On UBUNTU machine Install JAVA

sudo add-apt-repository ppa:openjdk-r/ppa sudo apt-get update sudo apt-get install -y openjdk-8-jdk

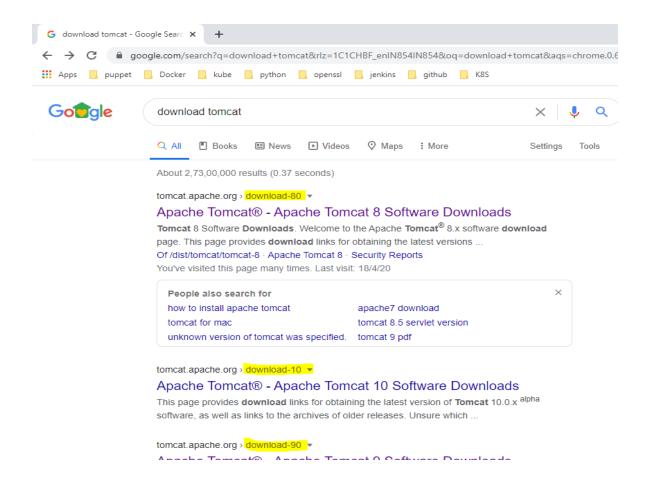
Tomcat Installation and Configuration

Tomcat

Tomcat is an open-source web server and provides a "pure Java" HTTP web server environment in which Java code can run.

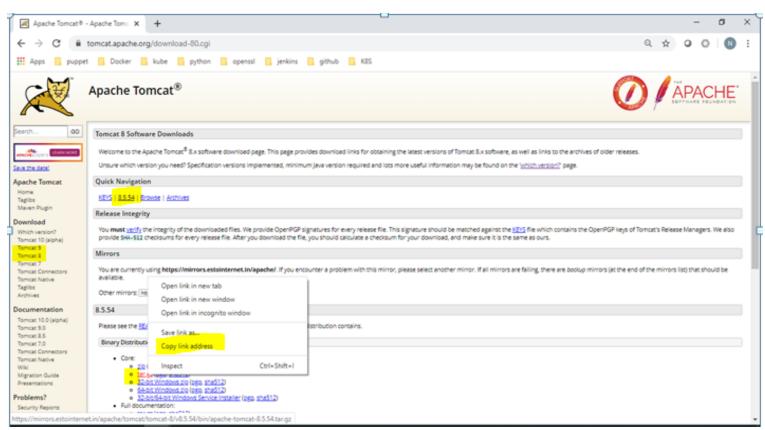


Go to www.google.com search for download tomcat, you can download link



The current stable version is 8.5.54 download the tar.gz . Extract the tar.gz and copy any where. Tomcat is ready.





Copy link address as shown in above screenshot

Login to UBUNTU Machine & below commands

NOTE: be root user to do all below tasks. You may see the permission issues if not.

cd /tmp; wget (paste the copied link here), i.e it looks like below

cd /tmp; wget https://mirrors.estointernet.in/apache/tomcat/tomcat-8/v8.5.54/bin/apache-tomcat-8.5.54.tar.gz

This will download the tomcat binary to UBUNTU machine under /tmp directtry, and then we can extract the tar file

cd /tmp; tar xzf apache-tomcat-8.5.54.tar.gz -C /opt/

The above command will extract the tomcat binary to /opt/ directory

Now you can goto /opt/apache-tomcat-8.5.54/bin & run startup.sh to start tomcat server

cd /opt/apache-tomcat-8.5.54/bin

./startup.sh

Note: ensure that 8080 port is not occupied on your machine since tomcat by default uses 8080 port number.

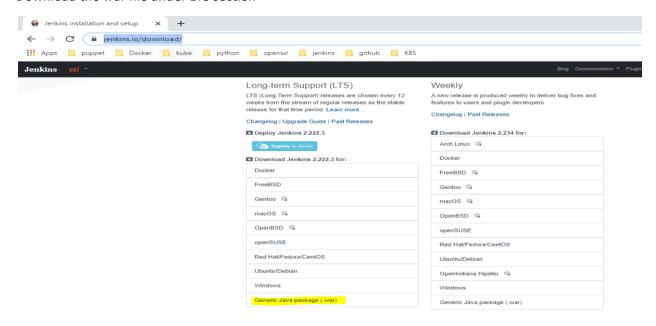
We can access the tomcat once it is started using http://IP:8080

Setting UP Jenkins in TOMCAT Server:

We need to download the jenkins.war file from official Jenkins website

Goto link https://www.jenkins.io/download/

Download the war file under LTS section



On downloads page right click on Generic Java package(war) & copy link address

Login to UBUNTU machine follow as below in screen shot.

```
root@ip-172-31-15-219:/opt# cd /tmp
root@ip-172-31-15-219:/tmp# wget http://mirrors.jenkins.io/war-stable/latest/jenkins.war
--2020-04-28 07:09:21-- http://mirrors.jenkins.io/war-stable/latest/jenkins.war
Resolving mirrors.jenkins.io (mirrors.jenkins.io)... 52.202.51.185
Connecting to mirrors.jenkins.io (mirrors.jenkins.io)|52.202.51.185|:80... connected.
HTTP request sent, awaiting response... 302 Found
Location: http://ftp-nyc.osuosl.org/pub/jenkins/war-stable/2.222.3/jenkins.war [following]
--2020-04-28 07:09:25-- http://ftp-nyc.osuosl.org/pub/jenkins/war-stable/2.222.3/jenkins.war
Resolving ftp-nyc.osuosl.org (ftp-nyc.osuosl.org)... 64.50.233.100, 2600:3404:200:237::2
Connecting to ftp-nyc.osuosl.org (ftp-nyc.osuosl.org)|64.50.233.100|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 66241734 (63M) [application/x-java-archive]
Saving to: 'jenkins.war'
jenkins.war
                                 100% [======
                                                                                 =======>] 63.17M 14.2MB/s
                                                                                                                     in 6.2s
2020-04-28 07:09:31 (10.2 MB/s) - \jenkins.war' saved [66241734/66241734]
root@ip-172-31-15-219:/tmp# ls -l jenkins.war
-rw-r--r-- 1 root root 66241734 Apr 24 22:44 jenkins.war
root@ip-172-31-15-219:/tmp#
```

Deploy Jenkins war file to tomcat Server:

```
root@ip-172-31-15-219:~# cd /tmp
root@ip-172-31-15-219:/tmp# ls -l jenkins.war
-rw-r--r-- 1 root root 66241734 Apr 24 22:44 jenkins.war
root@ip-172-31-15-219:/tmp# cp jenkins.war /opt/apache-tomcat-8.5.54/webapps/
root@ip-172-31-15-219:/tmp# 1s -1 /opt/apache-tomcat-8.5.54/webapps/
total 64716
drwxr-x--- 3 root root
                            4096 Apr 28 06:56 ROOT
                            4096 Apr 28 06:56 docs
drwxr-x--- 16 root root
                            4096 Apr 28 06:56 examples
drwxr-x---
           6 root root
drwxr-x--- 5 root root
                            4096 Apr 28 06:56 host-manager
drwxr-x--- 11 root root
                            4096 Apr 28 07:29 jenkins
-rw-r--r- 1 root root 66241734 Apr 28 07:29 jenkins.war
drwxr-x--- 5 root root
                            4096 Apr 28 06:56 manager
root@ip-172-31-15-219:/tmp#
```

Restart Jenkins

```
root@ip-172-31-15-219:/tmp#
root@ip-172-31-15-219:/tmp# cd /opt/apache-tomcat-8.5.54/bin/
root@ip-172-31-15-219:/opt/apache-tomcat-8.5.54/bin# ./shutdown.sh ; ./startup.sh
Using CATALINA_BASE: /opt/apache-tomcat-8.5.54
Using CATALINA_HOME: /opt/apache-tomcat-8.5.54
Using CATALINA_TMPDIR: /opt/apache-tomcat-8.5.54/temp
Using JRE HOME:
Using CLASSPATH:
                      /opt/apache-tomcat-8.5.54/bin/bootstrap.jar:/opt/apache-tomcat-8.5.54/bin/tomcat-juli.jar
Using CATALINA BASE:
                      /opt/apache-tomcat-8.5.54
Using CATALINA HOME: /opt/apache-tomcat-8.5.54
Using CATALINA_TMPDIR: /opt/apache-tomcat-8.5.54/temp
Using JRE HOME:
Using CLASSPATH:
                      /opt/apache-tomcat-8.5.54/bin/bootstrap.jar:/opt/apache-tomcat-8.5.54/bin/tomcat-juli.jar
Tomcat started.
root@ip-172-31-15-219:/opt/apache-tomcat-8.5.54/bin#
```

This concludes deploying Jenkins to tomcat Server; we can access Jenkins from below URL

http://IP:8080/jenkins

