**HOW TO INSTALL JAVA, JENKINS AND TOMCAT IN AMAZON LINUX SERVER MACHINE**

1. **Update the system**

**sudo yum update –y**

1. **Change to sudo user**

**sudo su –**

**JAVA**

1. **To install java**

**yum install java-1.8\***

**java –version**

**TOMCAT**

1. **To download and install tomcat**

**pwd**

1. **Go to browser (google) and search for tomcat 8 download link in care binary. Then click the tar.gz link and copy the link.**
2. **Change the path to opt**

**cd /opt**

**wget http://mirrors.estointernet.in/apache/tomcat/tomcat-8/v8.5.49/bin/apache-tomcat-8.5.49.tar.gz**

1. **It will show -bash: wget: command not found**
2. **To install wget**

**yum install wget –y**

**wget http://mirrors.estointernet.in/apache/tomcat/tomcat-8/v8.5.49/bin/apache-tomcat-8.5.49.tar.gz**

1. **Then ls the file**

**ls**

1. **Then tar file has to be untarred and unzipped using the following command**

**tar –zvxf apache-tomcat-8.5.49.tar.gz**

**ls**

1. **Shows this list apache-tomcat-8.5.49 apache-tomcat-8.5.49.tar.gz**
2. **The red highlighted is the folder path. Next step is to jump into the directory apache-tomcat-8.5.49**

**cd apache-tomcat-8.5.49**

1. **To access the default tomcat webpage, you need to start the service. To start the service under the bin directory**

**cd /bin**

**ls**

1. **To start the service we have startup.sh and to shutdown the service we have shutdown.sh.**
2. **To check whether any service in running use the following command**

**ps -efL | grep tomcat**

1. **To check the permission using the following command**

**ls –ltr**

1. **So there is no full permission to execute the startup and shutdown process. So need to change the permission**

**chmod +x startup.sh shutdown.sh**

1. **Now permission will be given, all user can able to execute the service. Use ls –ltr to show the permissions**

**pwd**

1. **So, now to start and stop the service you have to come to the path /opt/apache-tomcat-8.5.49/bin .**
2. **From here the path we can start the service using the following command ./startup.sh**

**Instead of this one we can create a a soft link to start or stop the service from anywhere (not only in the path directory)**

**ln -s /opt/apache-tomcat-8.5.49/bin/startup.sh /usr/local/bin/tomcatup**

**ln -s /opt/apache-tomcat-8.5.49/bin/shutdown.sh/usr/local/bin/tomcatdown**

1. **so making a link to run the service from anywhere using the command called tomcatup**

**tomcatup**

**ps –ef | grep tomcat-**

1. **Now it is running in the default port 8080. But I want to change the port to 8090. For that go back to tomcat directory**

**ls**

**cd ..**

**cd conf**

**vi server.xml**

1. **Change the connector port to 8090 from 8080. Next restart the service**

**tomcatdown**

**ps -ef | grep tomcat-**

**Now check in the web using the publicip:8090**

**To login manager app. It will show the manager will be run in the same machine. But we are trying in another machine.**

**403 access denied**

1. **You'll need to edit the Manager's context.xml file.**

**find / -name context.xml**

1. **Usually you will find under the webapps**

**vi /opt/apache-tomcat-8.5.49/webapps/host-manager/META-INF/context.xml**

**Comment the file by <!-- -->**

**Likewise comment the other file <!-- -- >. In the value statement.**

**Enter to the manager app** **It will ask the username and password. So get into the tomcat-users.xml file**

**vi tomcat users.xml**

1. **Use this following data in the comment section under tomcat user**

**<role rolename="manager-gui"/>**

**<role rolename="manager-script"/>**

**<role rolename="manager-jmx"/>**

**<role rolename="manager-status"/>**

**<role rolename="admin-gui"/>**

**<role rolename="admin-script"/>**

**<user username="admin" password="admin" roles="manager-gui,manager-script,manager-jmx,manager-status,admin-gui,admin-script"/>**

**tomcatdown**

**tomcatup**

**JENKINS**

1. **To set the java home path (permanent)**

**vi .bash\_profile**

1. **Setting the home path for java (as same like below)**

**JAVA\_HOME=/usr/lib/jvm/java-1.8.0.161-0.b14.el7\_4.x86\_64**

**PATH=$PATH:$JAVA\_HOME:$HOME/bin**

**export PATH**

**Check the path for java using echo command**

**echo $PATH**

1. **Then move to duplicate session and check the path again, it will show the new java home path for java**
2. **Install Jenkins**

**sudowget -O /etc/yum.repos.d/jenkins.repohttp://pkg.jenkins-ci.org/redhat/jenkins.repo**

**rpm --import https://pkg.jenkins.io/redhat/jenkins.io.key**

**yum install jenkins -y**

1. **Jenkins installation completed]**

**service jenkins status**

**service jenkins start**

1. **To change the port number of Jenkins**

**sudo vi /etc/sysconfig/Jenkins**

1. **In the Jenkins port change to the required port number**

**Sudo service Jenkins restart**