

JENKINS Installation Steps

Step1: Install Oracle java 8 on ubuntu 14.04

1. Add apt repository

```
sudo apt-add-repository ppa:webupd8team/java
```

Type in user password when it asks and hit Enter to continue.

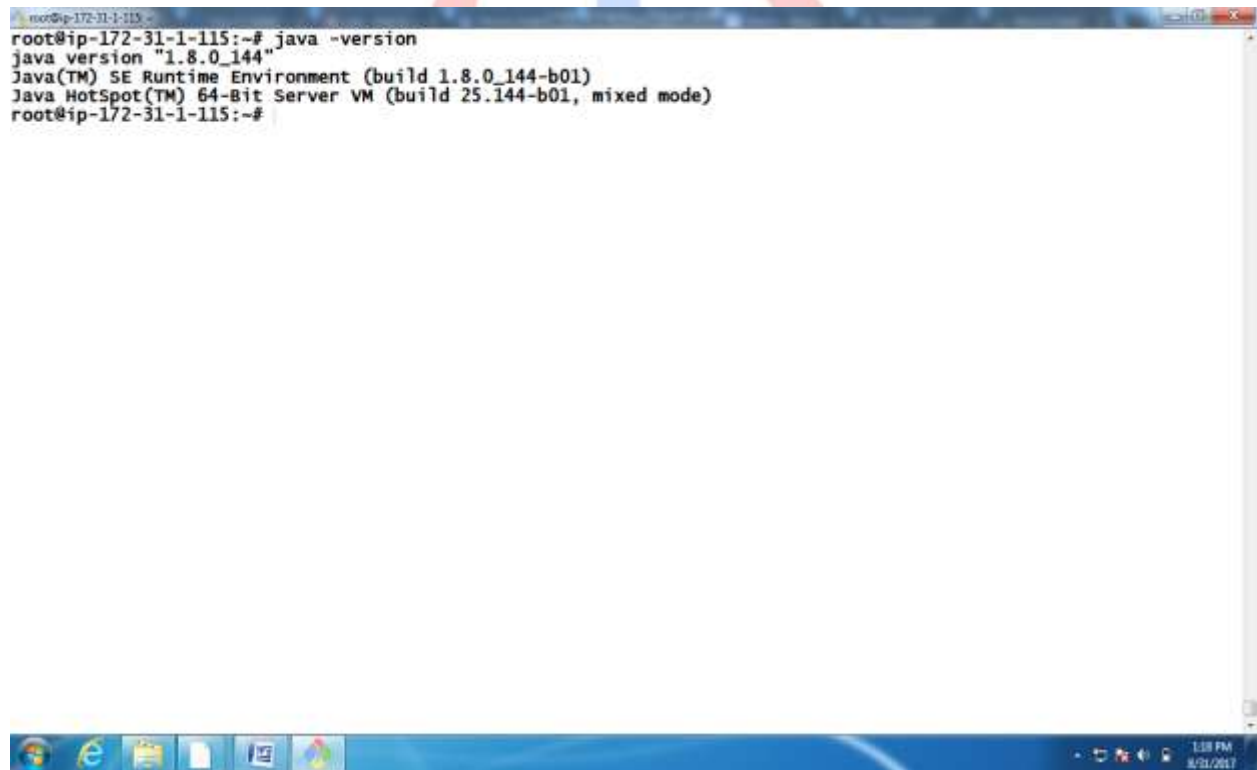
2. After that, update system package cache and install Oracle java 8

```
sudo apt-get update
```

```
sudo apt-get install oracle-java8-installer
```

step2: check java version

```
java -version
```



```
root@ip-172-31-1-115:~# java -version
java version "1.8.0_144"
Java(TM) SE Runtime Environment (build 1.8.0_144-b01)
Java HotSpot(TM) 64-Bit Server VM (build 25.144-b01, mixed mode)
root@ip-172-31-1-115:~#
```

Step3: To Set JAVA_HOME / PATH for all user, You need to setup global config in `/etc/profile` OR `/etc/bash.bashrc` file for all users:

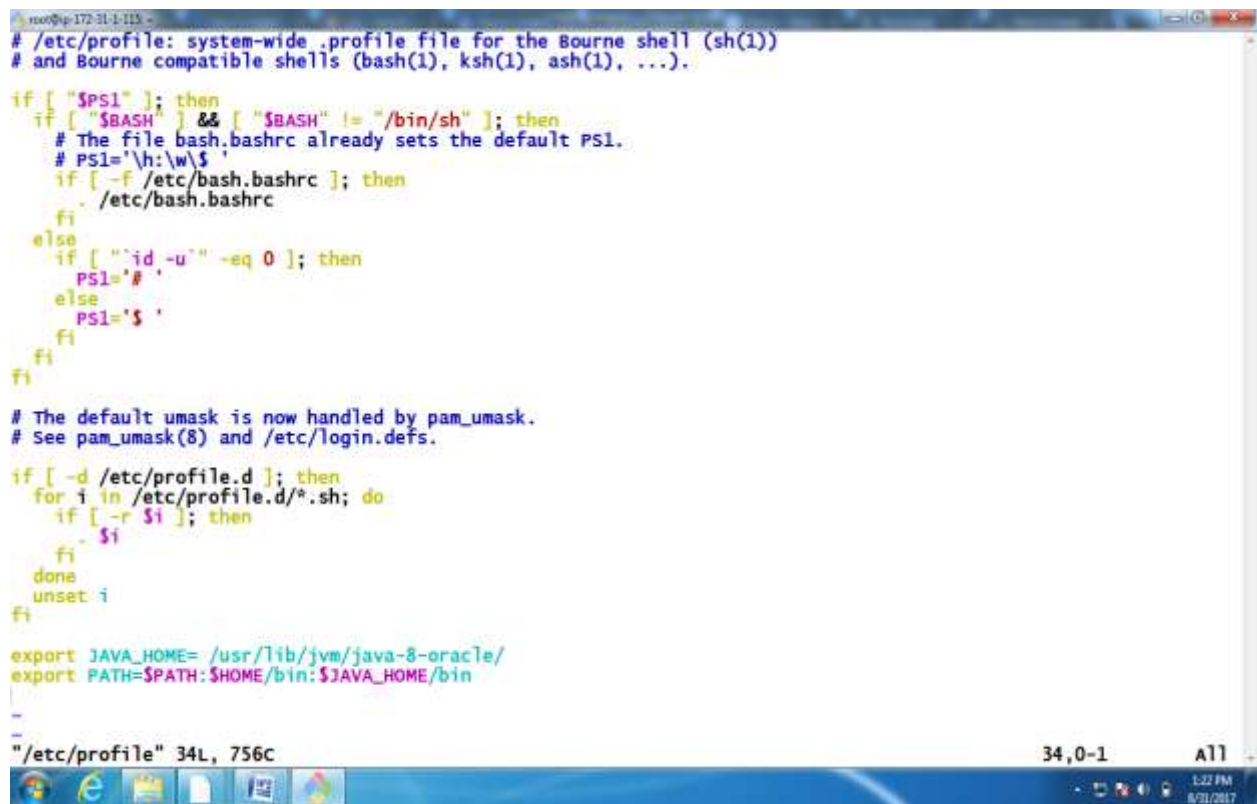
open `/etc/profile`

vi `/etc/profile`

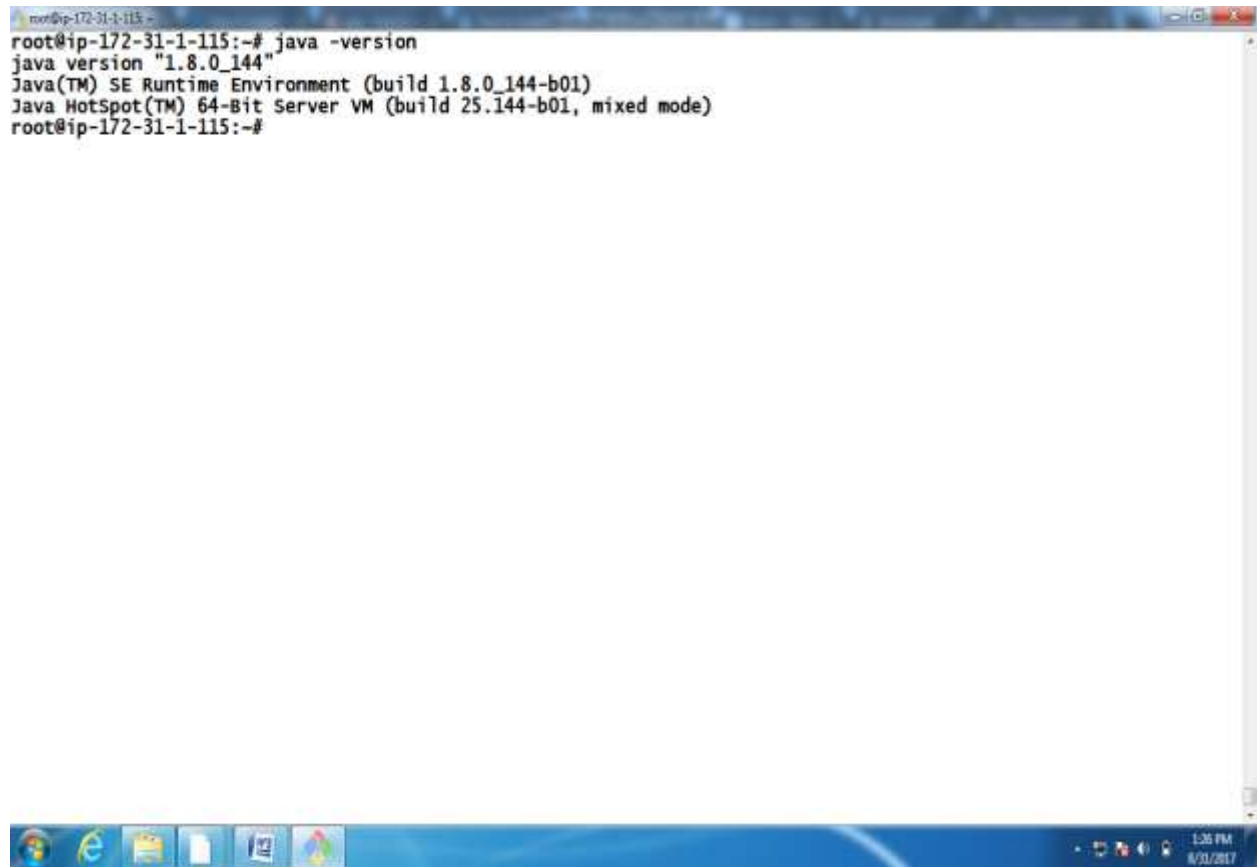
add bellow steps end of file

export `JAVA_HOME=/usr/lib/jvm/java-8-oracle/`

export `PATH=$PATH:$HOME/bin:$JAVA_HOME/bin`

A screenshot of a terminal window displaying the contents of the `/etc/profile` file. The terminal title bar shows 'root@ip-172-31-1-113 ~'. The file content includes comments about the Bourne shell and Bourne compatible shells, followed by a complex if-then-else block for setting the `PS1` prompt. Below this, there's a comment about `pam_umask` and a loop that sources files from `/etc/profile.d`. At the bottom, the `JAVA_HOME` and `PATH` environment variables are exported as specified in the instructions. The terminal status bar at the bottom shows '"/etc/profile" 34L, 756c', '34,0-1', and 'All'. The Windows taskbar is visible at the very bottom with the time '1:32 PM' and date '8/31/2017'.

step4: check your path

A screenshot of a terminal window titled 'root@ip-172-31-1-115:~'. The terminal shows the command 'java -version' being executed. The output is: 'java version "1.8.0_144"', 'Java(TM) SE Runtime Environment (build 1.8.0_144-b01)', and 'Java HotSpot(TM) 64-Bit Server VM (build 25.144-b01, mixed mode)'. The terminal window is part of a desktop environment with a taskbar at the bottom showing various application icons and a system clock indicating 1:35 PM on 8/31/2017.

```
root@ip-172-31-1-115:~# java -version
java version "1.8.0_144"
Java(TM) SE Runtime Environment (build 1.8.0_144-b01)
Java HotSpot(TM) 64-Bit Server VM (build 25.144-b01, mixed mode)
root@ip-172-31-1-115:~#
```

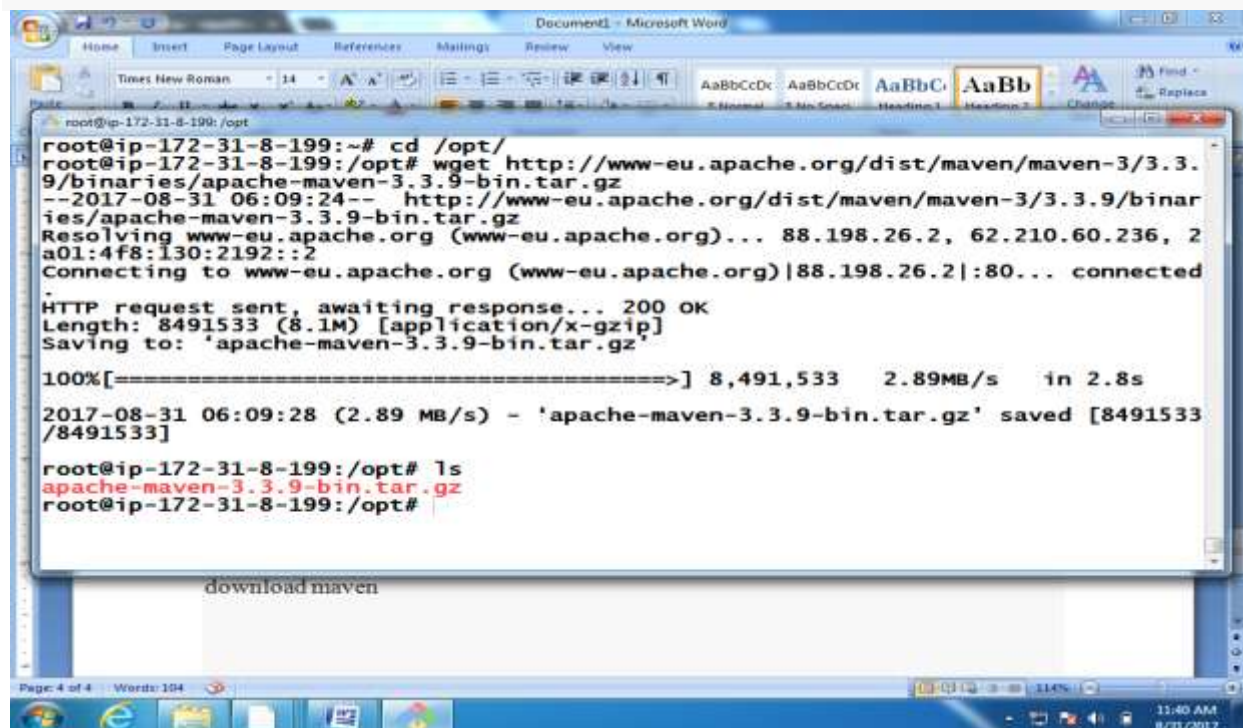
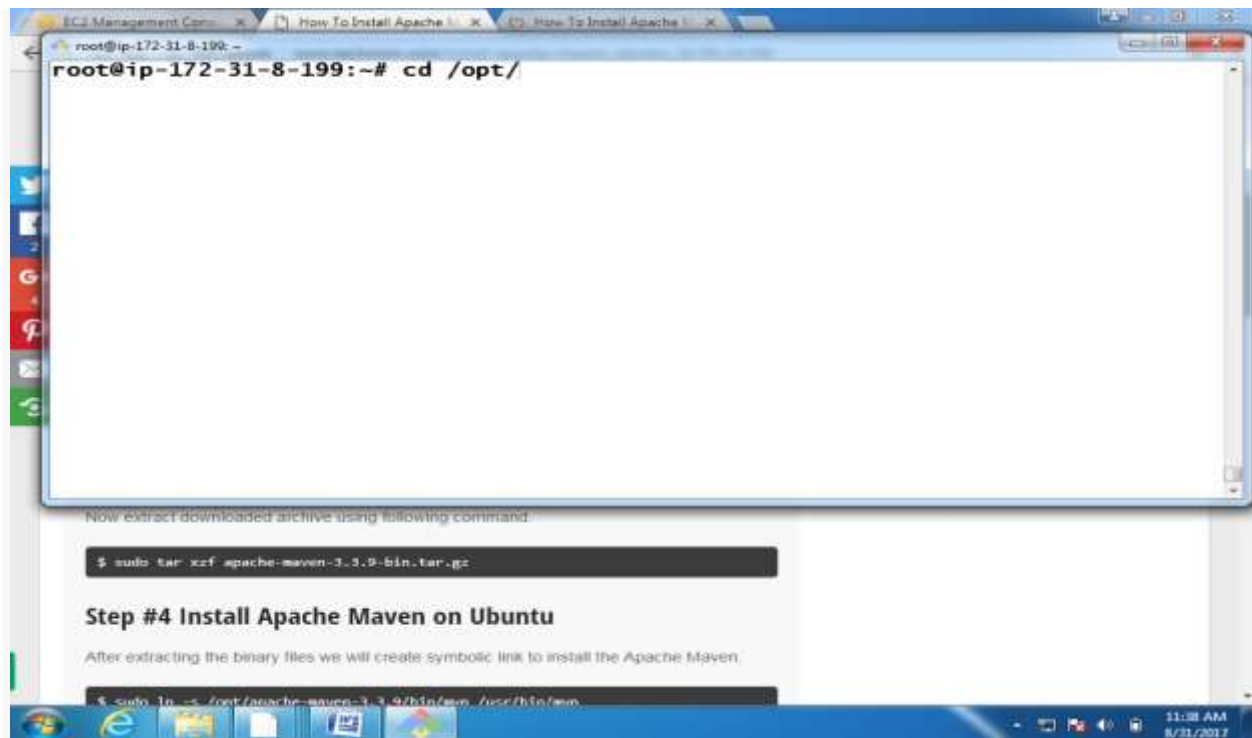
Step5: Install maven

1. Download Apache Maven

Go to /opt directory

Download maven tar file

wget <http://www-eu.apache.org/dist/maven/maven-3/3.3.9/binaries/apache-maven-3.3.9-bin.tar.gz>



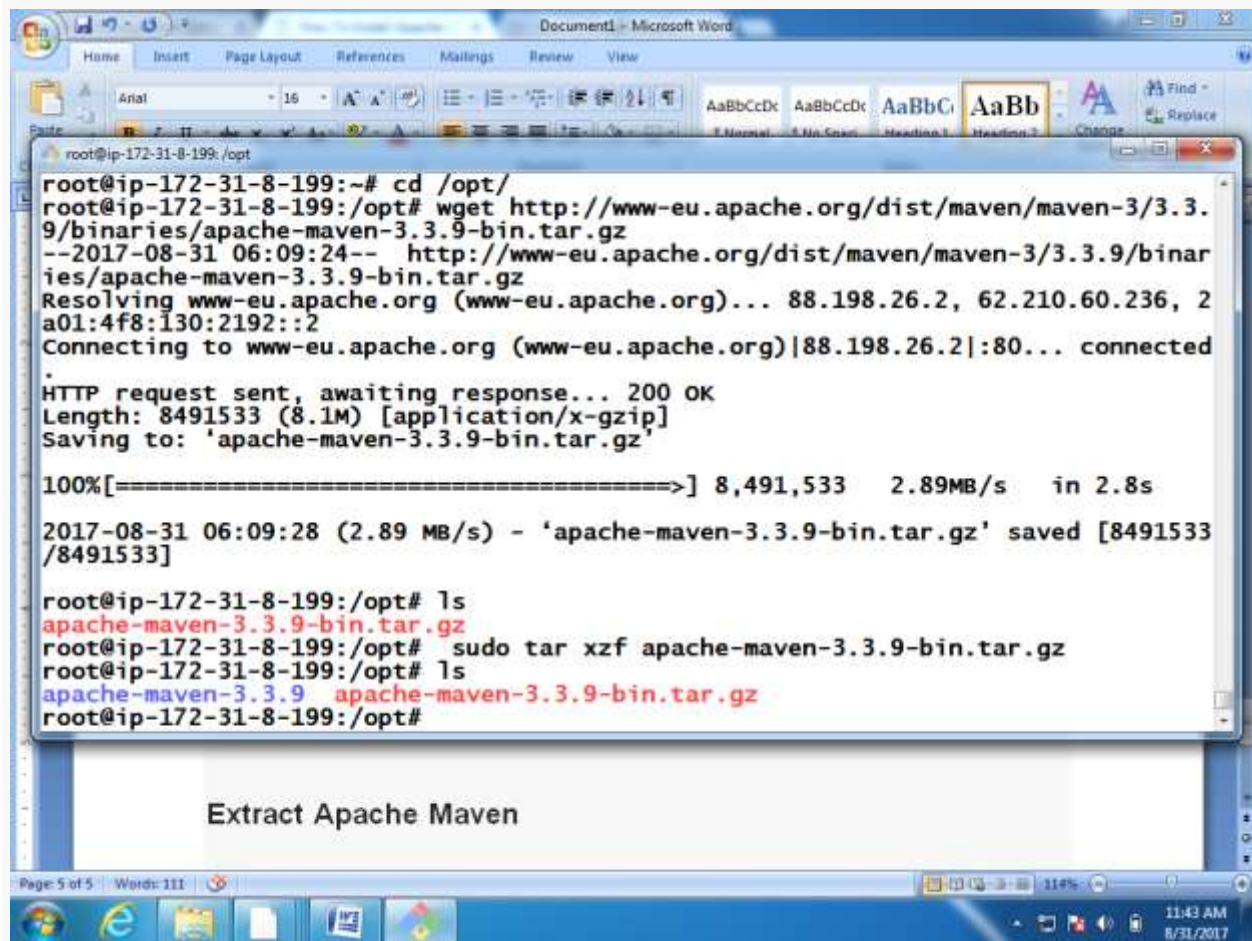
Extract Apache Maven:

Using below command:

```
sudo tar xzf apache-maven-3.3.9-bin.tar.gz
```

After run below command:

```
sudo ln -s /opt/apache-maven-3.3.9/bin/mvn /usr/bin/mvn
```



```
root@ip-172-31-8-199:~# cd /opt/
root@ip-172-31-8-199:/opt# wget http://www-eu.apache.org/dist/maven/maven-3/3.3.9/binaries/apache-maven-3.3.9-bin.tar.gz
--2017-08-31 06:09:24-- http://www-eu.apache.org/dist/maven/maven-3/3.3.9/binaries/apache-maven-3.3.9-bin.tar.gz
Resolving www-eu.apache.org (www-eu.apache.org)... 88.198.26.2, 62.210.60.236, 2a01:4f8:130:2192::2
Connecting to www-eu.apache.org (www-eu.apache.org)|88.198.26.2|:80... connected
HTTP request sent, awaiting response... 200 OK
Length: 8491533 (8.1M) [application/x-gzip]
Saving to: 'apache-maven-3.3.9-bin.tar.gz'

100%[=====>] 8,491,533  2.89MB/s  in 2.8s

2017-08-31 06:09:28 (2.89 MB/s) - 'apache-maven-3.3.9-bin.tar.gz' saved [8491533/8491533]

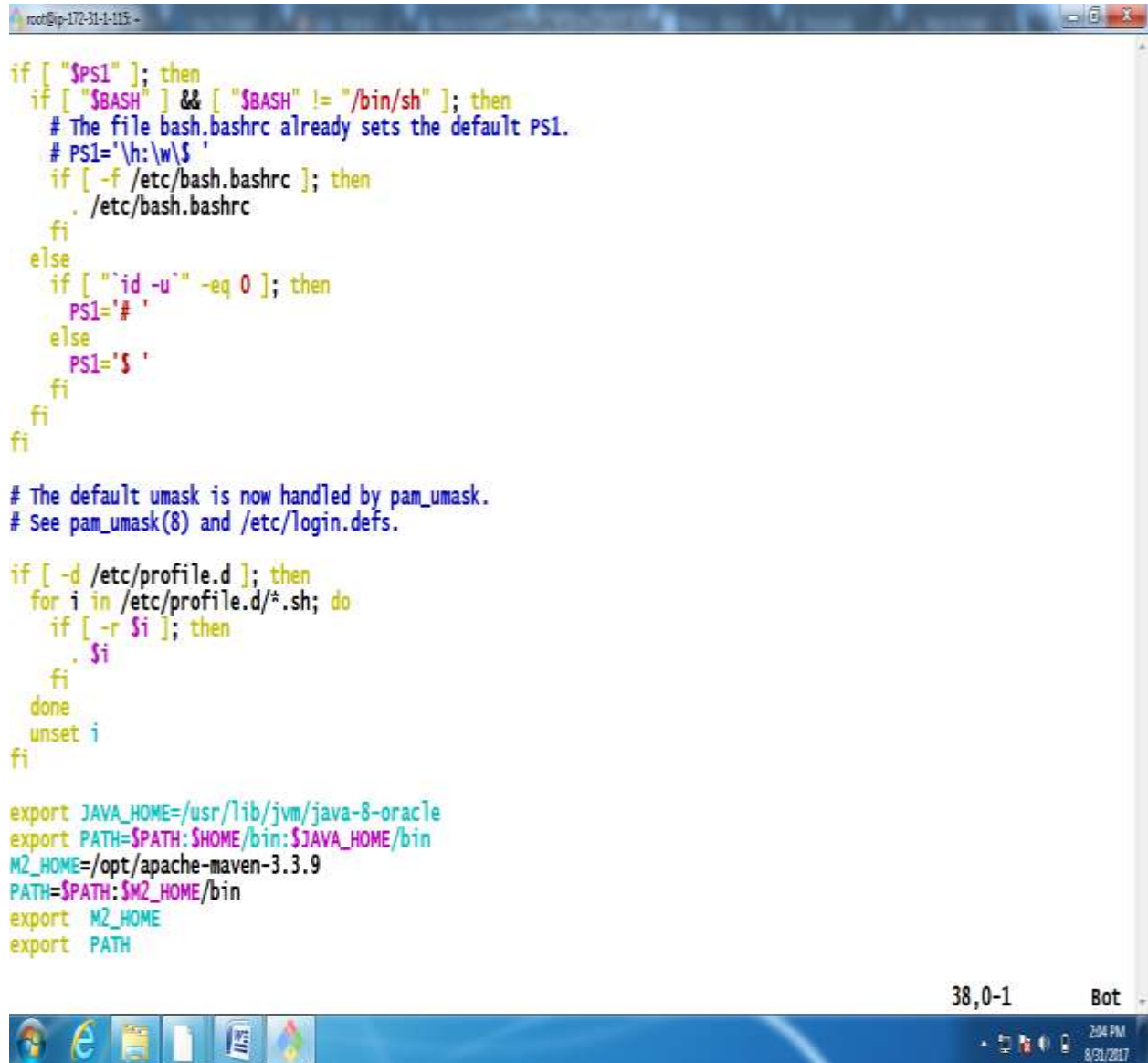
root@ip-172-31-8-199:/opt# ls
apache-maven-3.3.9-bin.tar.gz
root@ip-172-31-8-199:/opt# sudo tar xzf apache-maven-3.3.9-bin.tar.gz
root@ip-172-31-8-199:/opt# ls
apache-maven-3.3.9  apache-maven-3.3.9-bin.tar.gz
root@ip-172-31-8-199:/opt#
```

Extract Apache Maven

Setup Environment Variables for maven

Go to /etc/profile add bellow steps

```
vi /etc/profile
M2_HOME=/opt/apache-maven-3.3.9
PATH=$PATH:$M2_HOME/bin
export M2_HOME
export PATH
```



```
root@ip-172-31-1-115 ~
if [ "$PS1" ]; then
  if [ "$BASH" ] && [ "$BASH" != "/bin/sh" ]; then
    # The file bash.bashrc already sets the default PS1.
    # PS1='\h:\w\$ '
    if [ -f /etc/bash.bashrc ]; then
      . /etc/bash.bashrc
    fi
  else
    if [ "`id -u`" -eq 0 ]; then
      PS1='# '
    else
      PS1='$ '
    fi
  fi
fi

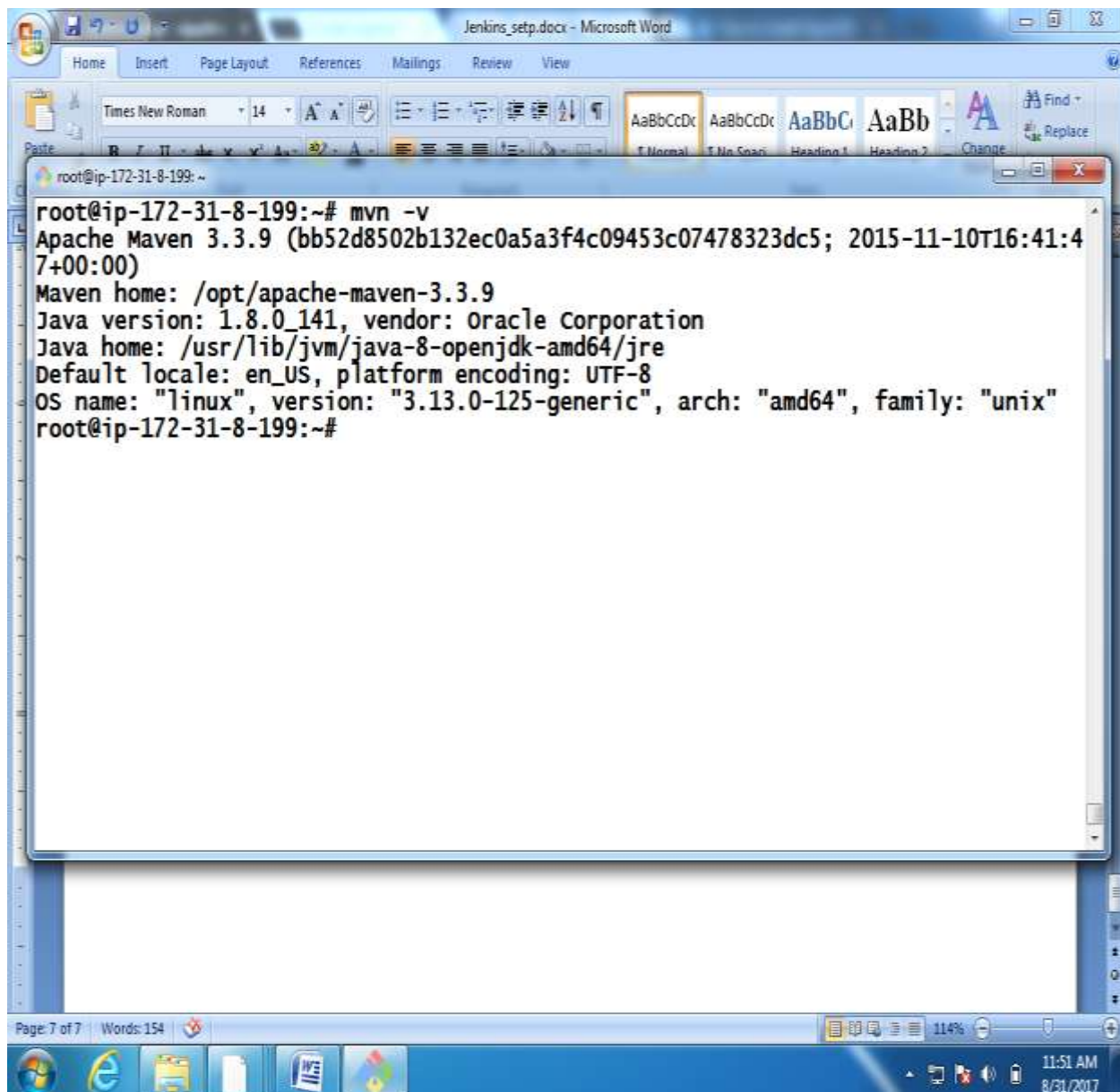
# The default umask is now handled by pam_umask.
# See pam_umask(8) and /etc/login.defs.

if [ -d /etc/profile.d ]; then
  for i in /etc/profile.d/*.sh; do
    if [ -r $i ]; then
      . $i
    fi
  done
  unset i
fi

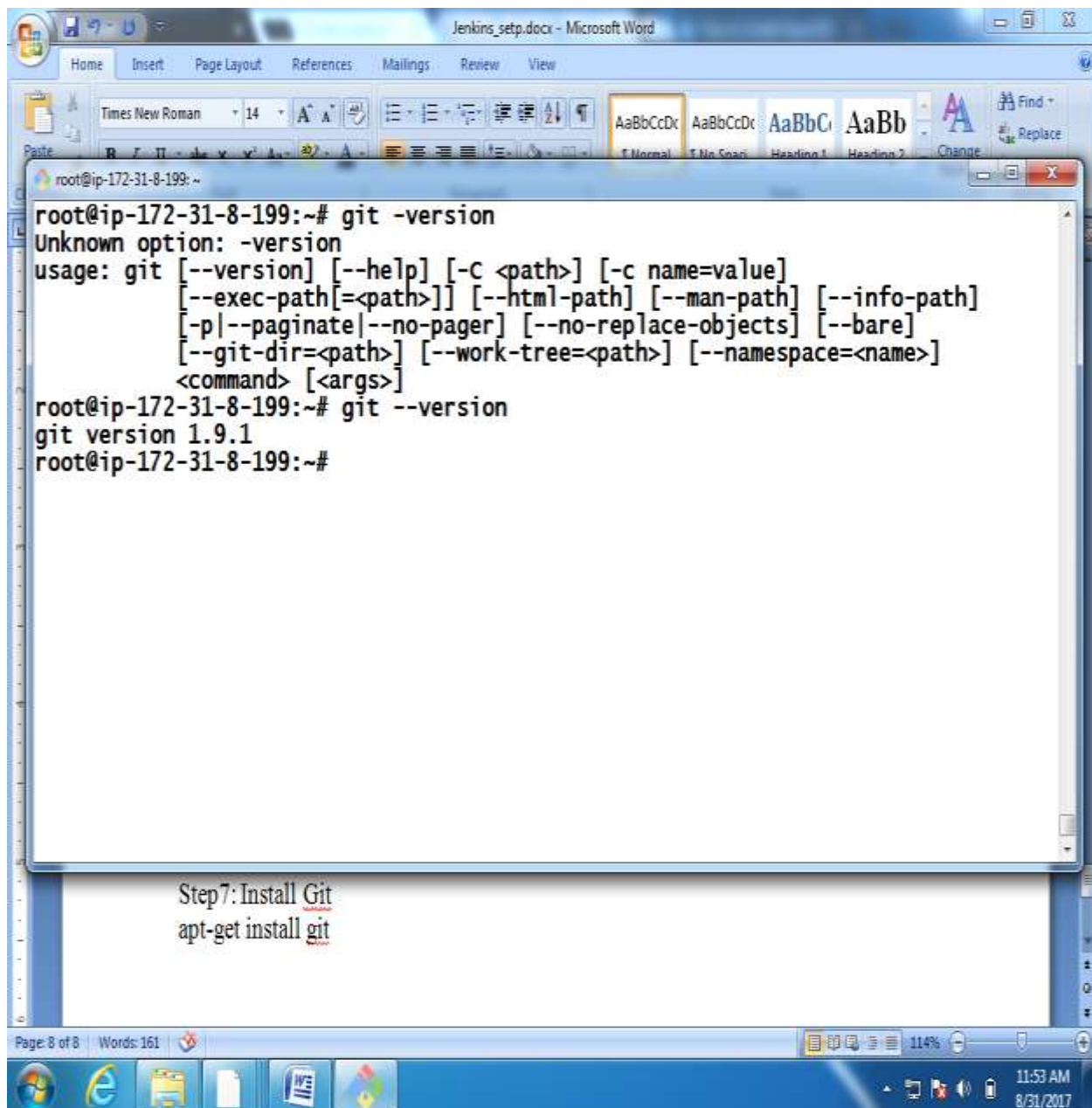
export JAVA_HOME=/usr/lib/jvm/java-8-oracle
export PATH=$PATH:$HOME/bin:$JAVA_HOME/bin
M2_HOME=/opt/apache-maven-3.3.9
PATH=$PATH:$M2_HOME/bin
export M2_HOME
export PATH

38,0-1 Bot
2:04 PM 8/31/2017
```

step6: Check maven version



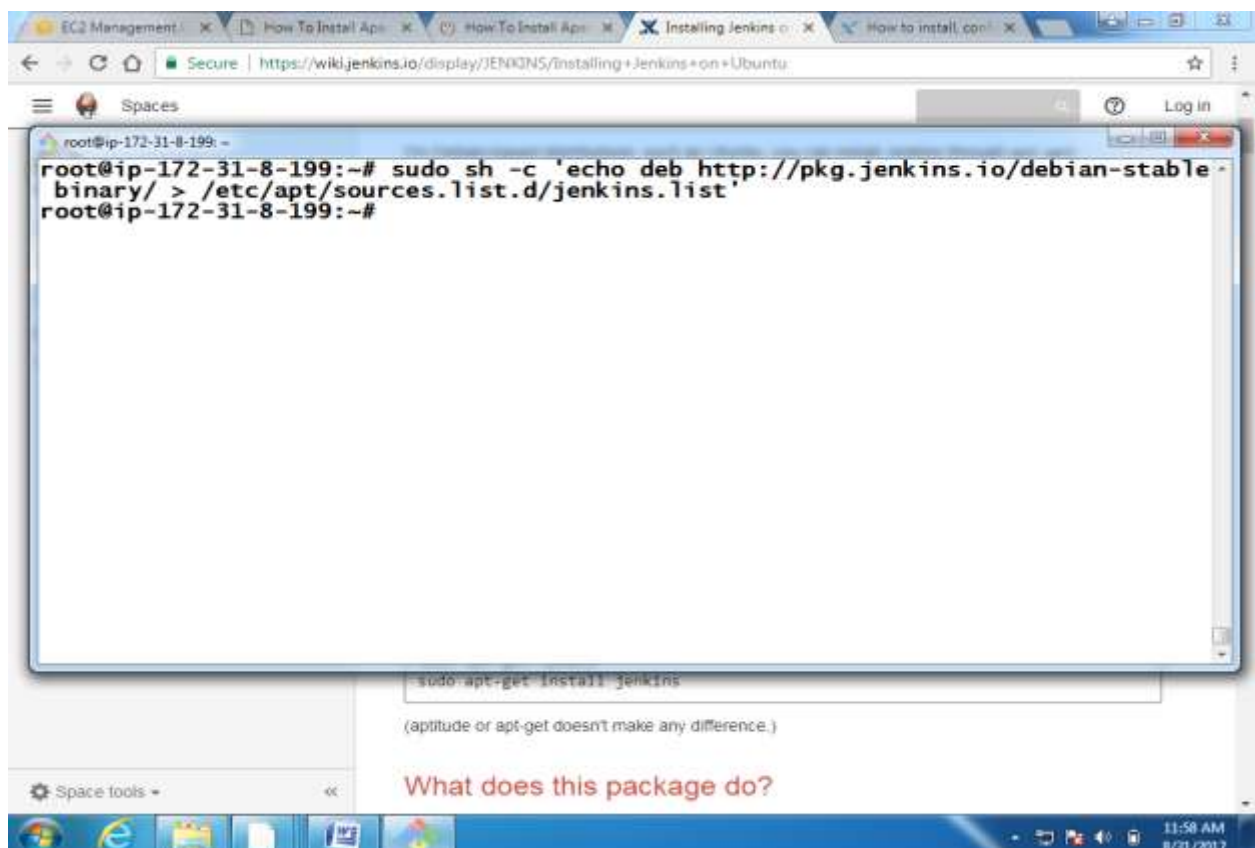
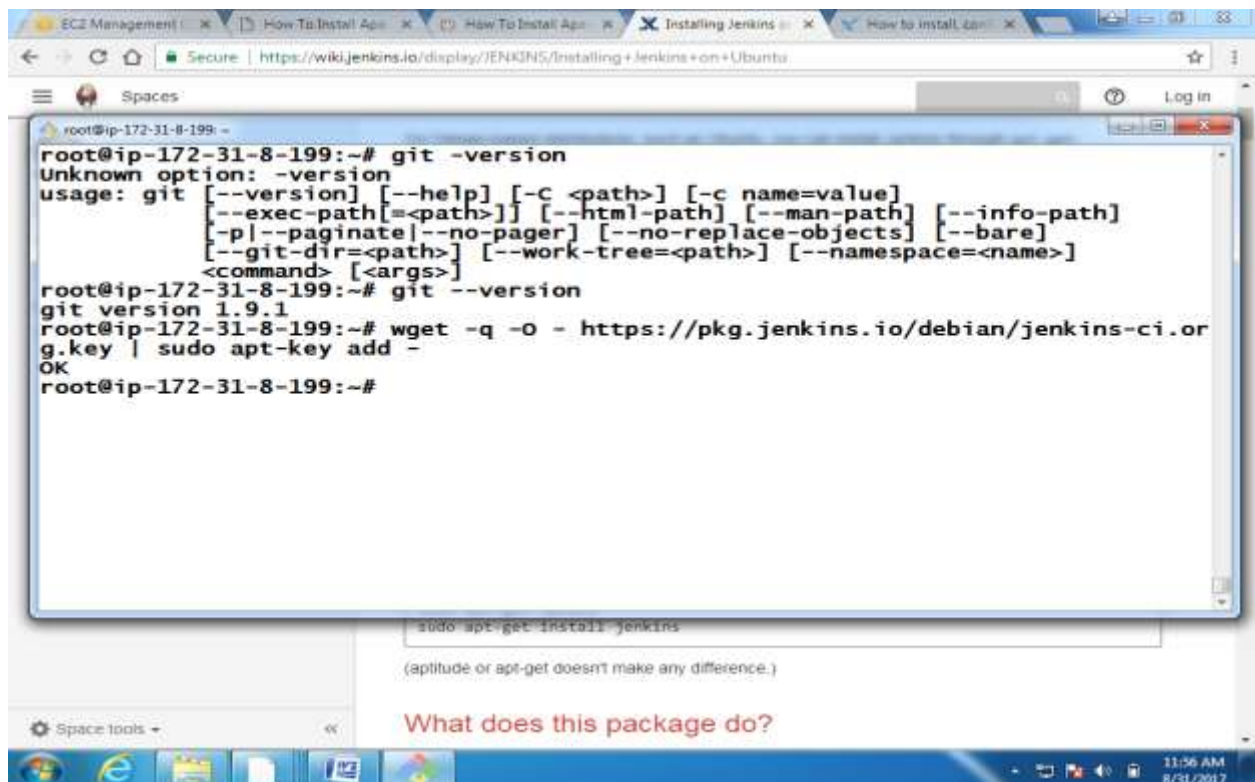
Step7: Install Git
apt-get install git



Step8: JENKINS Installation On ubuntu:14.04

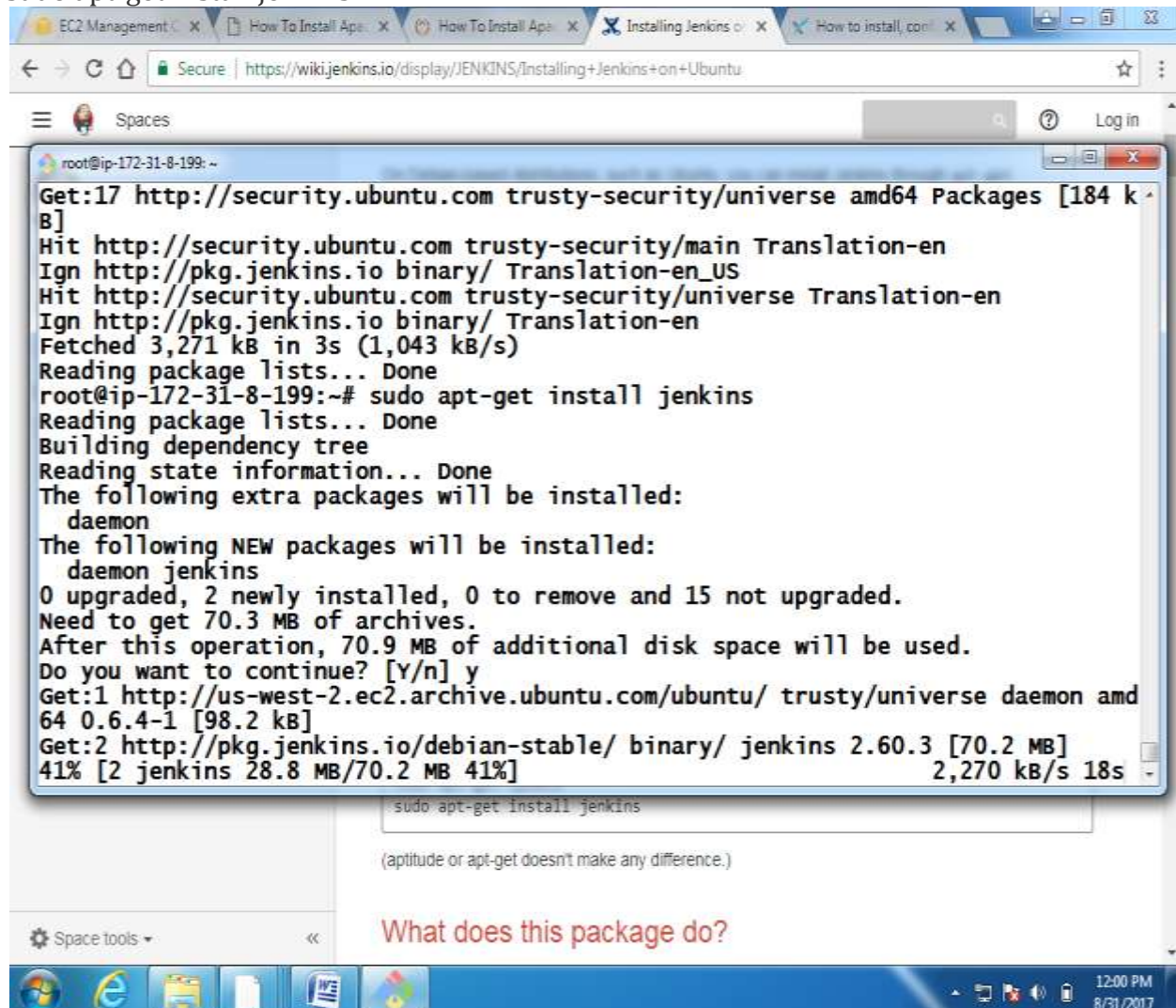
Add apt repo

```
wget -q -O - https://pkg.jenkins.io/debian/jenkins-ci.org.key | sudo apt-key add -  
sudo sh -c 'echo deb http://pkg.jenkins.io/debian-stable binary/ >  
/etc/apt/sources.list.d/jenkins.list'
```

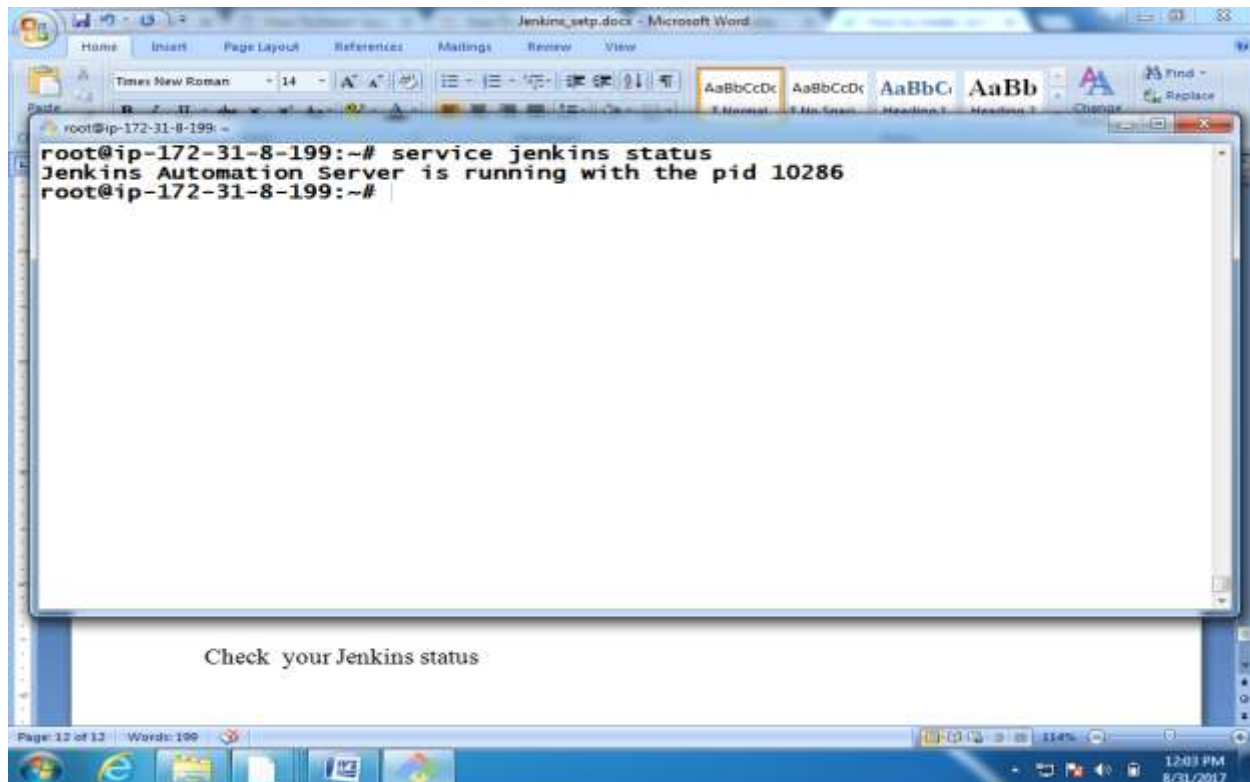



sudo apt-get update

sudo apt-get install jenkins



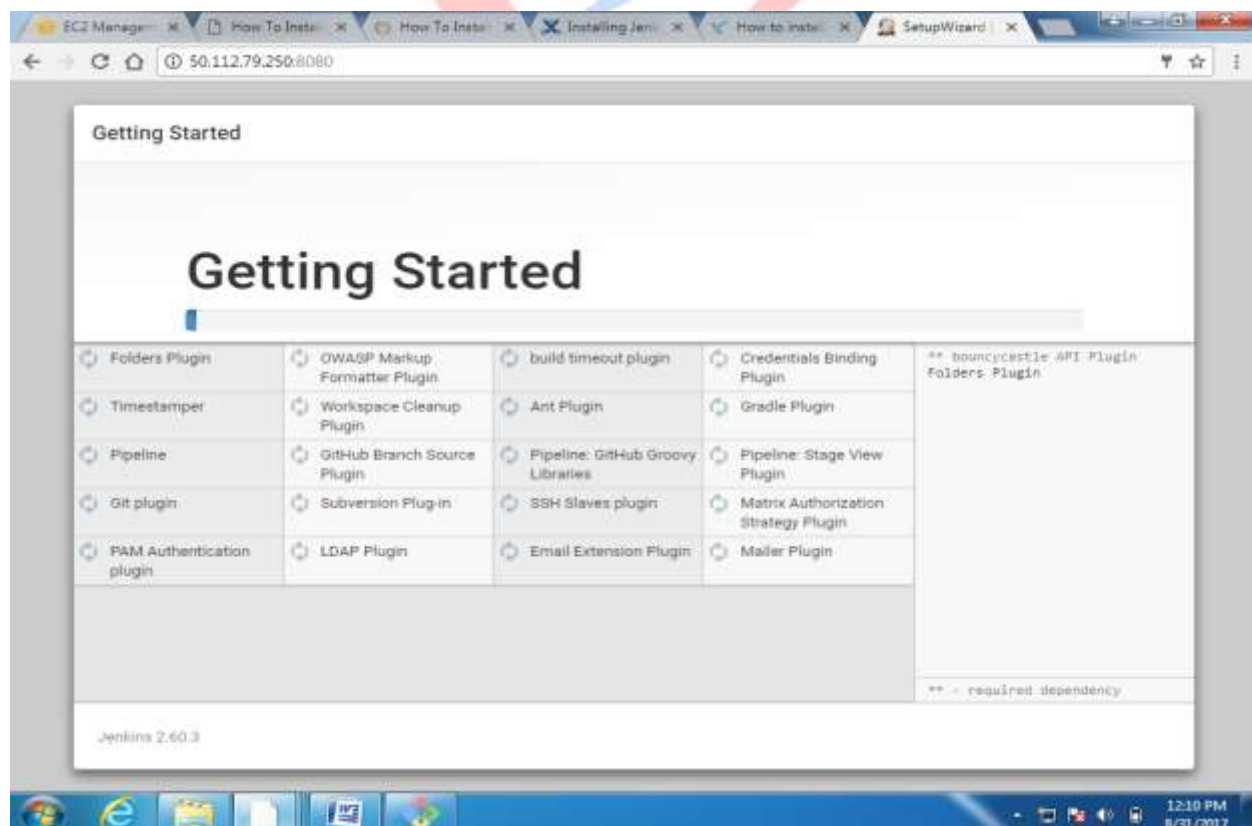
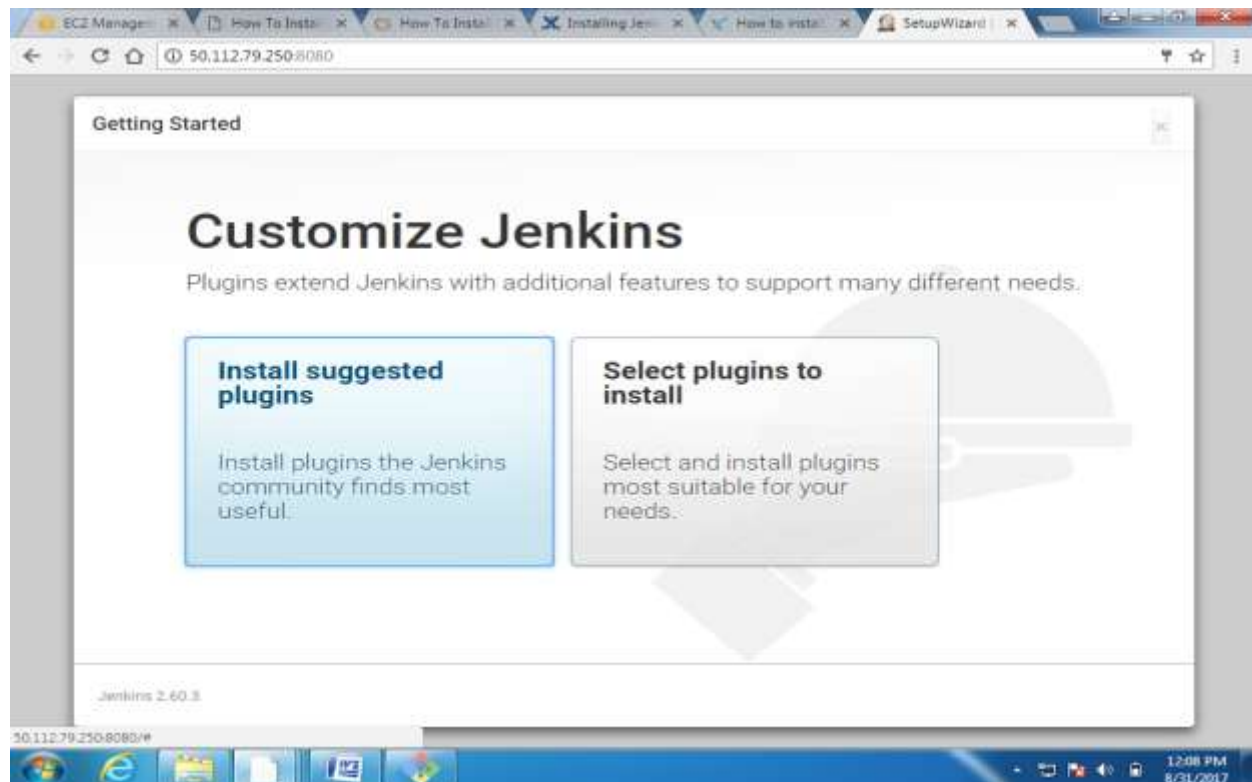
Check your Jenkins status



Go to any browser give your ip:8080



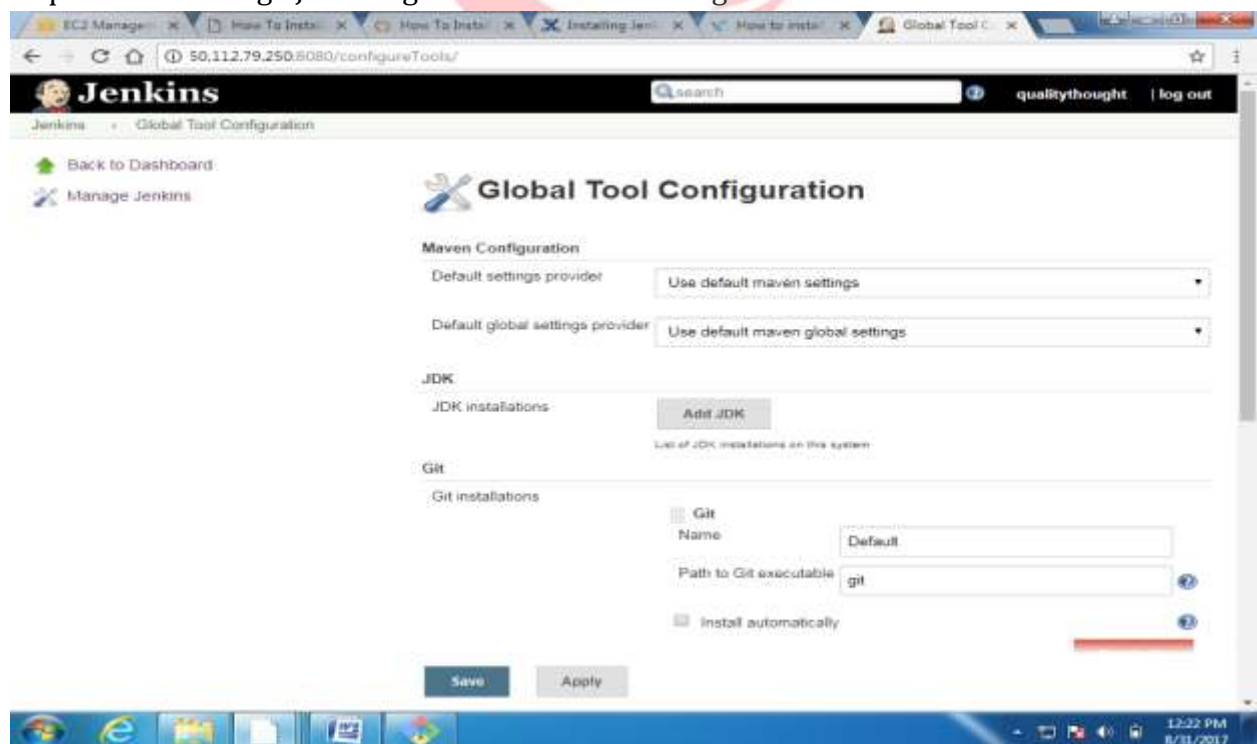
Install suggested plugins



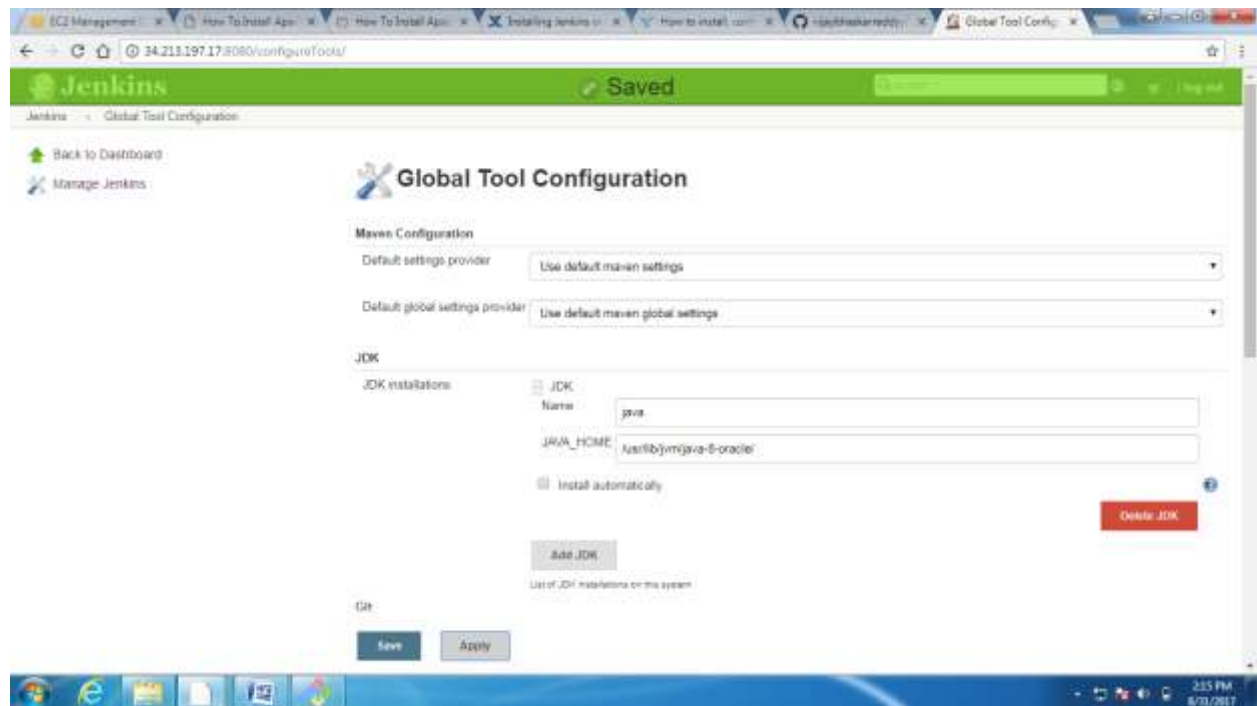
Step: Create user Fill all details whatever it asks After you will see like



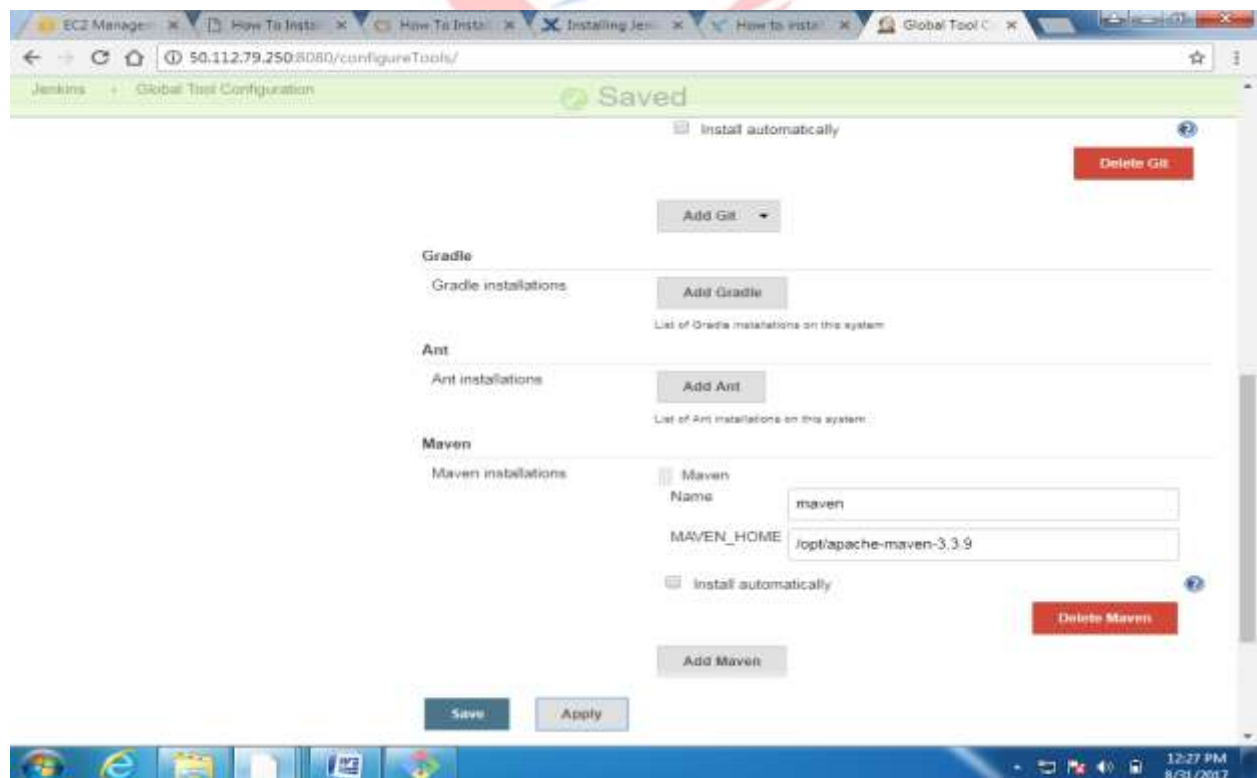
Step: Click on Mange Jenkins go to Global Tool Configuration



Step: Set JAVA_HOME Path on Jenkins Server

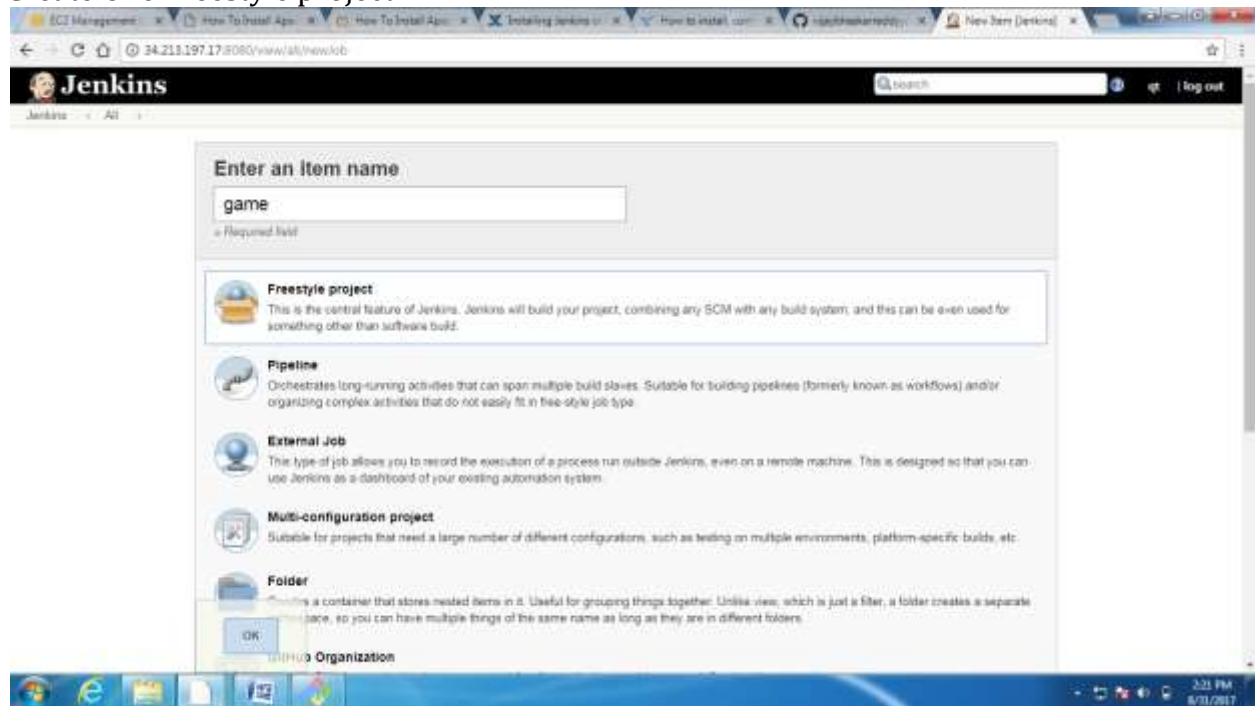


step: Set Maven path variable on Jenkins server



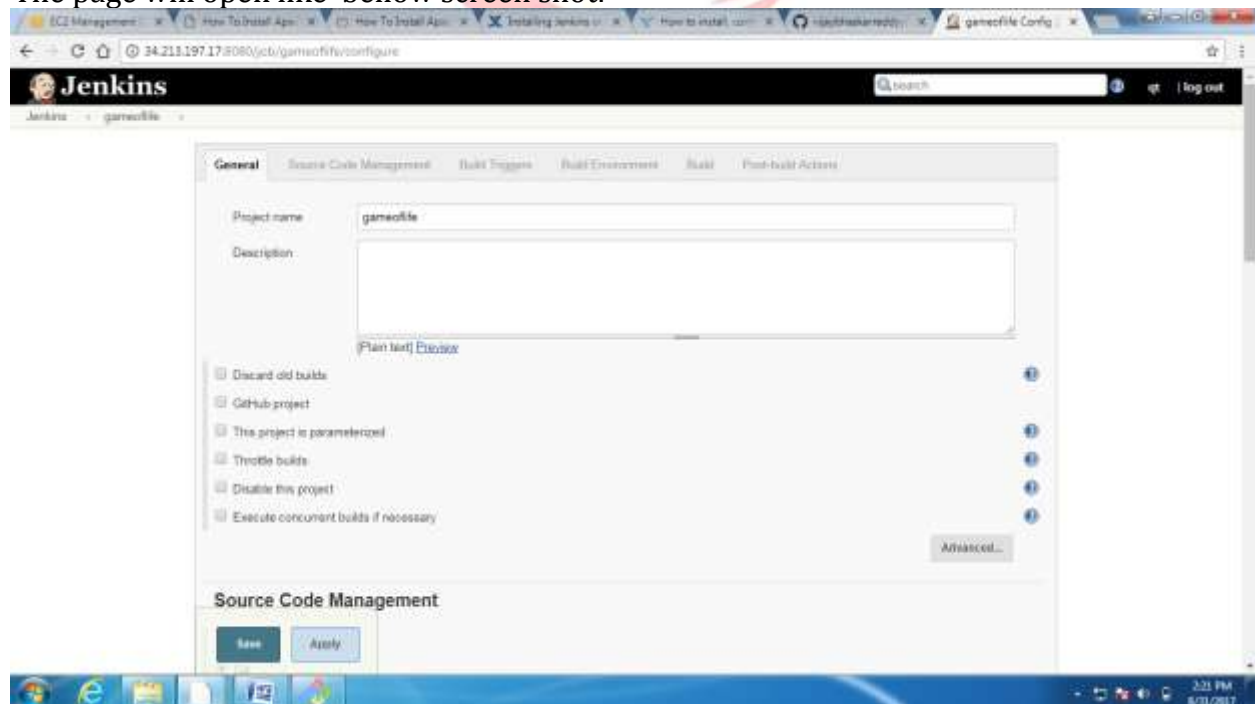
Then click apply and save

Create One Freestyle project

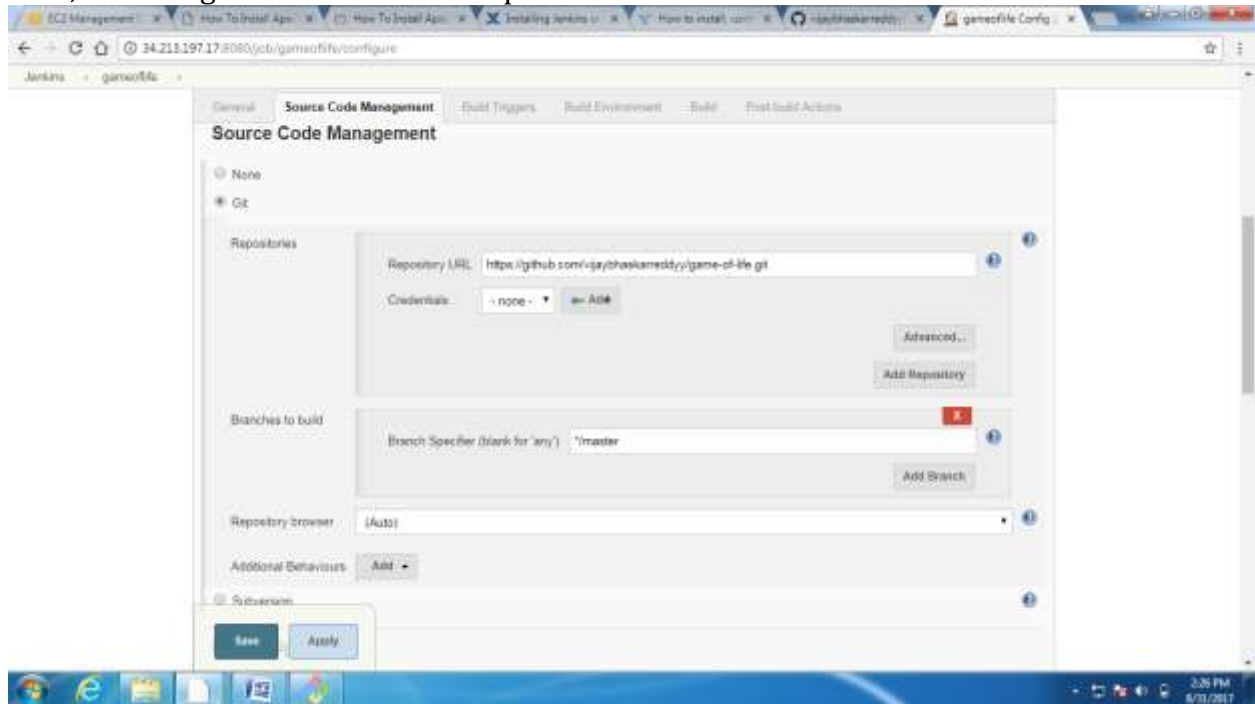


Click Ok.

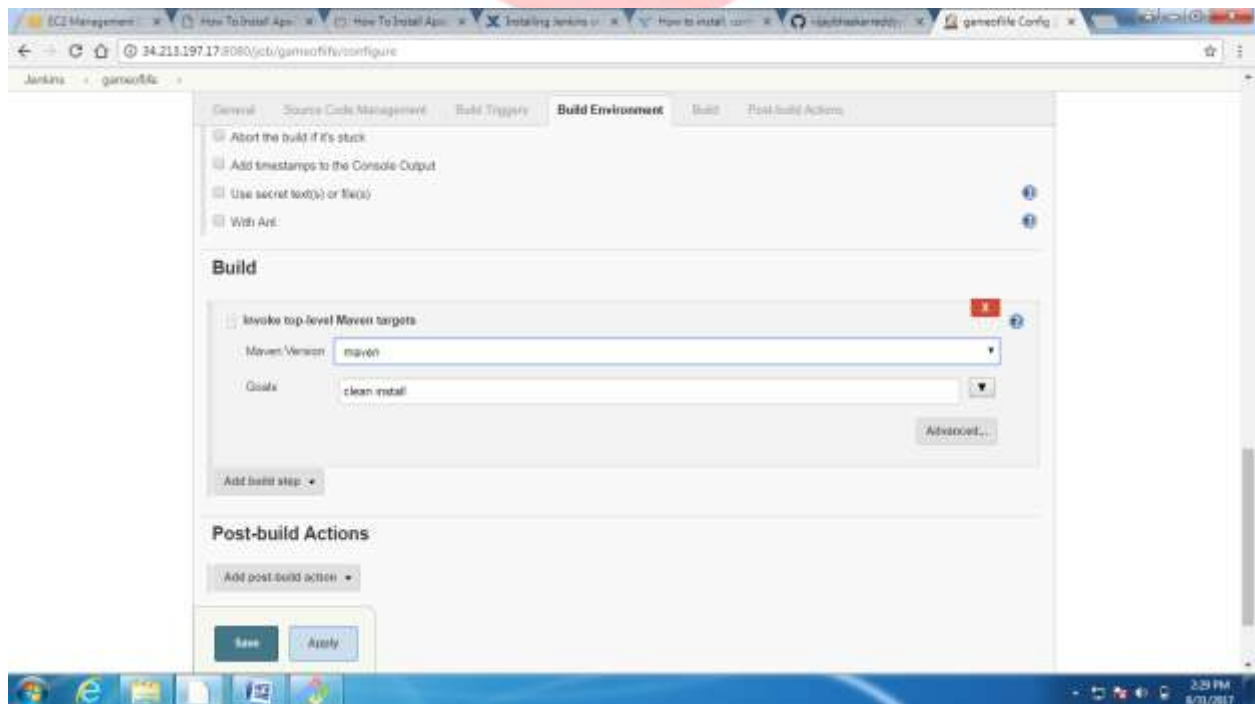
The page will open like bellow screen shot:



Scroll down and in the Source code management section enter your source code path.
Here, we took git as our source code path



In the below Build section select "Invoke toplevel maven" in the option and enter Maven goals

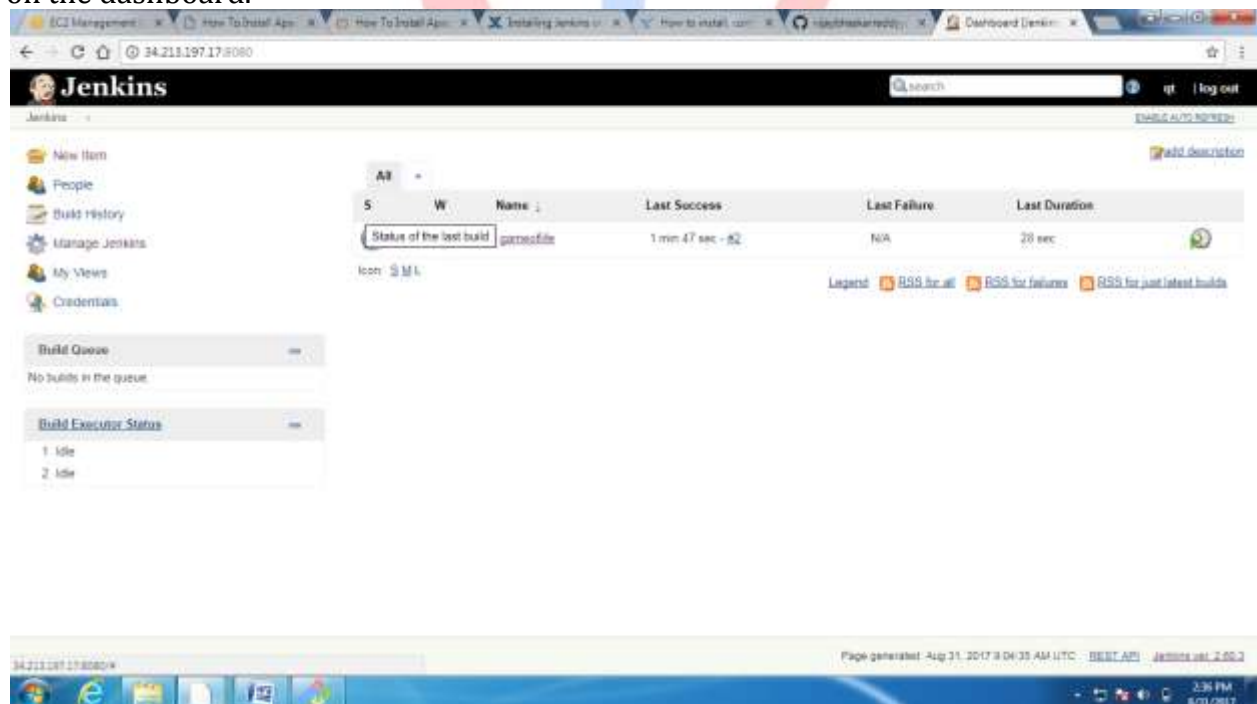


click apply and save

Click Build Now option and goto console output check whether the build is success or fail



you can also check about the build output by seeing the color of the status of the last build on the dashboard.



Blue color represents success of the build and Red color represents failure of the build