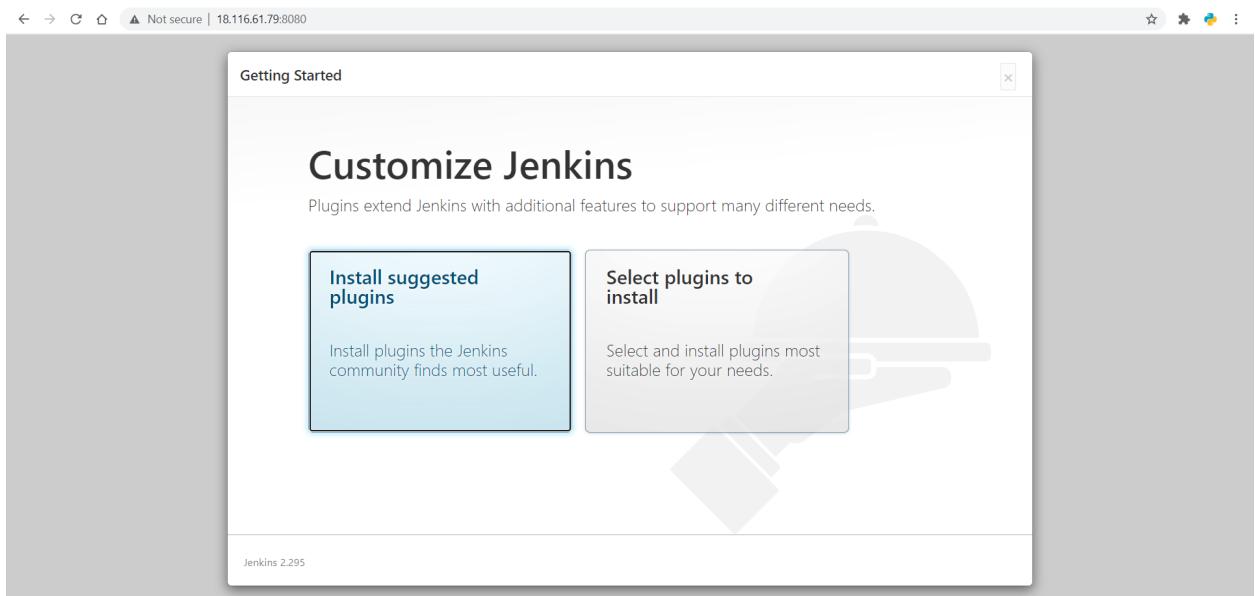
```
/etc/default# cat /var/lib/jenkins/secrets/initialAdminPassword
```

Paste the above path in ubuntu and password will generate
6635b94d40444a1cbf726476501ada19

```
root@ip-172-31-18-57: /etc/init.d#
root@ip-172-31-18-57:/etc/init.d# cat /var/lib/jenkins/secrets/initialAdminPassword
6635b94d40444a1cbf726476501ada19
root@ip-172-31-18-57:/etc/init.d#
root@ip-172-31-18-57:/etc/init.d#
```



Click on Install suggested plugins



Create the new account details and save

The screenshot shows a browser window titled "Getting Started" with the sub-page "Instance Configuration". The URL is <http://18.116.61.79:8080/>. The page displays the Jenkins URL field with the value "http://18.116.61.79:8080/". A note below states: "The Jenkins URL is used to provide the root URL for absolute links to various Jenkins resources. That means this value is required for proper operation of many Jenkins features including email notifications, PR status updates, and the BUILD_URL environment variable provided to build steps." Another note says: "The proposed default value shown is **not saved yet** and is generated from the current request, if possible. The best practice is to set this value to the URL that users are expected to use. This will avoid confusion when sharing or viewing links." At the bottom, it says "Jenkins 2.295" and has "Not now" and "Save and Finish" buttons.

The screenshot shows the Jenkins dashboard at <http://18.116.61.79:8080/>. The top navigation bar includes links for Billing, Inbox, Jenkins, Jenkins, Jenkins, Jenkins, YouTube, Instances, srinithya, Feed, and Dashboard. The dashboard itself has a sidebar with "New Item", "People", "Build History", "Manage Jenkins", "My Views", and "Lockable Resources". It also displays sections for "Build Queue" (No builds in the queue) and "Build Executor Status" (1 Idle, 2 Idle). The main content area features a "Welcome to Jenkins!" message, a "Start building your software project" button, and a "Set up a distributed build" section with "Create a job", "Set up an agent", "Configure a cloud", and a link to "Learn more about distributed builds". The bottom of the screen shows the Windows taskbar with various pinned icons.

How to create a job and run a job

Welcome to Jenkins!

This page is where your Jenkins jobs will be displayed. To get started, you can set up distributed builds or start building a software project.

Start building your software project

Create a job →

Set up a distributed build

Set up an agent →

Configure a cloud →

Learn more about distributed builds →

Build Queue

No builds in the queue.

Build Executor Status

1 Idle

2 Idle

18.116.61.79:8080/view/all/newJob

Londonkey28may.pem Show all 29-05-2021

Click on freestyle

New Item [Jenkins] +

Not secure | 18.116.61.79:8080/view/all/newJob

Jenkins

Dashboard > All >

Enter an item name

28mayjob x Required field

Freestyle project This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

Pipeline Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

Multi-configuration project Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

Folder Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.

GitHub Organization GitHub organization (or user account) for all repositories matching some defined markers.

OK

Type here to search

Links 01:20 29-05-2021

28mayjob Config [Jenkins] Not secure | 18.116.61.79:8080/job/28mayjob/configure

Dashboard > 28mayjob >

General Source Code Management Build Triggers Build Environment Build Post-build Actions

GitHub hook trigger for GITScm polling
 Poll SCM

Build Environment

Delete workspace before build starts
 Use secret text(s) or file(s)
 Abort the build if it's stuck
 Add timestamps to the Console Output
 Inspect build log for published Gradle build scans
 With Ant

Build

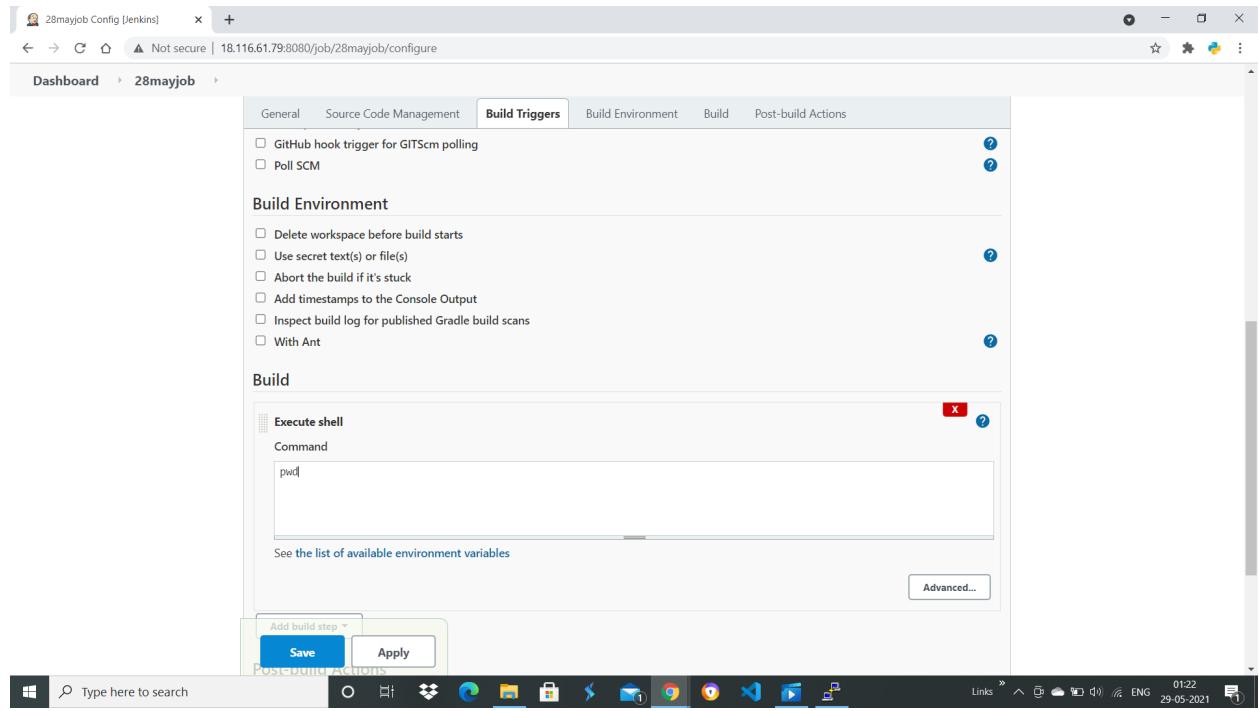
Execute shell

Command: `pwd`

See the list of available environment variables

Add build step ▾ Save Apply

POST-BUILD ACTIONS



28mayjob [Jenkins] Not secure | 18.116.61.79:8080/job/28mayjob/

Jenkins

Dashboard > 28mayjob >

[Back to Dashboard](#) [Status](#) [Changes](#) [Workspace](#) [Build Now](#) [Configure](#) [Delete Project](#) [Rename](#)

Project 28mayjob

[add description](#) [Disable Project](#)

[Workspace](#) [Recent Changes](#)

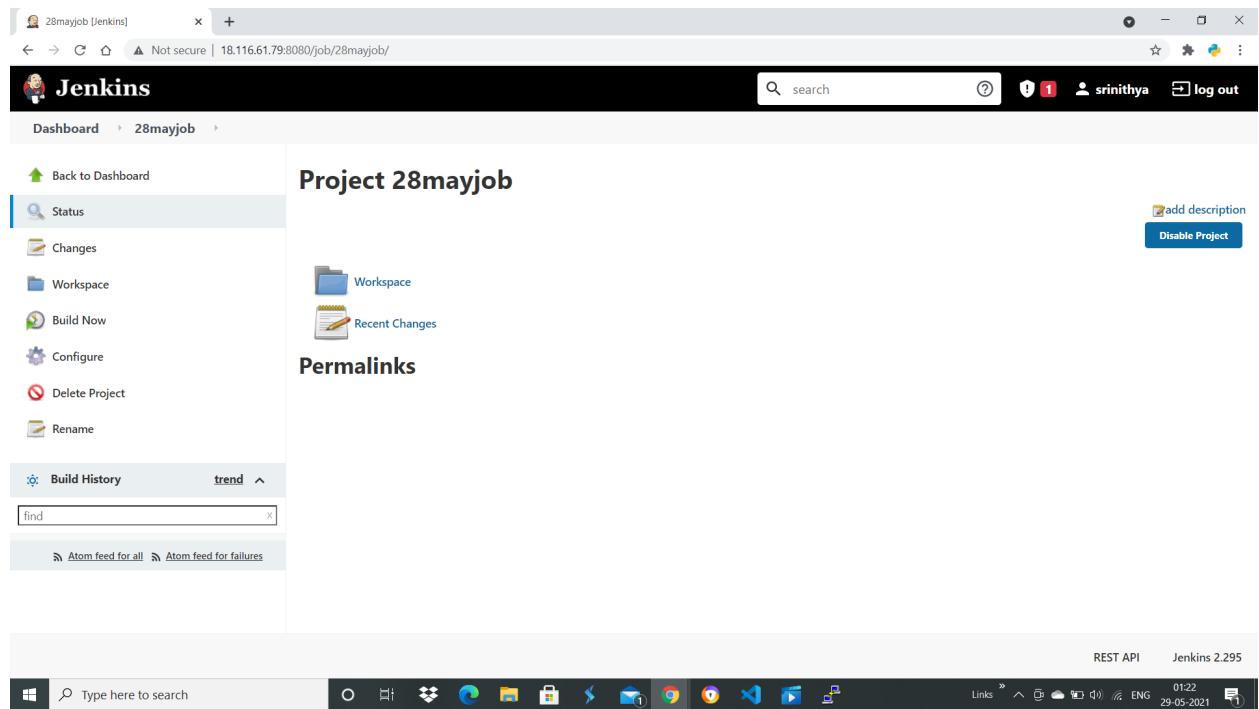
Permalinks

[Build History](#) trend ▾

find

Atom feed for all Atom feed for failures

REST API Jenkins 2.295



How to check the job status (click on back to dashboard)

The screenshot shows the Jenkins interface for the project "28mayjob". On the left, there's a sidebar with options like "Back to Dashboard", "Status", "Changes", "Workspace", "Build Now", "Configure", "Delete Project", and "Rename". Below this is a "Build History" section with a search bar and two feed links: "Atom feed for all" and "Atom feed for failures". The main content area is titled "Project 28mayjob" and contains links for "Workspace" and "Recent Changes". At the bottom right, there are buttons for "add description" and "Disable Project". The browser address bar shows "18.116.61.79:8080/job/28mayjob/" and the status bar indicates "REST API Jenkins 2.295".

The screenshot shows the Jenkins dashboard. On the left, the sidebar includes "New Item", "People", "Build History", "Manage Jenkins", "My Views", "Lockable Resources", and "New View". The main content area features a "Build Queue" section stating "No builds in the queue." and a "Build Executor Status" section showing "1 Idle" and "2 Idle". The top navigation bar has a user icon, search bar, and "srinithya log out" link. The status bar at the bottom right shows "REST API Jenkins 2.295".

Dashboard [Jenkins] Not secure | 18.116.61.79:8080

Jenkins

Dashboard

New Item People Build History Manage Jenkins My Views Lockable Resources New View

Build Queue No builds in the queue.

Build Executor Status 1 Idle 2 Idle

All + S W Name Last Success Last Failure Last Duration

S	W	Name	Last Success	Last Failure	Last Duration
✓	⌚	28mayjob	2.8 sec - #1	N/A	0.13 sec

Icon: S M L Legend Atom feed for all Atom feed for failures Atom feed for just latest builds

REST API Jenkins 2.295

Dashboard [Jenkins] Not secure | 18.116.61.79:8080

Jenkins

Dashboard

New Item People Build History Manage Jenkins My Views Lockable Resources New View

Build Queue No builds in the queue.

Build Executor Status 1 Idle 2 Idle

All + S W Name Last Success Last Failure Last Duration

S	W	Name	Last Success	Last Failure	Last Duration
✓	⌚	28mayjob	2.8 sec - #1	N/A	0.13 sec

Icon: S M L Changes Console Output Edit Build Information Delete build '#1'

Atom feed for all Atom feed for failures Atom feed for just latest builds

REST API Jenkins 2.295

18.116.61.79:8080/job/28mayjob/lastSuccessfulBuild/console

Type here to search Links 01:25 ENG 29-05-2021

The screenshot shows the Jenkins interface. On the left, a sidebar lists project actions: Back to Project, Status, Changes, Console Output (selected), View as plain text, Edit Build Information, and Delete build '#1'. The main content area is titled 'Console Output' with a green checkmark icon. It displays the build log:

```
Started by user srinithya  
Running as SYSTEM  
Building in workspace /var/lib/jenkins/workspace/28mayjob  
[28mayjob] $ /bin/sh -xe /tmp/jenkins206710326524502183.sh  
+ pwd  
/var/lib/jenkins/workspace/28mayjob  
Finished: SUCCESS
```

At the bottom right of the main window, it says 'REST API Jenkins 2.295'. The taskbar at the bottom shows various icons for system functions.

Failure of the job process

The screenshot shows the Jenkins dashboard. The sidebar includes: New Item, People, Build History, Manage Jenkins, My Views, Lockable Resources, and New View. The main area displays a table of projects:

All	W	Name	Last Success	Last Failure	Last Duration
		28mayjob	2 min 35 sec - #1	N/A	0.13 sec

For the '28mayjob' project, a context menu is open over the row, showing options: Changes, Workspace, Build Now, Configure (highlighted in blue), Delete Project, and Rename. Below the table, there are sections for 'Build Queue' (No builds in the queue) and 'Build Executor Status' (1 idle, 2 idle). At the bottom, the URL is 18.116.61.79:8080/job/28mayjob/configure, and the status bar shows 'REST API Jenkins 2.295'.

The screenshot shows the Jenkins configuration interface for the '28mayjob' project. The top navigation bar includes links for 'General', 'Source Code Management', 'Build Triggers', 'Build Environment', 'Build' (which is selected), and 'Post-build Actions'. Under the 'Build' tab, there is a section for 'Execute shell' with a command field containing 'pwd'. Below this, there is a link to 'See the list of available environment variables' and an 'Advanced...' button. A 'Post-build Actions' section follows, with a 'Save' and 'Apply' button at the bottom.

REST API Jenkins 2.295

The screenshot shows the Jenkins project page for '28mayjob'. The top navigation bar includes links for 'Dashboard' and '28mayjob'. The main content area features a title 'Project 28mayjob'. On the left, a sidebar provides links for 'Status', 'Changes', 'Workspace', 'Build Now' (which is currently selected), and 'Configure'. It also includes options for 'Delete Project' and 'Rename'. The right side displays a 'Permalinks' section with a bulleted list of recent builds and a 'Build History' table. The table has columns for 'find', 'trend', and '#'. One row is visible, showing 'May 28, 2021 7:55 PM'. At the bottom, there are links for 'Atom feed for all' and 'Atom feed for failures'. The bottom navigation bar includes links for 'REST API' and 'Jenkins 2.295'.

18.116.61.79:8080/job/28mayjob/build?delay=0sec

Dashboard [Jenkins] Not secure | 18.116.61.79:8080

Jenkins

Dashboard >

New Item People Build History Manage Jenkins My Views Lockable Resources New View

Build Queue No builds in the queue.

Build Executor Status 1 Idle 2 Idle

All S W Name ↓ Last Success Last Failure Last Duration

S	W	Name ↓	Last Success	Last Failure	Last Duration
✖	Cloud	28mayjob	4 min 16 sec - #1	4.2 sec - #2	0.13 sec

Icon: S M L Legend Atom feed for all Atom feed for failures Atom feed for just latest builds

REST API Jenkins 2.295

The screenshot shows the Jenkins dashboard with the 'Build History' section expanded. It lists a single build (#1) which failed. The failure message is '4.2 sec - #2'. A context menu is open over this build entry, with the 'Console Output' option highlighted.

Dashboard [Jenkins] Not secure | 18.116.61.79:8080

Jenkins

Dashboard >

New Item People Build History Manage Jenkins My Views Lockable Resources New View

Build Queue No builds in the queue.

Build Executor Status 1 Idle 2 Idle

All S W Name ↓ Last Success Last Failure Last Duration

S	W	Name ↓	Last Success	Last Failure	Last Duration
✖	Cloud	28mayjob	4 min 16 sec - #1	4.2 sec - #2	0.13 sec

Icon: S M L Legend Atom feed for all Atom feed for failures Atom feed for just latest builds

Changes Console Output Edit Build Information Delete build #2

REST API Jenkins 2.295

The screenshot shows the Jenkins dashboard with the 'Build History' section expanded. It lists a single build (#1) which failed. A context menu is open over this build entry, with the 'Console Output' option highlighted.

The screenshot shows a Jenkins console output page. The URL is 18.116.61.79:8080/job/28mayjob/lastFailedBuild/console. The page title is "Console Output" with a red "X" icon. It shows the following log entries:

```
Started by user srinithya
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/28mayjob
[28mayjob] $ /bin/sh -xe /tmp/jenkins5102598625141225027.sh
+ pwd
/tmp/jenkins5102598625141225027.sh: 2: /tmp/jenkins5102598625141225027.sh: pw: not found
Build step 'Execute shell' marked build as failure
Finished: FAILURE
```

How to Ordering a JOB

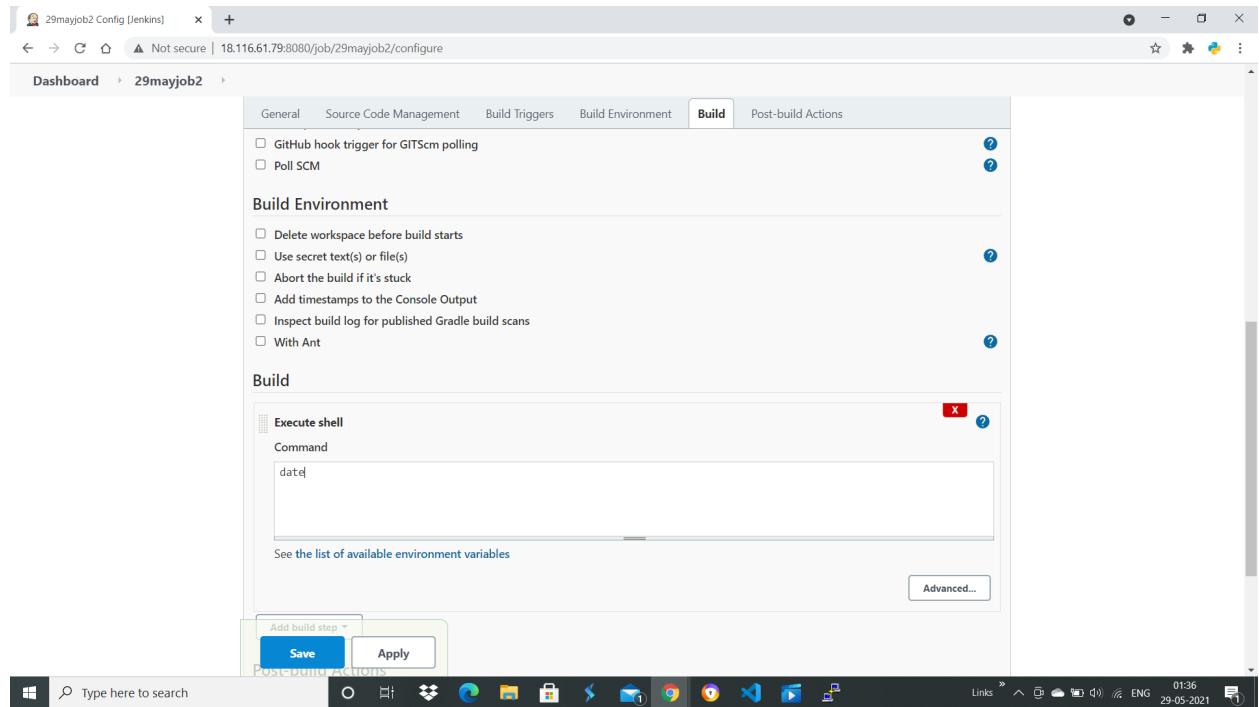
Job1

The screenshot shows the configuration page for the "may29job1" job. The URL is 18.116.61.79:8080/job/may29job1/configure. The "Build" tab is selected. The configuration includes:

- General: GitHub hook trigger for GITScm polling, Poll SCM
- Build Environment:
 - Delete workspace before build starts
 - Use secret text(s) or file(s)
 - Abort the build if it's stuck
 - Add timestamps to the Console Output
 - Inspect build log for published Gradle build scans
 - With Ant
- Build:
 - Execute shell:
 - Command: `pwd`

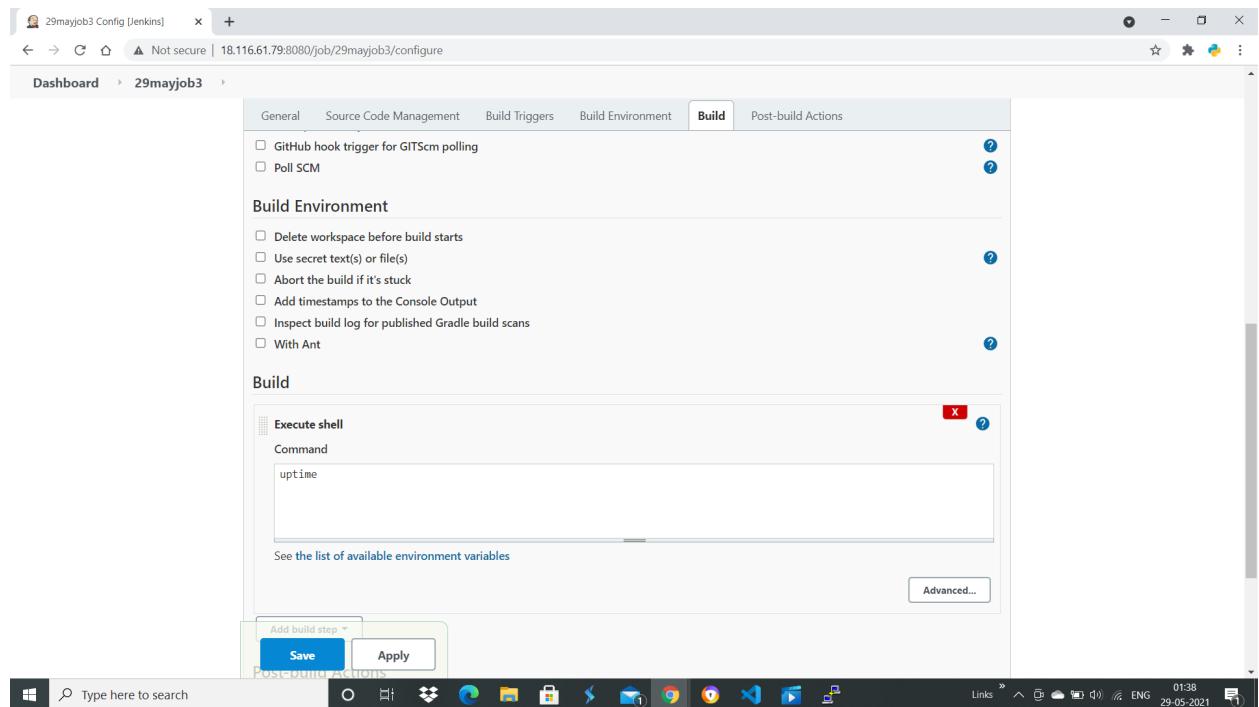
At the bottom, there are "Save" and "Apply" buttons.

Job2



The screenshot shows the Jenkins configuration page for '29mayjob2'. The 'Build' tab is selected. Under 'Build Environment', there are several checkboxes for workspace management and build termination. In the 'Build' section, a single 'Execute shell' step is defined with the command 'date'. Below the command, a note says 'See the list of available environment variables'. At the bottom of the build section, there are 'Save' and 'Apply' buttons.

Job3



The screenshot shows the Jenkins configuration page for '29mayjob3'. The 'Build' tab is selected. Under 'Build Environment', there are several checkboxes for workspace management and build termination. In the 'Build' section, a single 'Execute shell' step is defined with the command 'uptime'. Below the command, a note says 'See the list of available environment variables'. At the bottom of the build section, there are 'Save' and 'Apply' buttons.

Dashboard [Jenkins] Not secure | 18.116.61.79:8080

Jenkins

search ? 1 srinithya log out

New Item People Build History Manage Jenkins My Views Lockable Resources New View

Build Queue No builds in the queue.

Build Executor Status 1 Idle 2 Idle

All	W	Name ↓	Last Success	Last Failure	Last Duration
(X)	Cloud	28mayjob	13 min - #1	9 min 3 sec - #2	0.13 sec
(...)	Octagon	29mayjob2	N/A	N/A	N/A
(...)	Octagon		N/A	N/A	N/A
(...)	Octagon		N/A	N/A	N/A

Icon: S M L add description

Changes Workspace Build Now Configure Delete Project Rename

Legend Atom feed for all Atom feed for failures Atom feed for just latest builds

REST API Jenkins 2.295

Type here to search Links 01:40 29-05-2021

18.116.61.79:8080/job/29mayjob2/configure REST API Jenkins 2.295

29mayjob2 Config [Jenkins]

Dashboard > 29mayjob2 >

General Source Code Management Build Triggers Build Environment Build Post-build Actions

with Ant

Build

Execute shell

Command

date Aggregate downstream test results Archive the artifacts Build other projects Publish JUnit test result report Record fingerprints of files to track usage Git Publisher E-mail Notification Editable Email Notification Set GitHub commit status (universal) Set build status on GitHub commit [deprecated] Delete workspace when build is done

Add post-build action ▾

Save Apply

18.116.61.79:8080/job/29mayjob2/configure# REST API Jenkins 2.295

Type here to search Links 01:40 29-05-2021

Dashboard [Jenkins] Not secure | 18.116.61.79:8080

Jenkins

Dashboard

New Item People Build History Manage Jenkins My Views Lockable Resources New View

Build Queue (1)

29mayjob2

Build Executor Status

1 Idle
2 Idle

All	W	Name	Last Success	Last Failure	Last Duration
×	Cloud	28mayjob	17 min - #1	13 min - #2	0.13 sec
...	Node	29mayjob2	N/A	N/A	N/A
...	Node	29mayjob3	N/A	N/A	N/A
...	Node	may29job1	N/A	N/A	N/A

Icon: S M L Legend Atom feed for all Atom feed for failures Atom feed for just latest builds

REST API Jenkins 2.295 18.116.61.79:8080/job/29mayjob2/build?delay=0sec Links 01:43 29-05-2021

Dashboard [Jenkins] Not secure | 18.116.61.79:8080

Jenkins

Dashboard

New Item People Build History Manage Jenkins My Views Lockable Resources New View

Build Queue (2)

29mayjob2
29mayjob3

Build Executor Status

1 Idle
2 Idle

All	W	Name	Last Success	Last Failure	Last Duration
×	Cloud	28mayjob	27 min - #1	23 min - #2	0.13 sec
✓	Node	29mayjob2	4.8 sec - #56	N/A	20 ms
✓	Node	29mayjob3	4.7 sec - #48	N/A	17 ms
✓	Node	may29job1	7 min 32 sec - #1	N/A	24 ms

Icon: S M L Legend Atom feed for all Atom feed for failures Atom feed for just latest builds

REST API Jenkins 2.295 18.116.61.79:8080/job/29mayjob2/build?delay=0sec Links 01:53 29-05-2021

The screenshot shows the Jenkins dashboard with a list of jobs and a build queue.

Jobs List:

S	W	Name	Last Success	Last Failure	Last Duration	Icon
✗	Cloud	28mayjob	46 min - #1	42 min - #2	0.13 sec	
✓	Cloud	may29job1	26 min - #1	N/A	24 ms	
✓	Cloud	29mayjob2	4.4 sec - #169	N/A	39 ms	
✓	Cloud	29mayjob3	4.4 sec - #161	N/A	22 ms	

Build Queue (2):

- 29mayjob2
- 29mayjob3

Build Executor Status:

- 1 Idle
- 2 Idle

Remotely triggering, periodic triggering

HOW TO CHANGE JENKINS AS A DATACENTER USING MASTER SLAVE