Setup Tomcat Server

- Setup a Linux EC2 Instance
- Install Java
- Configure Tomcat
- Start Tomcat Server
- Access Web UI on port 8080















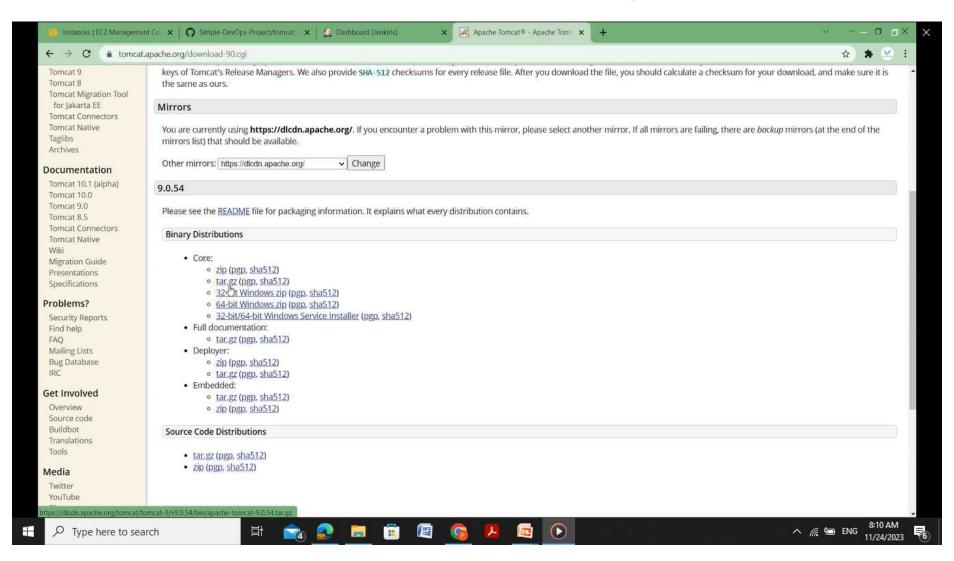




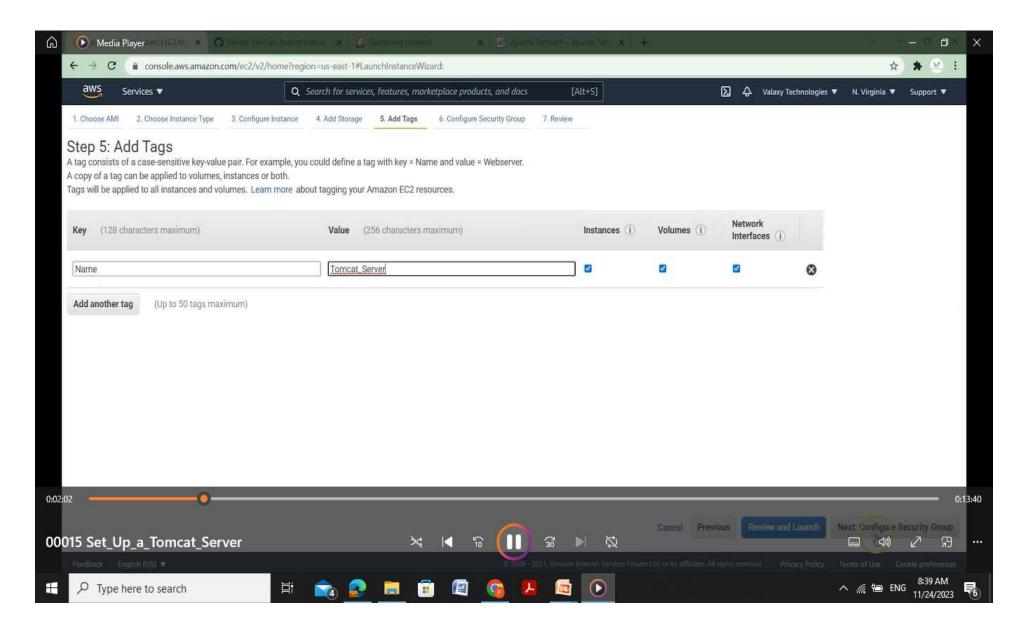


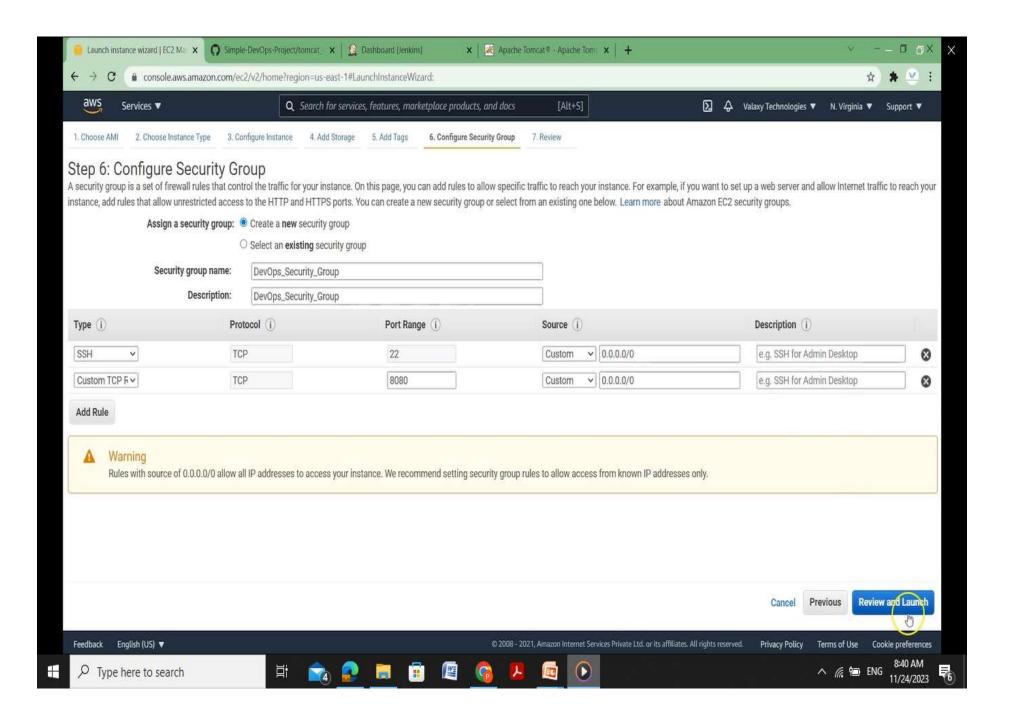


Goto-> tomcat server->binary distributions->tar.gz file

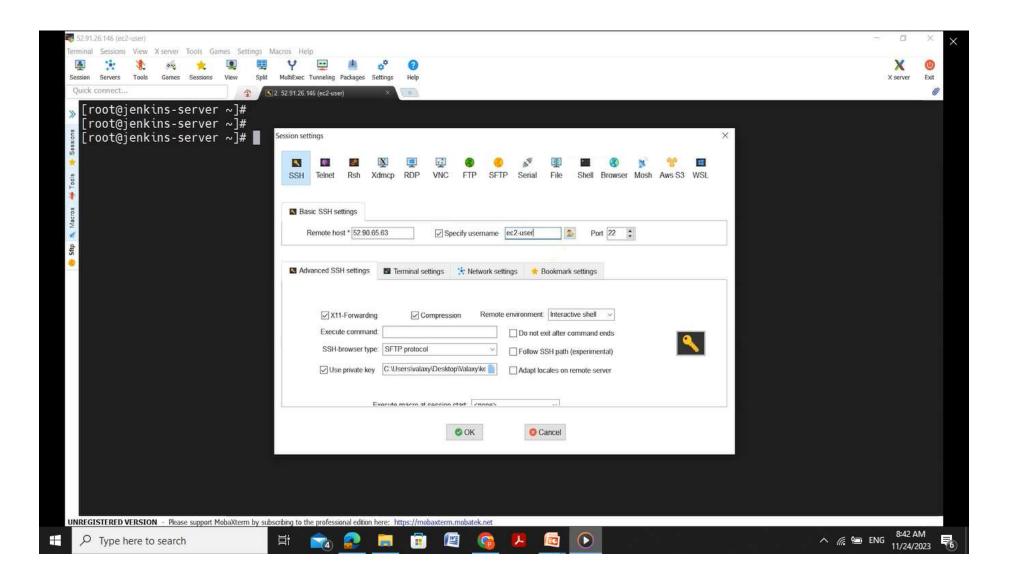


Launch new ec2 instance with modifications to add tags and security group





Copy the public IP from the instance and start ssh in mobaxterm



Now change to root directory and install java

Install Java

```
yum install java-1.8*
```

Install Tomcat

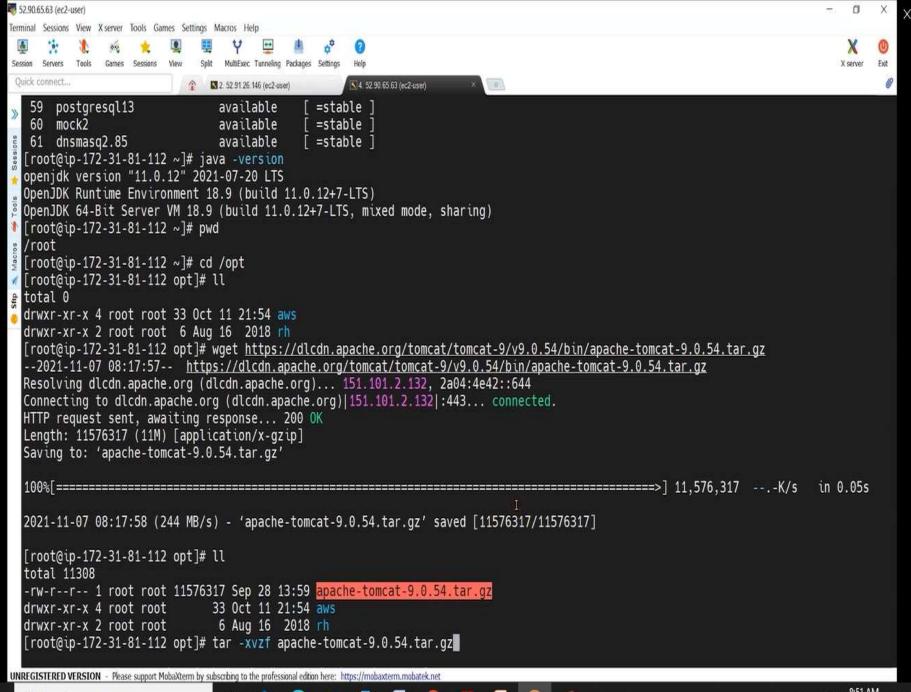
```
sudo su -

cd /

cd /opt

#Download tomcat binary
wget https://dlcdn.apache.org/tomcat/tomcat-9/v9.0.55/bin/apache-
tomcat-9.0.55.tar.gz

#unzip tomcat binary
tar -zvxf apache-tomcat-9.0.55.tar.gz
```













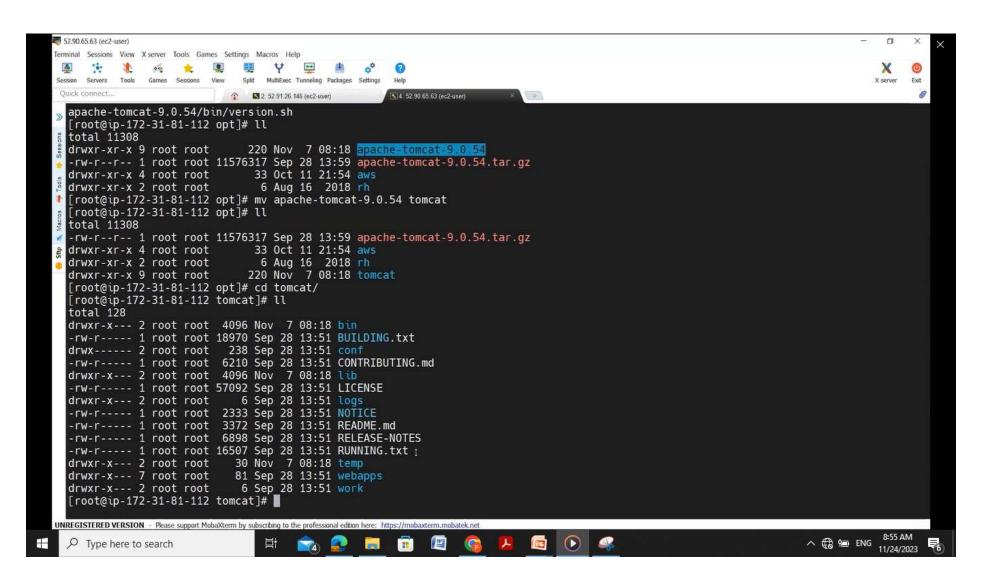




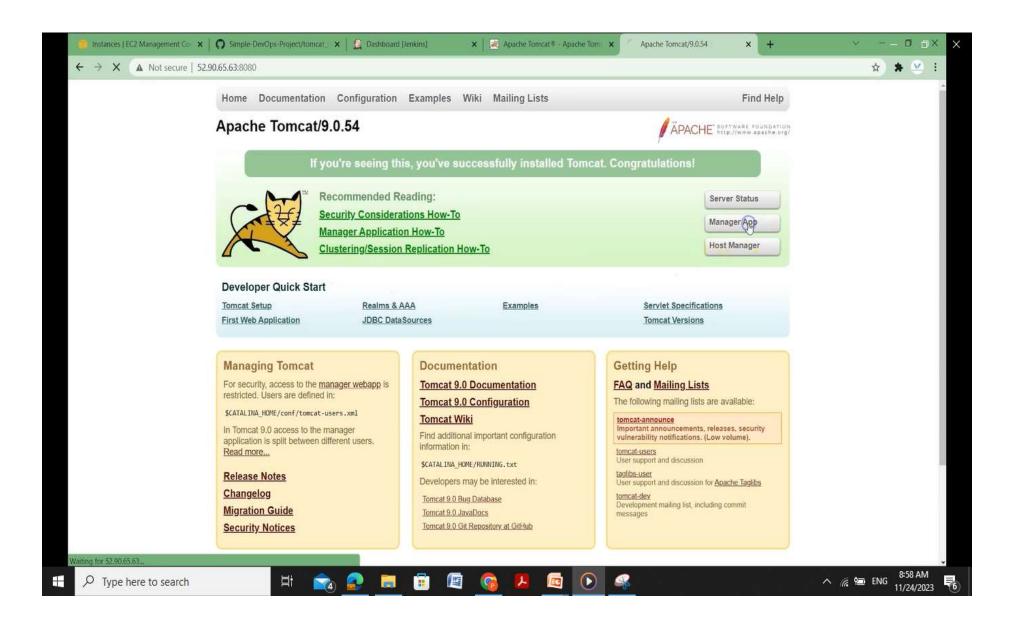




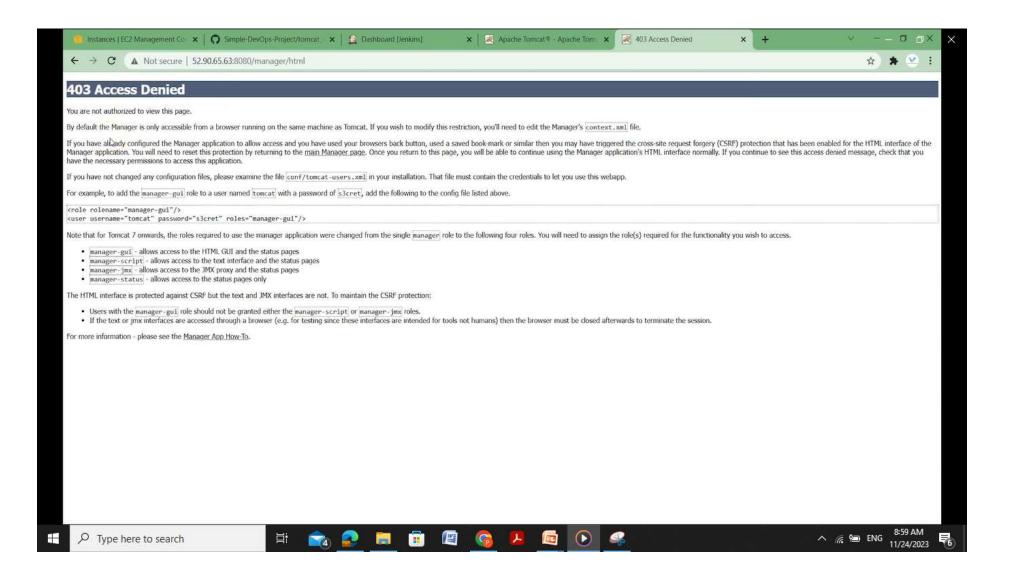
Move the tomcat -9.0.54 to just tomcat and move to bin directory



Check for tomcat installation by using the public IP and the local port address 8080



Now got to manager app present on the right top corner which should result in error



So we need to edit the context.xml file in order to rectify the error. Do the following steps by moving to tomcat

```
[root@up-172-31-81-112 bun]# cd ../..
[root@ip-172-31-81-112 opt]# pwd
/opt
[root@ip-172-31-81-112 opt]# ll
total 11308
-rw-r--r-- 1 root root 11576317 Sep 28 13:59 apache-tomcat-9.0.54.tar.gz
drwxr-xr-x 4 root root 33 Oct 11 21:54 aws
drwxr-xr-x 2 root root 6 Aug 16 2018 rh
drwxr-xr-x 9 root root 220 Nov 7 08:18 tomcat
[root@ip-172-31-81-112 opt]# cd tomcat/
[root@ip-172-31-81-112 tomcat]# find / -name context.xml
/opt/tomcat/conf/context.xml
/opt/tomcat/webapps/examples/META-INF/context.xml
/opt/tomcat/webapps/host-manager/META-INF/context.xml
/opt/tomcat/webapps/manager/META-INF/context.xml
[root@ip-172-31-81-112 tomcat]# vi /opt/tomcat/webapps/host-manager/META-INF/context.xml
```

Comment out the value class name with <!- - and --> as shown below the save and quit using wq

```
<Valve className="org.apache.catalina.valves.RemoteAddrValve"
allow="127\.\d+\.\d+\.\d+|::1|0:0:0:0:0:0:0:0:/</pre>
```

Repeat the same in another manager app

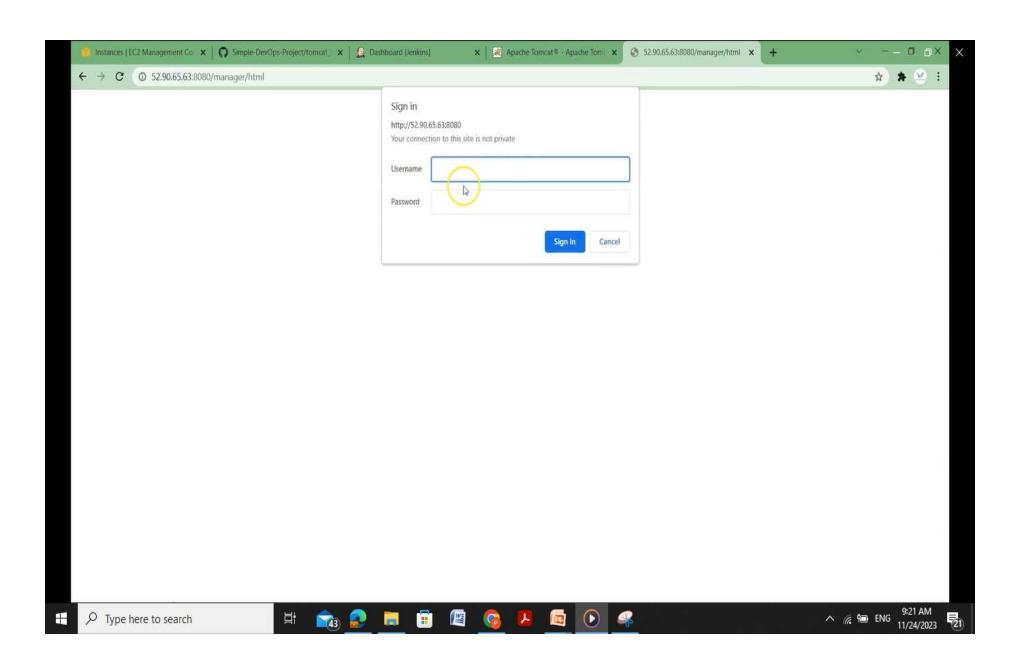
```
/opt/tomcat/context.xml
/opt/tomcat/webapps/examples/META-INF/context.xml
/opt/tomcat/webapps/host-manager/META-INF/context.xml
/opt/tomcat/webapps/manager/META-INF/context.xml
[root@ip-172-31-81-112 tomcat]# vi /opt/tomcat/webapps/host-manager/META-INF/context.xml
[root@ip-172-31-81-112 tomcat]# vi /opt/tomcat/webapps/manager/META-INF/context.xml
```

Comment out the value class name with <!- - and --> as shown below the save and quit using wq

```
<Valve className="org.apache.catalina.valves.RemoteAddrValve"
allow="127\.\d+\.\d+\.\d+|::1|0:0:0:0:0:0:0:0:" />
```

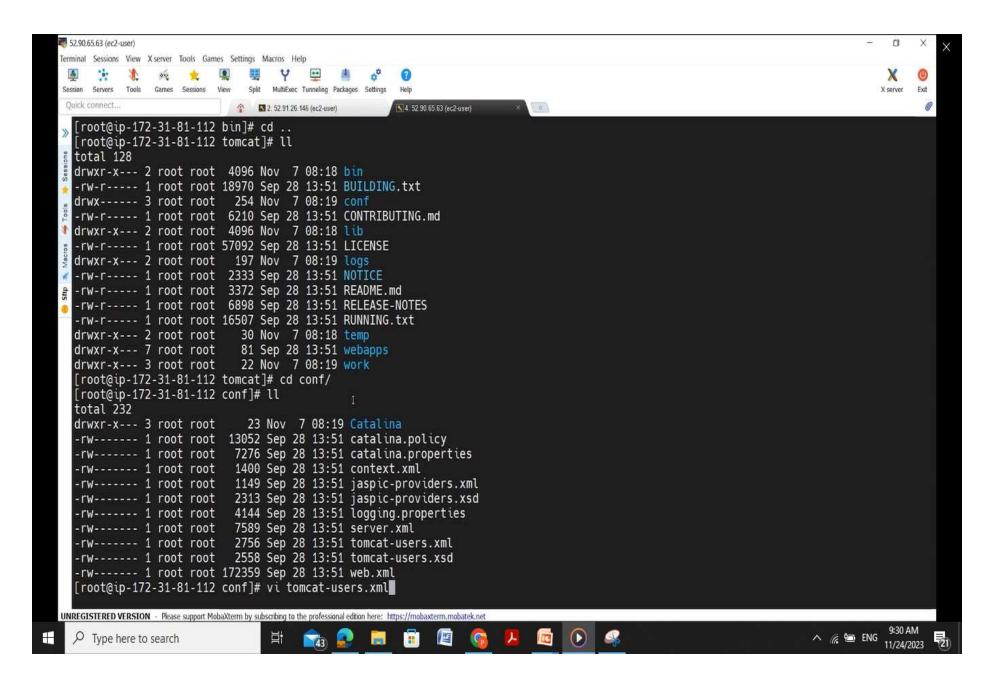
after the changes restart the tom cat server

- move to bin 'cd bin' and then ./shutdown.sh
- Then again start tomcat by the command ./startup.sh
- Then again try to run the tomcat server by giving the url with public IP and local host address 8080
- It should then ask for the credentials



So for credentials we have to gofor 'conf' directory in tomcat

- cd conf
- Now we need to edit the tomcat users.xml file using the command vi tomcat-users.xml



After the filed opened then goto end of the file by pressing 'shiftg'

```
#Add below lines between <tomcat-users> tag

<role rolename="manager-gui"/>
  <role rolename="manager-jmx"/>
  <role rolename="manager-status"/>
   <user username="admin" password="admin" roles="manager-gui,manager-script,manager-jmx,manager-status"/>
   <user username="deployer" password="deployer" roles="manager-script"/>
   <user username="tomcat" password="s3cret" roles="manager-gui"/>
   <user username="tomcat" password="s3cret" roles="manager-gui"/>
```

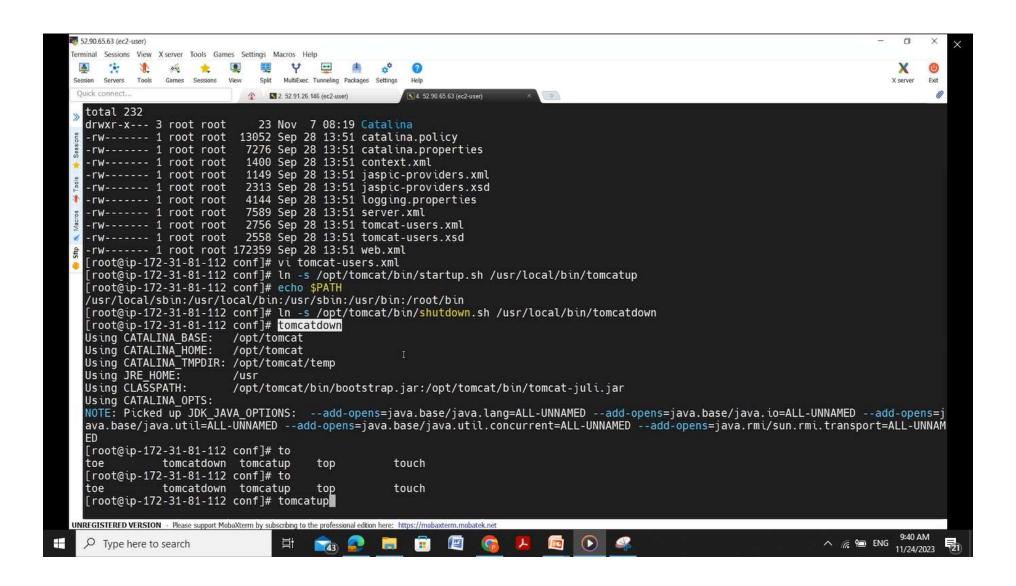
After adding the lines to the file save and quit then again restart the tom cat server

Create link files for Tomcat Server up and Down

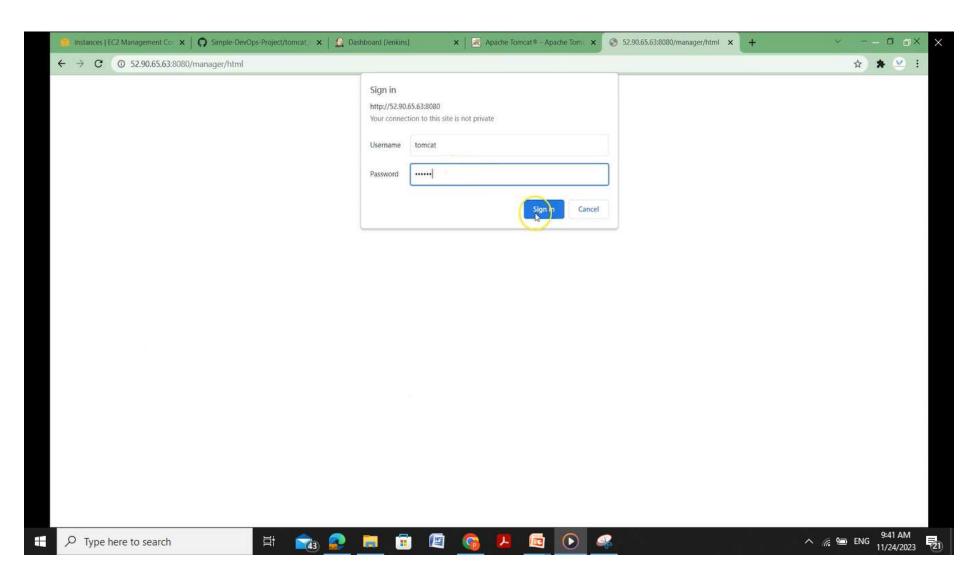
```
ln -s /opt/apache-tomcat-9.0.55/bin/startup.sh
/usr/local/bin/tomcatup
```

ln -s /opt/apache-tomcat-9.0.55/bin/shutdown.sh
/usr/local/bin/tomcatdown

Then use tomcatdown to shutdown and next tomcatup to restart



Now again the run tomcat using the ip and local port 8080 in url and see it asks for user id and password give the credentials as tomcat and s3cret



We can see the tomcat runs successfully

