

Installing and Configuring Apache tomcat server on Linux

- MANOJ K

INSTALLED JAVA USING - yum install java-1.8*

```

→ ↺ 🔍 https://us-east-2.console.aws.amazon.com/ec2/network/connect/ec2-user?ip=0cd072f4538f38224
java-1.8.0-openjdk-headless.x86_64 1:1.8.0.282.b08-1.amzn2.0.1
java-1.8.0-openjdk-javadoc.noarch 1:1.8.0.282.b08-1.amzn2.0.1
java-1.8.0-openjdk-javadoc-zip.noarch 1:1.8.0.282.b08-1.amzn2.0.1
java-1.8.0-openjdk-src.x86_64 1:1.8.0.282.b08-1.amzn2.0.1

Dependency Installed:
GConf2.x86_64 0:3.2.6-8.amzn2.0.2
avahi-libs.x86_64 0:0.6.31-20.amzn2
 cups-lips.x86_64 1:1.6.3-1.amzn2
 dejavu-sans-fonts.noarch 0:2.33.6.amzn2
 fridibi.x86_64 0:1.0.2-1.amzn2.1
 graphite2.x86_64 0:1.3.10-1.amzn2.0.2
 harfbuzz.x86_64 0:1.7.5-2.amzn2
 java-atk-wrapper.x86_64 0:0.30.4-5.amzn2.0.2
 libXss.x86_64 0:1.2.2-2.amzn2.0.2
 libXau.x86_64 0:1.0.8-2.1.amzn2.0.2
 libXdamage.x86_64 0:1.1.4-4.1.amzn2.0.2
 libXft.x86_64 0:2.3.2-2.amzn2.0.2
 libXrandr.x86_64 0:1.5.2.amzn2.0.3
 libXt.x86_64 0:1.1.4-2.1.amzn2.0.2
 libXtst.x86_64 0:1.1.4-1.amzn2.0.2
 libXxf86vm.x86_64 0:1.1.4-1.amzn2.0.2
 libglvnd.x86_64 1:1.0.1-0.1.git5baae15.amzn2.0.1
 libthai.x86_64 0:0.1.14-9.amzn2.0.2
 libxcb.x86_64 0:1.12.1.amzn2.0.2
 libcrypt-tools.x86_64 0:0.1.17-2.amzn2.0.2
 mesa-libGL.x86_64 0:18.3.4-5.amzn2.0.1
 mesa-libGlx.x86_64 0:18.3.4-5.amzn2.0.1
 pango.x86_64 0:1.42.4.amzn2
 polkit.x86_64 0:0.112-26.amzn2
 python-lxml.x86_64 0:3.2.1-4.amzn2.0.2
 xorg-x11-font-utils.x86_64 1:7.5-21.amzn2

also-lib.x86_64 0:1.1.4-1.2.amzn2
 cairo.x86_64 0:1.15.12-4.amzn2
 dbus-glib.x86_64 0:0.100-7.2.amzn2
 fontconfig.x86_64 0:12.13.0-4.3.amzn2
 gdk-pixbuf2.x86_64 0:2.36.12-3.amzn2
 gtk-update-icon-cache.x86_64 0:3.22.30-3.amzn2
 hicolor-icon-theme.noarch 0:0.12-7.amzn2
 jupyterlab.x86_64 0:3.4.1-11.amzn2
 libXcomposite.x86_64 0:1.0.4-4.1.amzn2.0.2
 libXext.x86_64 0:1.3.3-3.amzn2.0.2
 libXi.x86_64 0:1.7.9-1.amzn2.0.2
 libXrender.x86_64 0:0.9.10-1.amzn2.0.2
 libxfixes.x86_64 0:1.1.4-2.1.amzn2.0.2
 libXdmcp.x86_64 0:1.1.3-3.amzn2.0.2
 libglvnd-egl.x86_64 1:1.0.1-0.1.git5baae15.amzn2.0.1
 libwayland-client.x86_64 0:1.17.0-1.amzn2
 libxshmfence.x86_64 0:1.2-1.2.amzn2.0.2
 mesa-libEGL.x86_64 0:18.3.4-5.amzn2.0.1
 mesa-libGallium.x86_64 0:18.3.4-5.amzn2.0.1
 pcsc-lite-libs.x86_64 0:1.8.7-2.amzn2
 polkit-pkla-compat.x86_64 0:0.1-4.amzn2.0.2
 tkmtfidf.x86_64 0:3.0.9-42.amzn2.0.2
 xorg-x11-fonts-Type1.noarch 0:7.5-9.amzn2

atk.x86_64 0:2.22.0-3.amzn2.0.2
 copy-jdk-configs.noarch 0:3.3-10.amzn2
 dejavu-fonts-common.noarch 0:2.33-6.amzn2
 fontpackages-filesystem.noarch 0:1.44-8.amzn2
 giflib.x86_64 0:4.1.6-9.amzn2.0.2
 gtk2.x86_64 0:2.24.31-1.amzn2.0.2
 Jasper-Libs.x86_64 0:1.900.1-33.amzn2
 libICE.x86_64 0:1.0.9-9.amzn2.0.2
 libX11.x86_64 0:1.6.7-3.amzn2
 libXcursor.x86_64 0:1.1.15-1.amzn2
 libXfixes.x86_64 0:0.5-0.3.amzn2.0.2
 libXinerama.x86_64 0:1.1.3-2.1.amzn2.0.2
 libXtst.x86_64 0:1.2.3-1.amzn2.0.2
 libxfixes-devel.x86_64 0:0.5-0.3.amzn2.0.2
 libfontenc.x86_64 0:1.1.3-3.amzn2.0.2
 libglvnd-glx.x86_64 1:1.0.1-0.1.git5baae15.amzn2.0.1
 libwayland-server.x86_64 0:1.17.0-1.amzn2
 libxslt.x86_64 0:1.1.28-6.amzn2
 mesa-libGL.x86_64 0:18.3.4-5.amzn2.0.1
 mozilla-build.x86_64 0:0.17.0-0-20.amzn2.0.1
 pixman.x86_64 0:0.34.0-1.amzn2.0.2
 python-javapackages.noarch 0:3.4.1-11.amzn2
 tzdata.noarch 0:2020d-2.amzn2
 xorg-x11-utils.x86_64 0:7.5-23.amzn2

[Complete]
[root@ip-172-31-2-223 ec2-user]# opt

bash: opt: command not found
[root@ip-172-31-2-223 ec2-user]# cd /opt
[ash] cd: opt: No such file or directory
[root@ip-172-31-2-223 ec2-user]# cd /opt
[root@ip-172-31-2-223 opt]# ls
aws_rh
[root@ip-172-31-2-223 opt]# wget https://mirrors.estointernet.in/apache/tomcat/tomcat-8/v8.5.64/bin/apache-tomcat-8.5.64.tar.gz

iOcd072f4538f38224 (Tomcat-server)
Public IPs: 15.186.45.149 Private IPs: 172.31.2.223
```

DOWNLOAD AND EXTRACTION OF TOMCAT SERVER

tar -zxvf apache-tomcat-8.5.61.tar.gz

```
https://us-east-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0cd072f4538f38224
libxcb.x86_64 0:1.12-1.amzn2.0.2      libxshmfence.x86_64 0:1.2-1.amzn2.0.2      libxslt.x86_64 0:1.1.28-6.amzn2
lsctp-tools.x86_64 0:1.0.17-2.amzn2.0.2  mesa-libEGL.x86_64 0:18.3.4-5.amzn2.0.1      mesa-libGL.x86_64 0:18.3.4-5.amzn2.0.1
mesa-libgbm.x86_64 0:18.3.4-5.amzn2.0.1  mesa-libglapi.x86_64 0:18.3.4-5.amzn2.0.1      mozjs17.x86_64 0:17.0.0-20.amzn2.0.1
pango.x86_64 0:1.42.4-4.amzn2           pcsc-lite-libs.x86_64 0:1.8-7.amzn2          pixman.x86_64 0:0.34.0-1.amzn2.0.2
polkit.x86_64 0:0.112-26.amzn2          polkit-pkla-compact.x86_64 0:0.1-4.amzn2.0.2    python-javapackages.noarch 0:3.4.1-11.amzn2
python-lxml.x86_64 0:3.2.1-4.amzn2.0.2   ttwkfdir.x86_64 0:3.0.9-42.amzn2.0.2         tzdata-java.noarch 0:2020d-2.amzn2
xorg-x11-font-utils.x86_64 1:7.5-21.amzn2  xorg-x11-fonts-Type1.noarch 0:7.5-9.amzn2         xorg-x11-utils.x86_64 0:7.5-23.amzn2

Complete!
[root@ip-172-31-2-223 ec2-user]# opt
bash: opt: command not found
[root@ip-172-31-2-223 ec2-user]# cd \opt
bash: cd: opt: No such file or directory
[root@ip-172-31-2-223 ec2-user]# cd /opt
[root@ip-172-31-2-223 opt]# ls
aws rh
[root@ip-172-31-2-223 opt]# wget https://mirrors.estointernet.in/apache/tomcat/tomcat-8/v8.5.64/bin/apache-tomcat-8.5.64.tar.gz
--2021-03-20 06:21:13-- https://mirrors.estointernet.in/apache/tomcat/tomcat-8/v8.5.64/bin/apache-tomcat-8.5.64.tar.gz
Resolving mirrors.estointernet.in (mirrors.estointernet.in)... 43.255.166.254, 2403:8940:3:1::f
Connecting to mirrors.estointernet.in (mirrors.estointernet.in)[43.255.166.254]:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 10520844 (10M) [application/octet-stream]
Saving to: 'apache-tomcat-8.5.64.tar.gz'

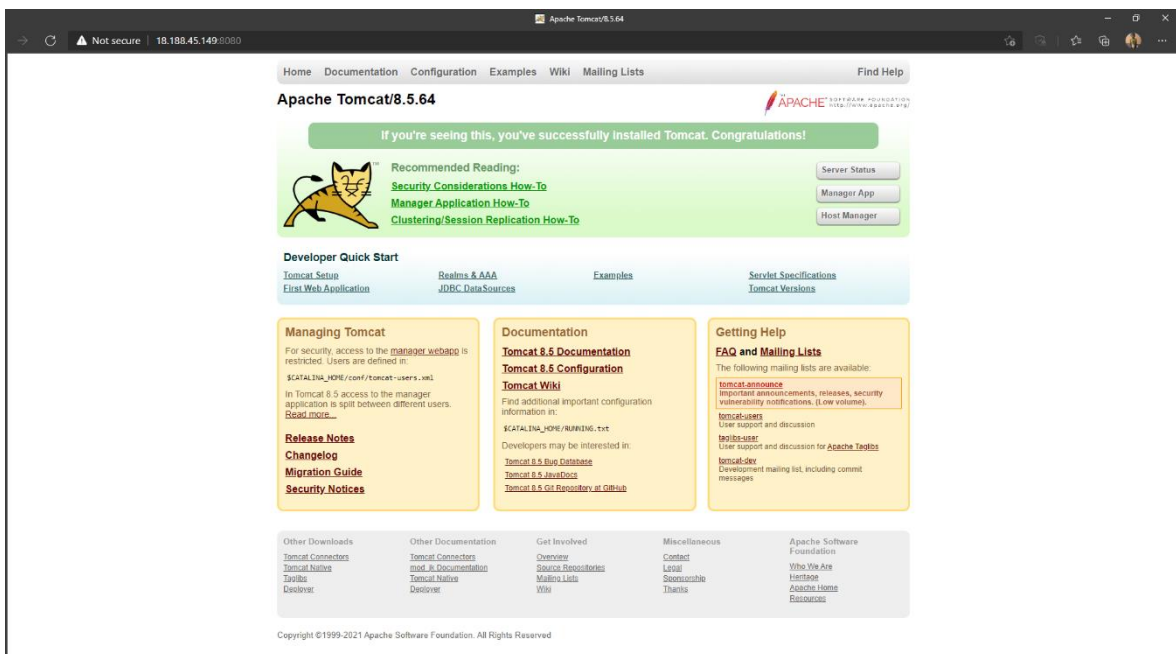
100%[=====] 10,520,844  2.87MB/s   in 3.8s

2021-03-20 06:21:18 (2.66 MB/s) - 'apache-tomcat-8.5.64.tar.gz' saved [10520844/10520844]

[root@ip-172-31-2-223 opt]# ls
apache-tomcat-8.5.64.tar.gz aws rh
[root@ip-172-31-2-223 opt]# tar -zxvf apache-tomcat-8.5.61.tar.gz
tar (child): apache-tomcat-8.5.61.tar.gz: Cannot open: No such file or directory
tar (child): Error is not recoverable: exiting now
tar: Child returned status 2
tar: Error is not recoverable: exiting now
[root@ip-172-31-2-223 opt]# tar -zxvf apache-tomcat-8.5.64.tar.gz
apache-tomcat-8.5.64/conf/
apache-tomcat-8.5.64/conf/catalina.policy
apache-tomcat-8.5.64/conf/catalina.properties
apache-tomcat-8.5.64/conf/context.xml

i-0cd072f4538f38224 (Tomcat-server)
Public IPs: 18.188.45.149 Private IPs: 172.31.2.223
```

STARTED THE TOMCAT SERVER AFTER CREATION OF SOFTLINK



CHANGING OF PORT 8080 TO 8090

```
https://us-east-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0cd072f4538f38224

apache-tomcat-8.5.64/webapps/manager/images/tomcat.svg
apache-tomcat-8.5.64/webapps/manager/index.jsp
apache-tomcat-8.5.64/webapps/manager/status.rsd
apache-tomcat-8.5.64/webapps/manager/xforn.xml
apache-tomcat-8.5.64/bin/catalina.sh
apache-tomcat-8.5.64/bin/ciphers.sh
apache-tomcat-8.5.64/bin/configtest.sh
apache-tomcat-8.5.64/bin/daemon.sh
apache-tomcat-8.5.64/bin/digest.sh
apache-tomcat-8.5.64/bin/setclasspath.sh
apache-tomcat-8.5.64/bin/shutdown.sh
apache-tomcat-8.5.64/bin/startup.sh
apache-tomcat-8.5.64/bin/tool-wrapper.sh
apache-tomcat-8.5.64/bin/version.sh
[root@ip-172-31-2-223 opt]# ls
apache-tomcat-8.5.64  apache-tomcat-8.5.64.tar.gz  aws  rh
[root@ip-172-31-2-223 opt]# cd apache-tomcat-8.5.64
[root@ip-172-31-2-223 apache-tomcat-8.5.64]# ls
bin  BUILDING.txt  conf  CONTRIBUTING.md  lib  LICENSE  logs  NOTICE  README.md  RELEASE-NOTES  RUNNING.txt  temp  webapps  work
[root@ip-172-31-2-223 apache-tomcat-8.5.64]# cd bin
[root@ip-172-31-2-223 bin]# ls
bootstrap.jar  catalina.bat  catalina-tasks.xml  commons-daemon.jar  commons-daemon-native.tar.gz  configtest.sh  digest.sh  shutdown.bat  startup.sh  tool-wrapper.bat  version.sh
catalina.sh  ciphers.sh  configtest.bat  daemon.sh  setclasspath.bat  shutdown.sh  tomcat-juli.jar  tool-wrapper.sh  version.bat
[root@ip-172-31-2-223 bin]# chmod 777 startup.sh
[root@ip-172-31-2-223 bin]# chmod 777 shutdown.sh
[root@ip-172-31-2-223 bin]# find / -name startup.sh
/opt/apache-tomcat-8.5.64/bin/startup.sh
[root@ip-172-31-2-223 bin]# ln -s /opt/apache-tomcat-8.5.64/bin/startup.sh /usr/bin/tomcatup
[root@ip-172-31-2-223 bin]# ln -s /opt/apache-tomcat-8.5.64/bin/shutdown.sh /usr/bin/tomcatdown
[root@ip-172-31-2-223 bin]# ps -ef | grep tomcat
root      4085   3723   0 06:25 pts/0    00:00:00 grep  --color=auto tomcat
[root@ip-172-31-2-223 bin]# tomcatup
Using CATALINA_BASE:   /opt/apache-tomcat-8.5.64
Using CATALINA_HOME:   /opt/apache-tomcat-8.5.64
Using CATALINA_TMPDIR: /opt/apache-tomcat-8.5.64/temp
Using JRE_HOME:        /
Using CLASSPATH:       /opt/apache-tomcat-8.5.64/bin/bootstrap.jar:/opt/apache-tomcat-8.5.64/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
[root@ip-172-31-2-223 bin]#
```

i-0cd072f4538f38224 (Tomcat-server)

Public IPs: 18.186.45.149 Private IPs: 172.31.2.223

```
https://us-east-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0cd072f4538f38224

<!-- Global JNDI resources
Documentation at /docs/jndi-resources-howto.html
-->
<GlobalNamingResources>
  <!-- Editable user database that can also be used by
  UserDatabaseRealm to authenticate users
  -->
  <Resource name="UserDatabase" auth="Container"
    type="org.apache.catalina.UserDatabase"
    description="User database that can be updated and saved"
    factory="org.apache.catalina.users.MemoryUserDatabaseFactory"
    pathname="conf/tomcat-users.xml" />
</GlobalNamingResources>

<!-- A "Service" is a collection of one or more "Connectors" that share
a single "Container" Note: A "Service" is not itself a "Container",
so you may not define subcomponents such as "Valves" at this level.
Documentation at /docs/config/service.html
-->
<Service name="Catalina">

  <!--The connectors can use a shared executor, you can define one or more named thread pools-->
  <!--
  <Executor name="tomcatThreadPool" namePrefix="catalina-exec-"
    maxThreads="150" minSpareThreads="4"/>
  -->

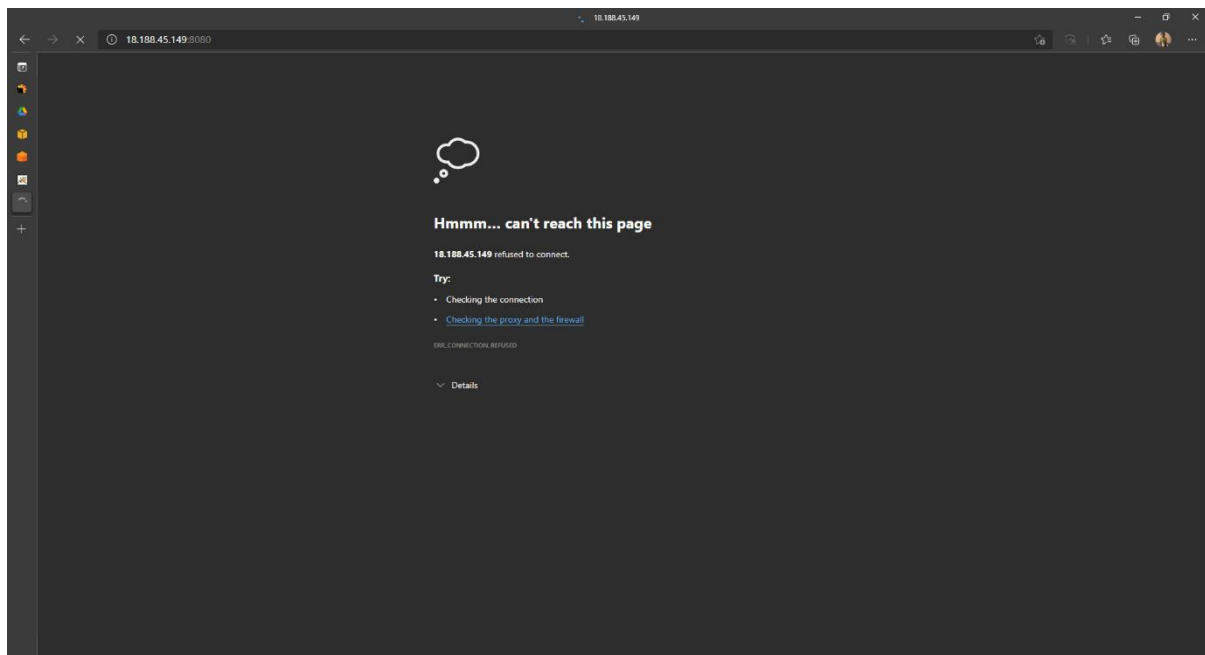
  <!-- A "Connector" represents an endpoint by which requests are received
  and responses are returned. Documentation at :
  Java HTTP  Connector: /docs/config/http.html
  Java AJP  Connector: /docs/config/ajp.html
  APR (HTTP/AJP) Connector: /docs/apr.html
  Define a non-SSL/TLS HTTP/1.1 Connector on port 8080
  -->
  <Connector port="8090" protocol="HTTP/1.1"
    connectionTimeout="20000"
    redirectPort="8443" />

  <!-- A "Connector" using the shared thread pool-->
  <!--
  <Connector executor="tomcatThreadPool"
    port="8080" protocol="HTTP/1.1"
    connectionTimeout="20000"
    redirectPort="8443" />
  -->
-- INSERT --
```

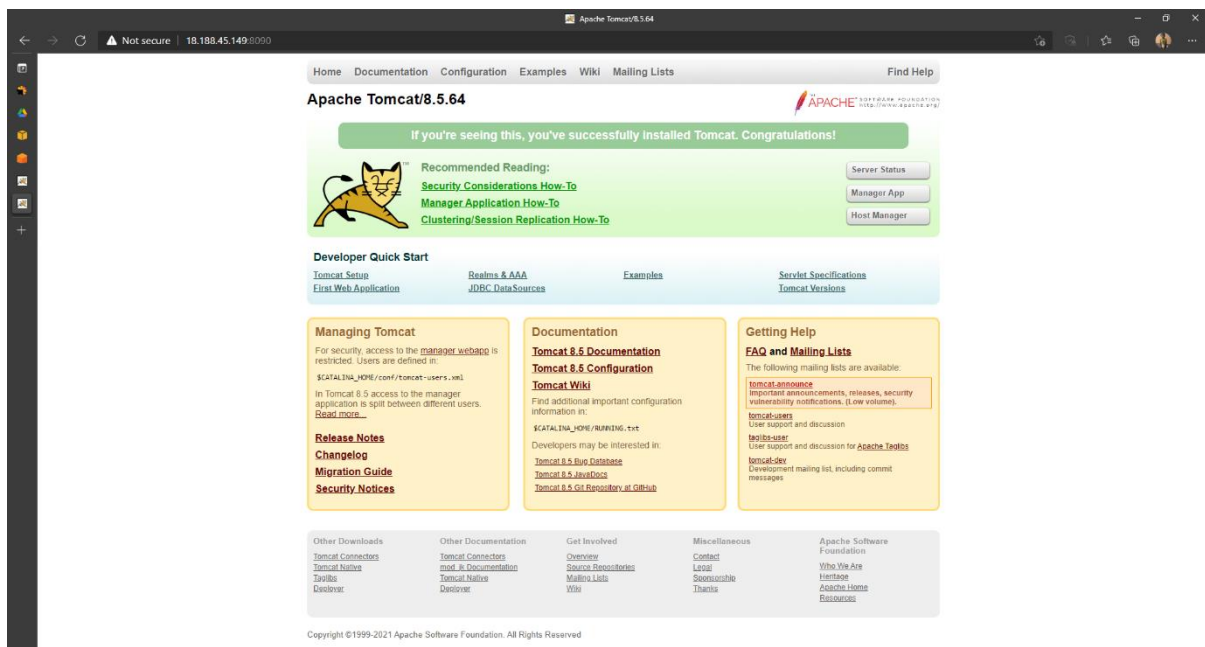
i-0cd072f4538f38224 (Tomcat-server)

Public IPs: 18.186.45.149 Private IPs: 172.31.2.223

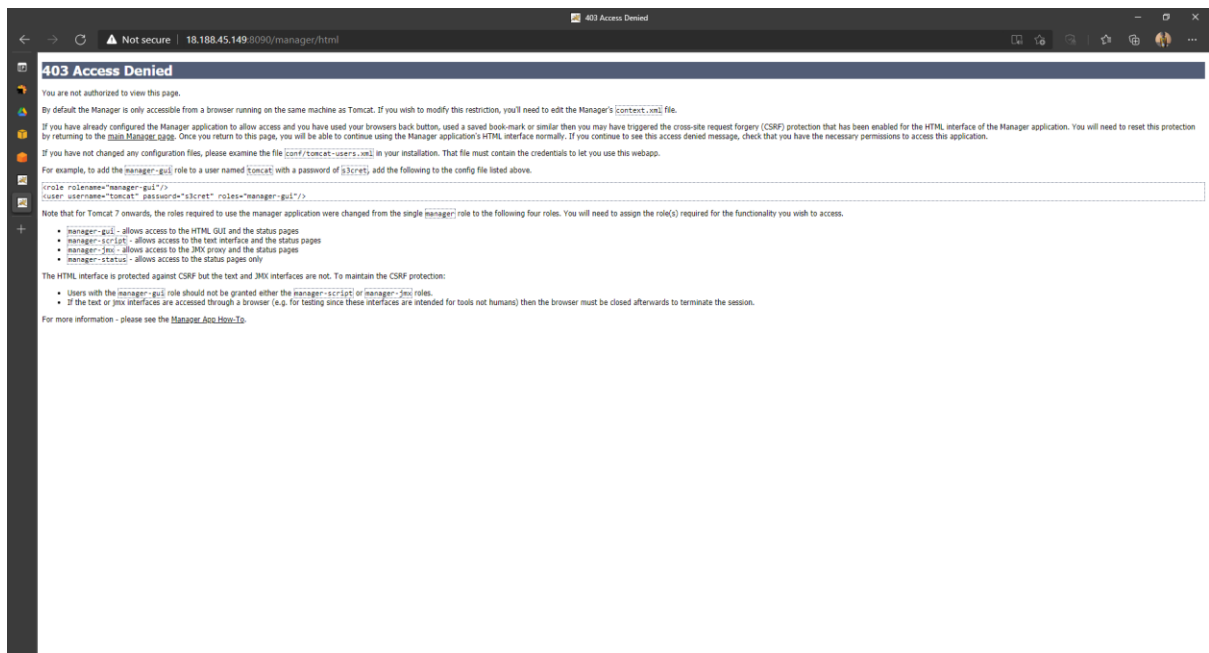
AFTER SHUTDOWN AND STARTUP FOR PORT 8080



IN PORT 8090

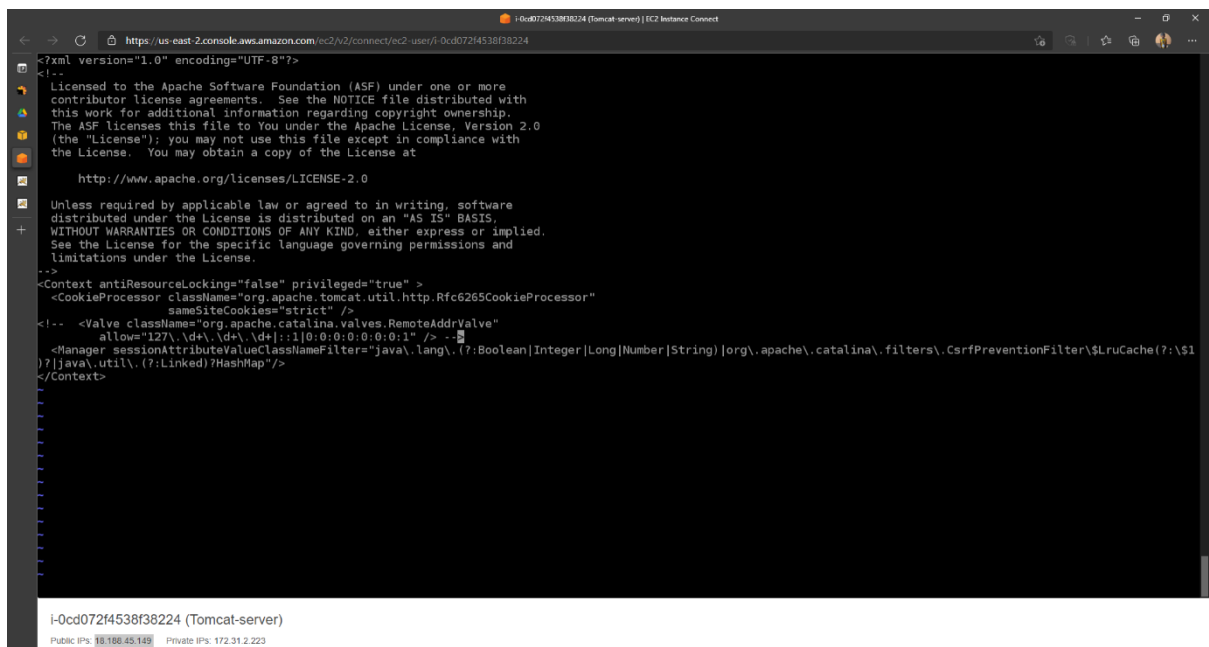


INITIALLY WE CANT ACCESS THE MANAGER PAGE

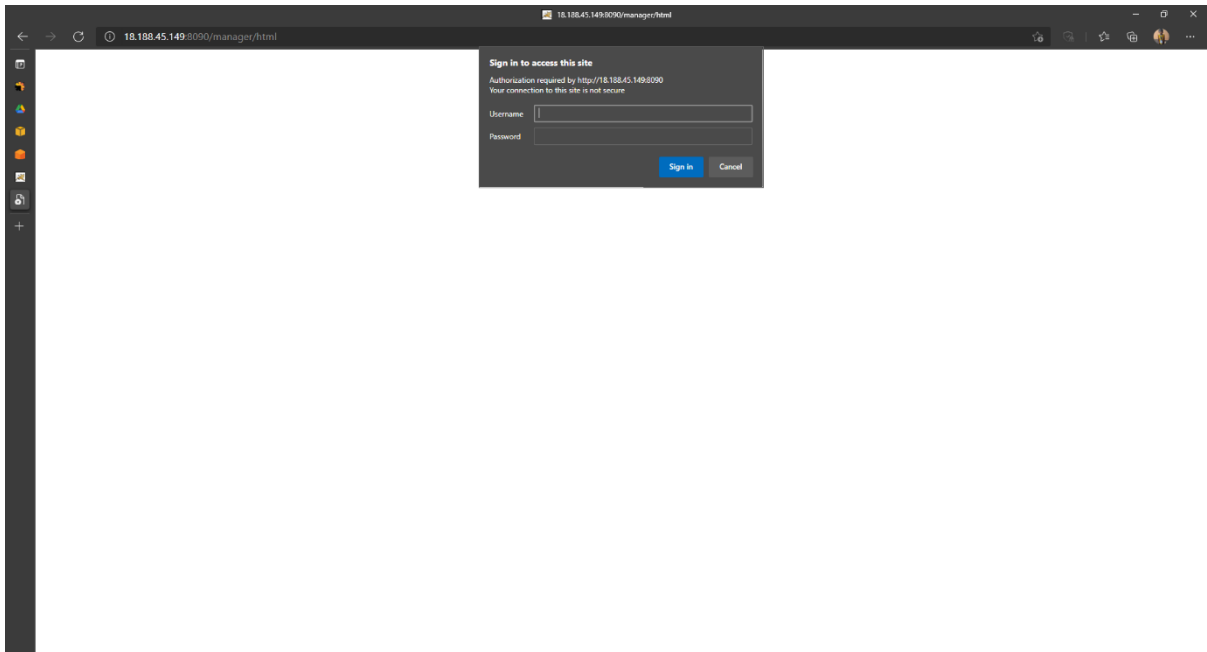


EDITING CONTEXT FILE

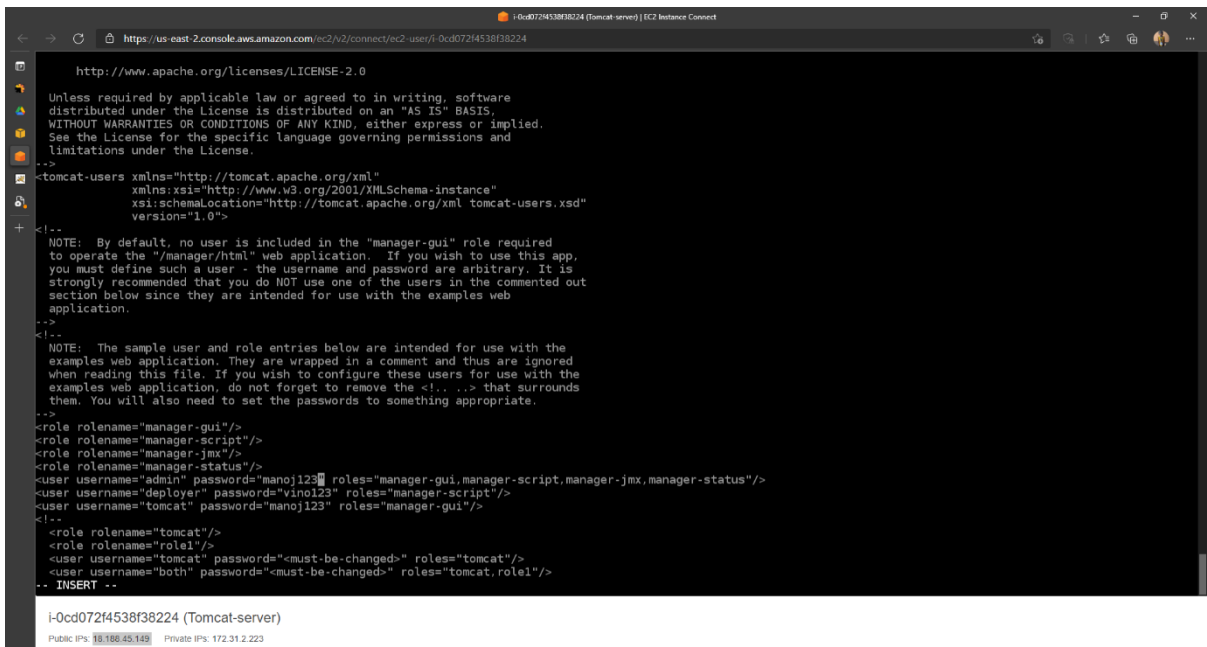
Commenting the value



NEED USERNAME AND PASSWORD



CREATING USER AND ROLES





RESTARTING THE TOMCAT SERVER

```
https://us-east-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/-0cd072f4538f38224

you must define such a user - the username and password are arbitrary. It is
strongly recommended that you do NOT use one of the users in the commented out
section below since they are intended for use with the examples web
application.
-->
<!--
NOTE: The sample user and role entries below are intended for use with the
examples web application. They are wrapped in a comment and thus are ignored
when reading this file. If you wish to configure these users for use with the
examples web application, do not forget to remove the <!-- ... --> that surrounds
them. You will also need to set the passwords to something appropriate.
-->
<role rolename="manager-gui"/>
<role rolename="manager-script"/>
<role rolename="manager-jmx"/>
<role rolename="manager-status"/>
<user username="admin" password="manoj123" roles="manager-gui,manager-script,manager-jmx,manager-status"/>
<user username="deployer" password="vino123" roles="manager-script"/>
<user username="tomcat" password="manoj123" roles="manager-gui"/>
<!--
<role rolename="tomcat"/>
<role rolename="role1"/>
<user username="tomcat" password="cmust-be-changed" roles="tomcat"/>
<user username="both" password="cmust-be-changed" roles="tomcat,role1"/>
"tomcat-users.xml" 51L 2537C written
[root@ip-172-31-2-223 conf]# tomcatdown
Using CATALINA_BASE: /opt/apache-tomcat-8.5.64
Using CATALINA_HOME: /opt/apache-tomcat-8.5.64
Using CATALINA_TMPDIR: /opt/apache-tomcat-8.5.64/temp
Using JRE_HOME: /
Using CLASSPATH: /opt/apache-tomcat-8.5.64/bin/bootstrap.jar:/opt/apache-tomcat-8.5.64/bin/tomcat-juli.jar
[root@ip-172-31-2-223 conf]# tomcatup
Using CATALINA_BASE: /opt/apache-tomcat-8.5.64
Using CATALINA_HOME: /opt/apache-tomcat-8.5.64
Using CATALINA_TMPDIR: /opt/apache-tomcat-8.5.64/temp
Using JRE_HOME: /
Using CLASSPATH: /opt/apache-tomcat-8.5.64/bin/bootstrap.jar:/opt/apache-tomcat-8.5.64/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
[root@ip-172-31-2-223 conf]#
```

i-0cd072f4538f38224 (Tomcat-server)
Public IPs: 18.188.45.149 Private IPs: 172.31.2.223



Tomcat Web Application Manager

Message:

Manager

List ApplicationsHTML Manager HelpManager HelpServer Status

Applications	Path	Version	Display Name	Running	Sessions	Commands
	/	None specified	Welcome to Tomcat	true	0	Start Stop Reload Undeploy Expire sessions with idle > 30 minutes
	/docs	None specified	Tomcat Documentation	true	0	Start Stop Reload Undeploy Expire sessions with idle > 30 minutes
	/examples	None specified	Servlet and JSP Examples	true	0	Start Stop Reload Undeploy Expire sessions with idle > 30 minutes
	/host-manager	None specified	Tomcat Host Manager Application	true	0	Start Stop Reload Undeploy Expire sessions with idle > 30 minutes
	/manager	None specified	Tomcat Manager Application	true	1	Start Stop Reload Undeploy Expire sessions with idle > 30 minutes

Deploy

Deploy directory or WAR file located on server

Context Path (required):

XML Configuration file path:

WAR or Directory path:

Deploy

WAR file to deploy

Select WAR file to uploadChoose FileNo file chosen

Deploy

Configuration