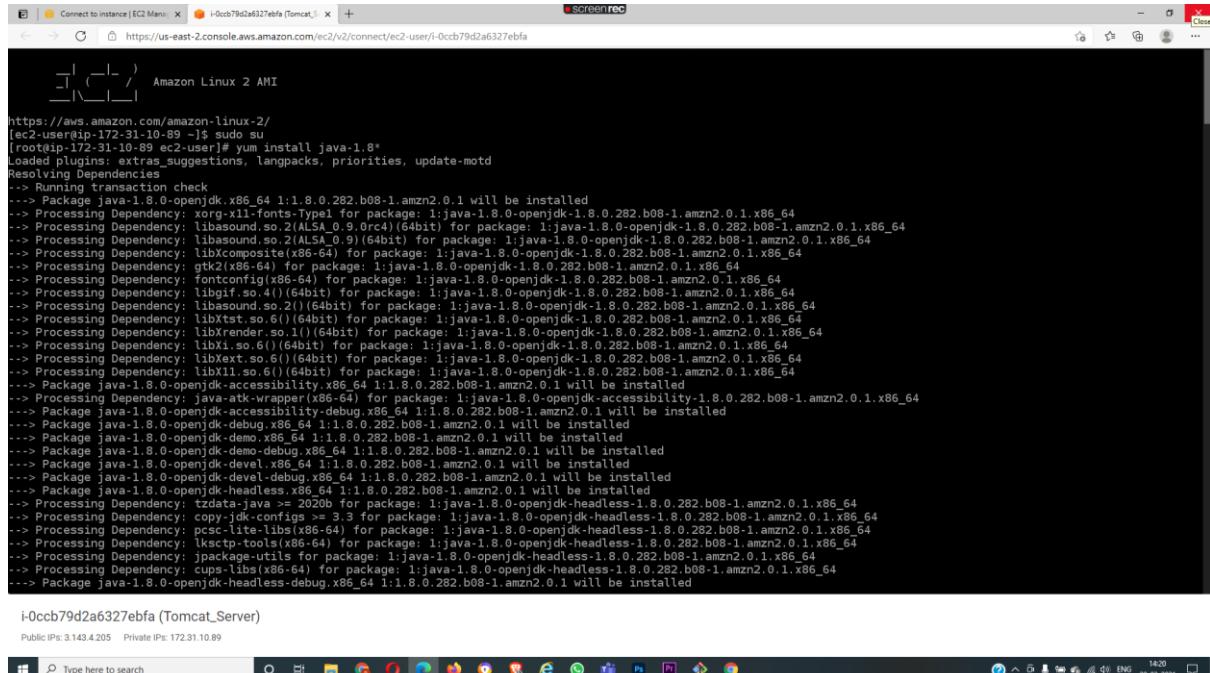


AWS PROJECT 6

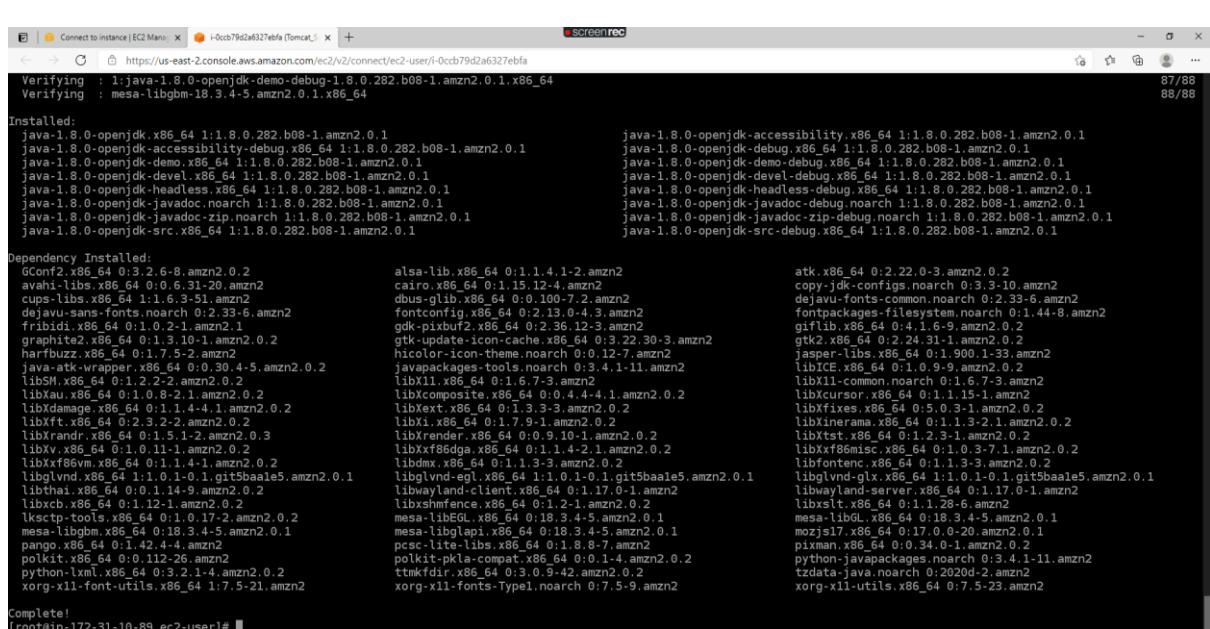
INSTALLING AND CONFIGURING APACHE TOMCAT SERVER ON LINUX

-PRUTHVI RAJ.M

INSTALLD JAVA USING – yum install java-1.8*



```
https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-10-89 ~]$ sudo su
[root@ip-172-31-10-89 ec2-user]# yum install java-1.8*
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Resolving Dependencies
--> Running transaction check
--> Package java-1.8.0-openjdk.x86_64 1:1.8.0.282.b08-1.amzn2.0.1 will be installed
--> Processing Dependency: xorg-x11-fonts-type1 for package: 1:java-1.8.0-openjdk-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Processing Dependency: libosmesa-dri.so.0(ALSA) 0:1.0.0+64bit for package: 1:java-1.8.0-openjdk-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Processing Dependency: libgbm.so.0(alsa-lib.so.0.3) (64bit) for package: 1:java-1.8.0-openjdk-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Processing Dependency: gtk2(x86-64) for package: 1:java-1.8.0-openjdk-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Processing Dependency: fontconfig(x86-64) for package: 1:java-1.8.0-openjdk-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Processing Dependency: libgif.so.4((64bit)) for package: 1:java-1.8.0-openjdk-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Processing Dependency: libasound.so.2() (64bit) for package: 1:java-1.8.0-openjdk-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Processing Dependency: libxtst.so.6() (64bit) for package: 1:java-1.8.0-openjdk-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Processing Dependency: libXrender.so.1() (64bit) for package: 1:java-1.8.0-openjdk-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Processing Dependency: libXi.so.6(64bit) for package: 1:java-1.8.0-openjdk-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Processing Dependency: libXext.so.6() (64bit) for package: 1:java-1.8.0-openjdk-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Package java-1.8.0-openjdk-accessibility.x86_64 1:1.8.0.282.b08-1.amzn2.0.1 will be installed
--> Processing Dependency: java-atk-wrapper(x86-64) for package: 1:java-1.8.0-openjdk-accessibility-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Package java-1.8.0-openjdk-accessibility-debug.x86_64 1:1.8.0.282.b08-1.amzn2.0.1 will be installed
--> Package java-1.8.0-openjdk-demo.x86_64 1:1.8.0.282.b08-1.amzn2.0.1 will be installed
--> Package java-1.8.0-openjdk-demo-debug.x86_64 1:1.8.0.282.b08-1.amzn2.0.1 will be installed
--> Package java-1.8.0-openjdk-devel.x86_64 1:1.8.0.282.b08-1.amzn2.0.1 will be installed
--> Package java-1.8.0-openjdk-headless.x86_64 1:1.8.0.282.b08-1.amzn2.0.1 will be installed
--> Processing Dependency: tzdata-java >= 2020b for package: 1:java-1.8.0-openjdk-headless-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Processing Dependency: copy-jdk-configs >= 3.3 for package: 1:java-1.8.0-openjdk-headless-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Processing Dependency: psccl-lite-libs(x86-64) for package: 1:java-1.8.0-openjdk-headless-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Processing Dependency: lksctp-tools(x86-64) for package: 1:java-1.8.0-openjdk-headless-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Processing Dependency: cups-libs(x86-64) for package: 1:java-1.8.0-openjdk-headless-1.8.0.282.b08-1.amzn2.0.1.x86_64
--> Package java-1.8.0-openjdk-headless-debug.x86_64 1:1.8.0.282.b08-1.amzn2.0.1 will be installed
```



```
https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-10-89 ~]$ sudo su
[root@ip-172-31-10-89 ec2-user]# yum install java-1.8.0-openjdk-headless
Verifying : 1:java-1.8.0-openjdk-demo-debug-1.8.0.282.b08-1.amzn2.0.1.x86_64
Verifying : mesa-libgbm-18.3.4-5.amzn2.0.1.x86_64

Installed:
  java-1.8.0-openjdk.x86_64 1:1.8.0.282.b08-1.amzn2.0.1
  java-1.8.0-openjdk-accessibility-debug.x86_64 1:1.8.0.282.b08-1.amzn2.0.1
  java-1.8.0-openjdk-demo.x86_64 1:1.8.0.282.b08-1.amzn2.0.1
  java-1.8.0-openjdk-headless.x86_64 1:1.8.0.282.b08-1.amzn2.0.1
  java-1.8.0-openjdk-headless-noarch.x86_64 1:1.8.0.282.b08-1.amzn2.0.1
  java-1.8.0-openjdk-javavoc.x86_64 1:1.8.0.282.b08-1.amzn2.0.1
  java-1.8.0-openjdk-javavoc-*.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

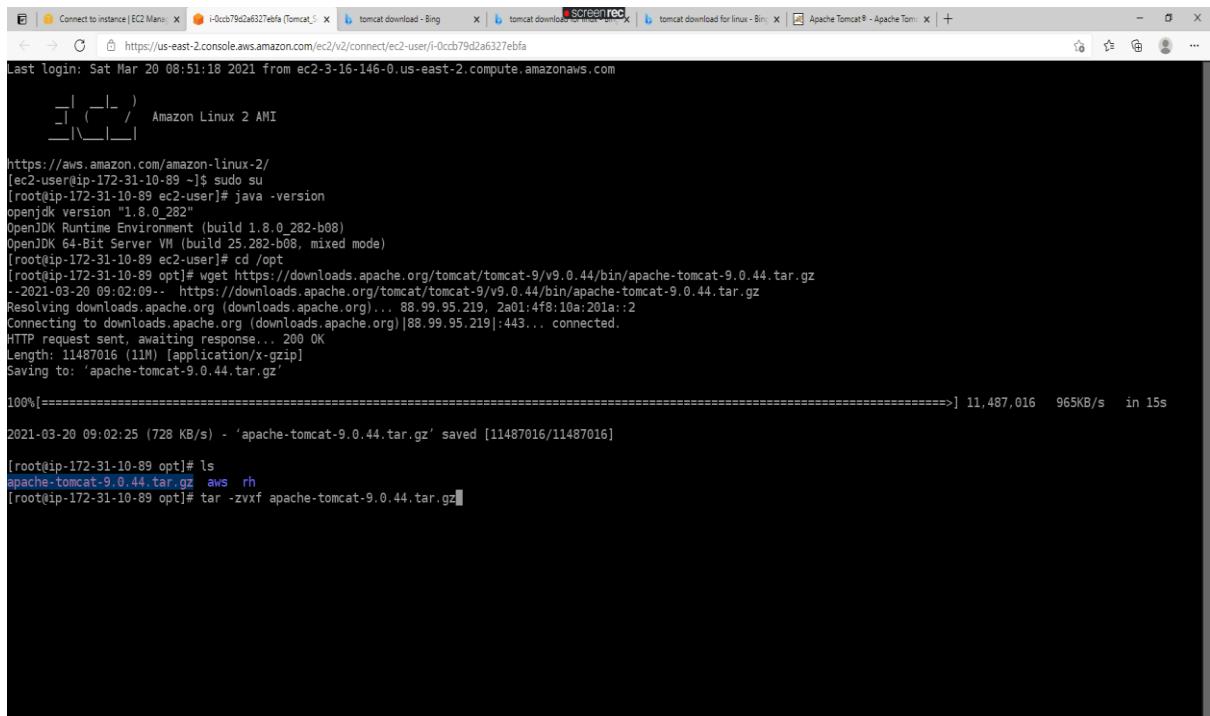
Dependency Installed:
  GConf2.x86_64 0:3.2.6-8.amzn2.0.2
  avahi-libx.x86_64 0:1.0.6.31-20.amzn2
  cups-libs.x86_64 1:1.6.3-51.amzn2
  dejavu-sans-fonts.noarch 0:2.33-6.amzn2
  fribidi.x86_64 0:1.0.2-1.amzn2.1
  graphite.x86_64 0:1.1.10-1.amzn2.0.2
  harfbuzz.x86_64 0:1.7.5-2.amzn2
  jai-webkit-applet.x86_64 0:1.0.5-4.5.amzn2.0.2
  libHSI.x86_64 0:1.2.2-2.amzn2.0.2
  libXau.x86_64 0:1.0.8-2.amzn2.0.2
  libXdamage.x86_64 0:1.1.4-1.amzn2.0.2
  libXft.x86_64 0:2.3.2-2.amzn2.0.2
  libXrandr.x86_64 0:1.5.1-2.amzn2.0.3
  libXv.x86_64 0:1.0.11-1.amzn2.0.2
  libXxf86vm.x86_64 0:1.0.1-4.1.amzn2.0.2
  linglVnd.x86_64 1:1.0.1-0.1.5.git5baa1e5.amzn2.0.1
  libthai.x86_64 0:1.1.4-9.amzn2.0.2
  libxcb.x86_64 0:1.12-1.amzn2.0.2
  lksctp-tools.x86_64 0:1.0.17-2.amzn2.0.2
  mesa-libgbm.x86_64 0:18.3.4-5.amzn2.0.1
  pango.x86_64 0:1.42-4.4.amzn2
  polkit.x86_64 0:0.112-2.amzn2
  python-lxml.x86_64 0:3.2.1-4.amzn2.0.2
  xorg-x11-font-utils.x86_64 0:1.7.5-21.amzn2

Complete!
[root@ip-172-31-10-89 ec2-user]#
```



```
i-0ccb79d2a6327ebfa (Tomcat_Server)
Public IP: 3.143.4.205 Private IP: 172.31.10.89
```

DOWNLOAD AND EXTRACT OF TOMCAT SERVER



```
Last login: Sat Mar 20 08:51:18 2021 from ec2-3-16-146-0.us-east-2.compute.amazonaws.com
[ec2-user@ip-172-31-10-89 ~]$ sudo su
[ec2-user@ip-172-31-10-89 ec2-user]# java -version
openjdk version "1.8.0_282"
OpenJDK Runtime Environment (build 1.8.0_282-b08)
OpenJDK 64-Bit Server VM (build 25.282-b08, mixed mode)
[ec2-user@ip-172-31-10-89 ec2-user]# cd /opt
[ec2-user@ip-172-31-10-89 opt]# wget https://downloads.apache.org/tomcat/tomcat-9/v9.0.44/bin/apache-tomcat-9.0.44.tar.gz
--2021-03-20 09:02:09.000... https://downloads.apache.org/tomcat/tomcat-9/v9.0.44/bin/apache-tomcat-9.0.44.tar.gz
Resolving downloads.apache.org (downloads.apache.org)... 88.99.95.219, 2a01:4f8:10a:201a::2
Connecting to downloads.apache.org (downloads.apache.org)|88.99.95.219|:443...
HTTP request sent, awaiting response... 200 OK
Length: 11487016 (11M) [application/x-gzip]
Saving to: 'apache-tomcat-9.0.44.tar.gz'

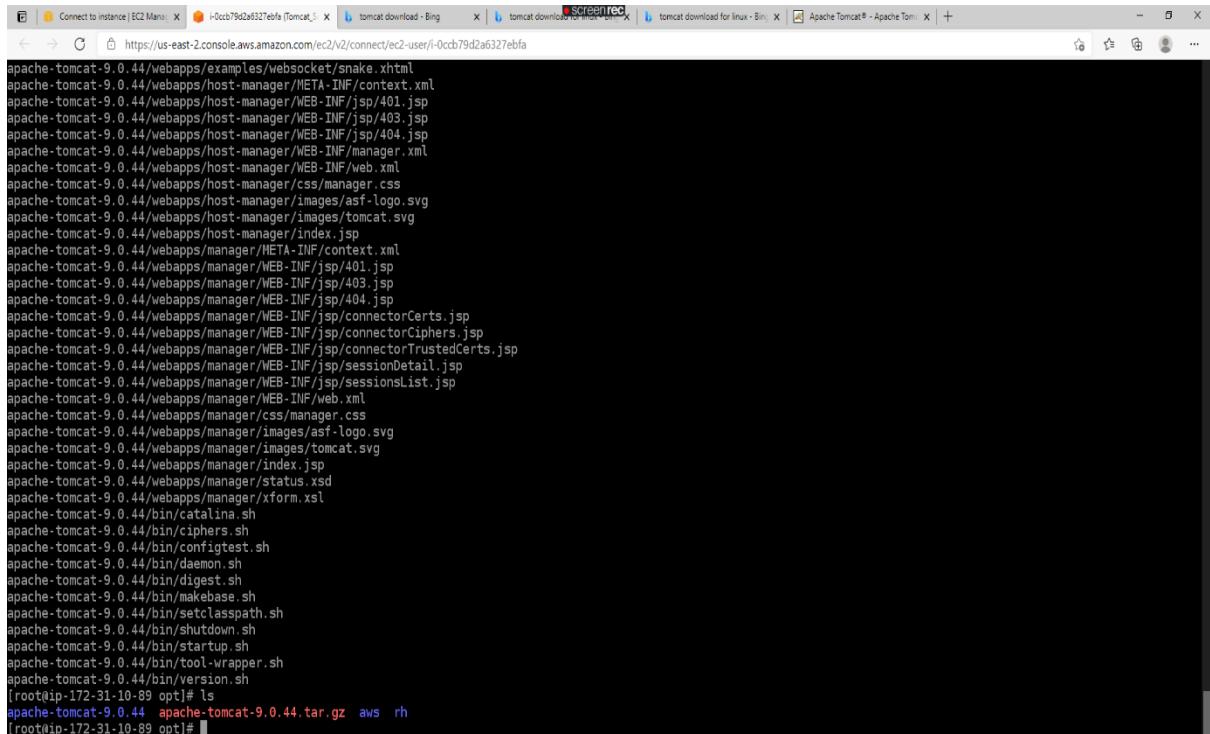
100%[=====] 11,487,016 965KB/s in 15s

2021-03-20 09:02:25 (728 KB/s) - 'apache-tomcat-9.0.44.tar.gz' saved [11487016/11487016]

[ec2-user@ip-172-31-10-89 opt]# ls
apache-tomcat-9.0.44.tar.gz  aws  rh
[ec2-user@ip-172-31-10-89 opt]# tar -zvxf apache-tomcat-9.0.44.tar.gz
```

i-0ccb79d2a6327ebfa (Tomcat_Server)

Public IPs: 3.143.4.205 Private IPs: 172.31.10.89

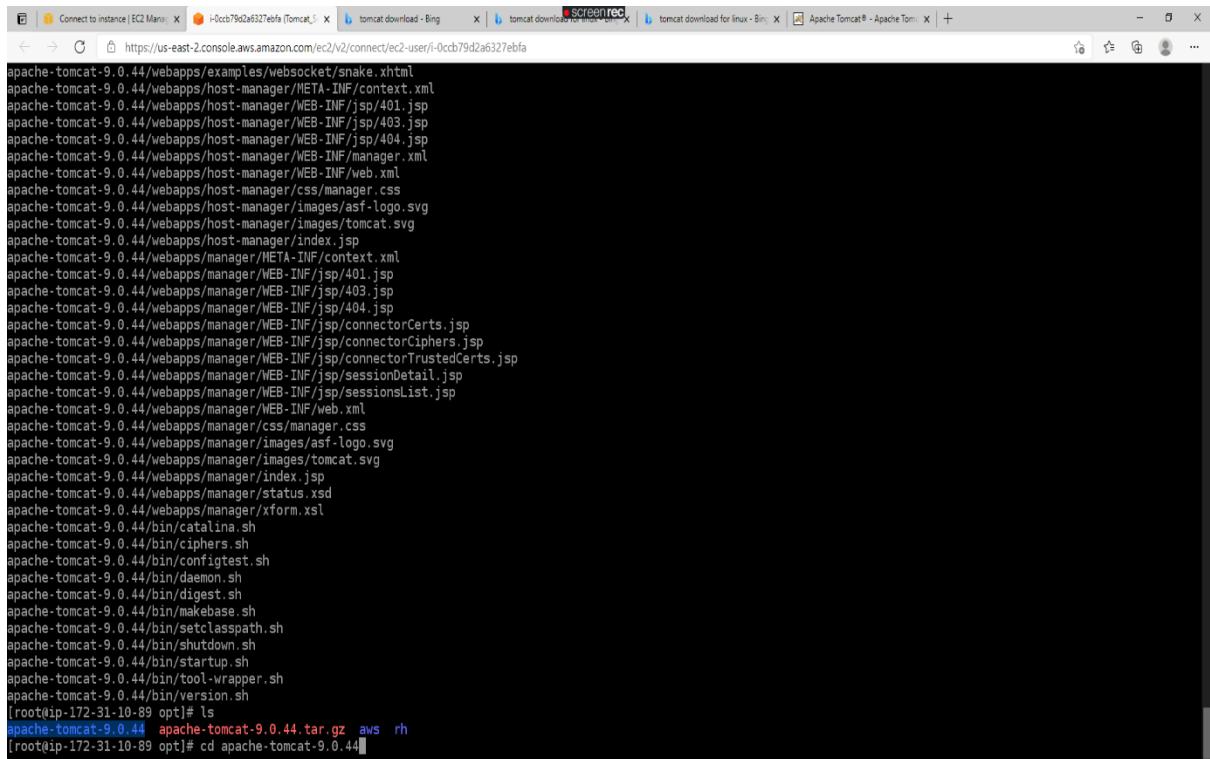


```
apache-tomcat-9.0.44/webapps/examples/websocket/snake.xhtml
apache-tomcat-9.0.44/webapps/host-manager/META-INF/context.xml
apache-tomcat-9.0.44/webapps/host-manager/WEB-INF/jsp/401.jsp
apache-tomcat-9.0.44/webapps/host-manager/WEB-INF/jsp/403.jsp
apache-tomcat-9.0.44/webapps/host-manager/WEB-INF/jsp/404.jsp
apache-tomcat-9.0.44/webapps/host-manager/WEB-INF/manager.xml
apache-tomcat-9.0.44/webapps/host-manager/WEB-INF/web.xml
apache-tomcat-9.0.44/webapps/host-manager/css/manager.css
apache-tomcat-9.0.44/webapps/host-manager/images/asf-logo.svg
apache-tomcat-9.0.44/webapps/host-manager/images/tomcat.svg
apache-tomcat-9.0.44/webapps/host-manager/index.jsp
apache-tomcat-9.0.44/webapps/manager/META-INF/context.xml
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/401.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/403.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/404.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/connectorCerts.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/connectorCiphers.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/connectorTrustedCerts.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/sessionDetail.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/sessionsList.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/web.xml
apache-tomcat-9.0.44/webapps/manager/css/manager.css
apache-tomcat-9.0.44/webapps/manager/images/asf-logo.svg
apache-tomcat-9.0.44/webapps/manager/images/tomcat.svg
apache-tomcat-9.0.44/webapps/manager/index.jsp
apache-tomcat-9.0.44/webapps/manager/status.xsd
apache-tomcat-9.0.44/webapps/manager/xform.xsl
apache-tomcat-9.0.44/bin/catalina.sh
apache-tomcat-9.0.44/bin/ciphers.sh
apache-tomcat-9.0.44/bin/configtest.sh
apache-tomcat-9.0.44/bin/daemon.sh
apache-tomcat-9.0.44/bin/digest.sh
apache-tomcat-9.0.44/bin/makebase.sh
apache-tomcat-9.0.44/bin/setclasspath.sh
apache-tomcat-9.0.44/bin/shutdown.sh
apache-tomcat-9.0.44/bin/startup.sh
apache-tomcat-9.0.44/bin/tool-wrapper.sh
apache-tomcat-9.0.44/bin/version.sh
[ec2-user@ip-172-31-10-89 opt]# ls
apache-tomcat-9.0.44 apache-tomcat-9.0.44.tar.gz  aws  rh
[ec2-user@ip-172-31-10-89 opt]#
```

i-0ccb79d2a6327ebfa (Tomcat_Server)

Public IPs: 3.143.4.205 Private IPs: 172.31.10.89

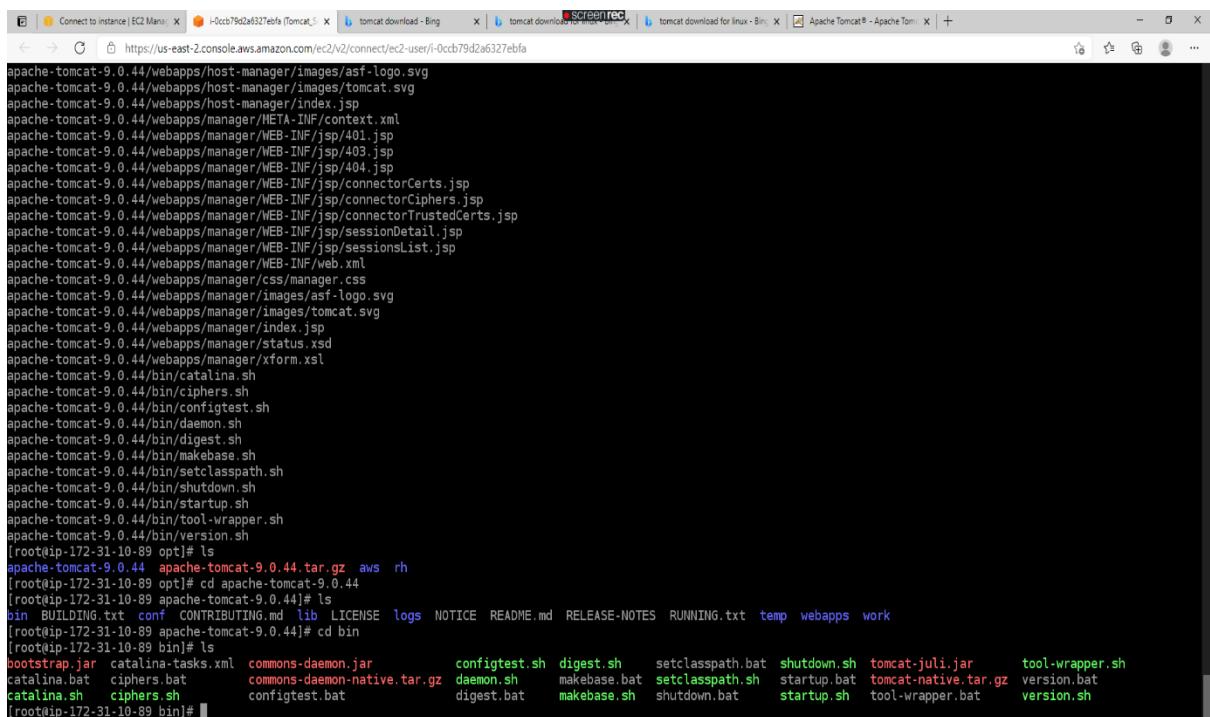




```
apache-tomcat-9.0.44/webapps/examples/websocket/snake.xhtml
apache-tomcat-9.0.44/webapps/host-manager/META-INF/context.xml
apache-tomcat-9.0.44/webapps/host-manager/WEB-INF/jsp/401.jsp
apache-tomcat-9.0.44/webapps/host-manager/WEB-INF/jsp/403.jsp
apache-tomcat-9.0.44/webapps/host-manager/WEB-INF/jsp/404.jsp
apache-tomcat-9.0.44/webapps/host-manager/WEB-INF/manager.xml
apache-tomcat-9.0.44/webapps/host-manager/WEB-INF/web.xml
apache-tomcat-9.0.44/webapps/host-manager/css/manager.css
apache-tomcat-9.0.44/webapps/host-manager/images/asf-logo.svg
apache-tomcat-9.0.44/webapps/host-manager/images/tomcat.svg
apache-tomcat-9.0.44/webapps/host-manager/index.jsp
apache-tomcat-9.0.44/webapps/manager/META-INF/context.xml
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/401.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/403.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/404.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/connectorCerts.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/connectorCiphers.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/connectorTrustedCerts.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/sessionDetail.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/sessionsList.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/web.xml
apache-tomcat-9.0.44/webapps/manager/css/manager.css
apache-tomcat-9.0.44/webapps/manager/images/asf-logo.svg
apache-tomcat-9.0.44/webapps/manager/images/tomcat.svg
apache-tomcat-9.0.44/webapps/manager/index.jsp
apache-tomcat-9.0.44/webapps/manager/status.xsd
apache-tomcat-9.0.44/webapps/manager/xform.xsl
apache-tomcat-9.0.44/bin/catalina.sh
apache-tomcat-9.0.44/bin/ciphers.sh
apache-tomcat-9.0.44/bin/configtest.sh
apache-tomcat-9.0.44/bin/daemon.sh
apache-tomcat-9.0.44/bin/digest.sh
apache-tomcat-9.0.44/bin/makebase.sh
apache-tomcat-9.0.44/bin/setclasspath.sh
apache-tomcat-9.0.44/bin/shutdown.sh
apache-tomcat-9.0.44/bin/startup.sh
apache-tomcat-9.0.44/bin/tool-wrapper.sh
apache-tomcat-9.0.44/bin/version.sh
[root@ip-172-31-10-89 opt]# ls
apache-tomcat-9.0.44 apache-tomcat-9.0.44.tar.gz aws rh
[root@ip-172-31-10-89 opt]# cd apache-tomcat-9.0.44
```

i-0ccb79d2a6327ebfa (Tomcat_Server)

Public IPs: 3.143.4.205 Private IPs: 172.31.10.89



```
apache-tomcat-9.0.44/webapps/host-manager/images/asf-logo.svg
apache-tomcat-9.0.44/webapps/host-manager/images/tomcat.svg
apache-tomcat-9.0.44/webapps/host-manager/index.jsp
apache-tomcat-9.0.44/webapps/manager/META-INF/context.xml
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/401.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/403.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/404.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/connectorCerts.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/connectorCiphers.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/connectorTrustedCerts.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/sessionDetail.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/jsp/sessionsList.jsp
apache-tomcat-9.0.44/webapps/manager/WEB-INF/web.xml
apache-tomcat-9.0.44/webapps/manager/css/manager.css
apache-tomcat-9.0.44/webapps/manager/images/asf-logo.svg
apache-tomcat-9.0.44/webapps/manager/images/tomcat.svg
apache-tomcat-9.0.44/webapps/manager/index.jsp
apache-tomcat-9.0.44/webapps/manager/status.xsd
apache-tomcat-9.0.44/webapps/manager/xform.xsl
apache-tomcat-9.0.44/bin/catalina.sh
apache-tomcat-9.0.44/bin/ciphers.sh
apache-tomcat-9.0.44/bin/configtest.sh
apache-tomcat-9.0.44/bin/daemon.sh
apache-tomcat-9.0.44/bin/digest.sh
apache-tomcat-9.0.44/bin/makebase.sh
apache-tomcat-9.0.44/bin/setclasspath.sh
apache-tomcat-9.0.44/bin/shutdown.sh
apache-tomcat-9.0.44/bin/startup.sh
apache-tomcat-9.0.44/bin/tool-wrapper.sh
apache-tomcat-9.0.44/bin/version.sh
[root@ip-172-31-10-89 opt]# ls
apache-tomcat-9.0.44 apache-tomcat-9.0.44.tar.gz aws rh
[root@ip-172-31-10-89 opt]# cd apache-tomcat-9.0.44
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# ls
bin BUILDING.txt conf CONTRIBUTING.md lib LICENSE logs NOTICE README.md RELEASE-NOTES RUNNING.txt temp webapps work
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# cd bin
[root@ip-172-31-10-89 bin]# ls
bootstrap.jar catalina-tasks.xml commons-daemon.jar configtest.sh digest.sh setclasspath.bat shutdown.sh tomcat-juli.jar tool-wrapper.sh
catalina.bat ciphers.bat commons-daemon-native.tar.gz daemon.sh makebase.bat setclasspath.sh startup.bat tomcat-native.tar.gz version.bat
catalina.sh ciphers.sh configtest.bat digest.bat makebase.sh shutdown.bat startup.sh tool-wrapper.bat version.sh
[root@ip-172-31-10-89 bin]#
```

i-0ccb79d2a6327ebfa (Tomcat_Server)

Public IPs: 3.143.4.205 Private IPs: 172.31.10.89



```

Connect to instance | EC2 Manager | i-0ccb79d2a6327ebfa Tomcat_5 | tomcat download - Bing | tomcat download for windows | tomcat download for linux - Bing | Apache Tomcat® - Apache Tomcat | + | Screenrec
apache-tomcat-9.0.44/webapps/manager/images/tomcat.svg
apache-tomcat-9.0.44/webapps/manager/index.jsp
apache-tomcat-9.0.44/webapps/manager/status.xhtml
apache-tomcat-9.0.44/webapps/manager/xform.xhtml
apache-tomcat-9.0.44/bin/catalina.sh
apache-tomcat-9.0.44/bin/ciphers.sh
apache-tomcat-9.0.44/bin/configtest.sh
apache-tomcat-9.0.44/bin/daemon.sh
apache-tomcat-9.0.44/bin/digest.sh
apache-tomcat-9.0.44/bin/makebase.sh
apache-tomcat-9.0.44/bin/setclasspath.sh
apache-tomcat-9.0.44/bin/shutdown.sh
apache-tomcat-9.0.44/bin/startup.sh
apache-tomcat-9.0.44/bin/tool-wrapper.sh
apache-tomcat-9.0.44/bin/version.sh
[root@ip-172-31-10-89 opt]# ls
apache-tomcat-9.0.44 apache-tomcat-9.0.44.tar.gz aws rh
[root@ip-172-31-10-89 opt]# cd apache-tomcat-9.0.44
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# ls
bin BUILDING.txt conf CONTRIBUTING.md lib LICENSE logs NOTICE README.md RELEASE-NOTES RUNNING.txt temp webapps work
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# cd bin
[root@ip-172-31-10-89 bin]# ls
bootstrap.jar catalina-tasks.xml commons-daemon.jar configtest.sh digest.sh setclasspath.bat shutdown.sh tomcat-juli.jar tool-wrapper.sh
catalina.bat ciphers.bat commons-daemon-native.tar.gz daemon.sh makebase.bat setclasspath.sh startup.bat tomcat-native.tar.gz version.bat
catalina.sh ciphers.sh configtest.bat digest.bat makebase.sh shutdown.bat startup.sh tool-wrapper.sh version.sh
[root@ip-172-31-10-89 bin]# chmod 777 startup.sh
[root@ip-172-31-10-89 bin]# chmod 777 shutdown.sh
[root@ip-172-31-10-89 bin]# find / -name startup.sh
[root@ip-172-31-10-89 bin]# /opt/apache-tomcat-9.0.44/bin/startup.sh /usr/bin/tomcatstart
[root@ip-172-31-10-89 bin]# ln -s /opt/apache-tomcat-9.0.44/bin/startup.sh /usr/bin/tomcatstop
[root@ip-172-31-10-89 bin]# tomcatstart
Using CATALINA_BASE: /opt/apache-tomcat-9.0.44
Using CATALINA_HOME: /opt/apache-tomcat-9.0.44
Using CATALINA_TMPDIR: /opt/apache-tomcat-9.0.44/temp
Using JRE_HOME: /
Using CLASSPATH: /opt/apache-tomcat-9.0.44/bin/bootstrap.jar:/opt/apache-tomcat-9.0.44/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
[root@ip-172-31-10-89 bin]#

```

i-0ccb79d2a6327ebfa (Tomcat_Server)

Public IP: 3.143.4.205 Private IP: 172.31.10.89



STARTED THE TOMCAT SERVER AFTER CREATION OF

If you're seeing this, you've successfully installed Tomcat. Congratulations!

 Recommended Reading:
[Security Considerations How-To](#)
[Manager Application How-To](#)
[Clustering/Session Replication How-To](#)

[Server Status](#)
[Manager App](#)
[Host Manager](#)

Developer Quick Start

Tomcat Setup	Realms & AAA	Examples	Servlet Specifications
First Web Application	JDBC Data Sources		Tomcat Versions

Managing Tomcat

For security, access to the [manager webapp](#) is restricted. Users are defined in: [\\$CATALINA_HOME/conf/tomcat-users.xml](#)

In Tomcat 9.0, access to the manager application is split between different users. [Read more...](#)

[Release Notes](#)
[Changelog](#)
[Migration Guide](#)
[Security Notices](#)

Documentation

[Tomcat 9.0 Documentation](#)
[Tomcat 9.0 Configuration](#)
[Tomcat Wiki](#)

Find additional important configuration information in: [\\$CATALINA_HOME/RUNNING.txt](#)

Developers may be interested in:

- [Tomcat 9.0 Bye Database](#)
- [Tomcat 9.0 JavaDocs](#)
- [Tomcat 9.0 Repository at GitHub](#)

Getting Help

FAQ and Mailing Lists

The following mailing lists are available:

tomcat-announce	Important announcements, releases, security vulnerability notifications. (Low volume).
tomcat-users	User support and discussion
tomcat-user	User support and discussion for Apache Tomcat
tomcat-dev	Development mailing list, including commit messages

Other Downloads

[Tomcat Connectors](#)
[Tomcat Native](#)
[Tairbs](#)
[Deovlar](#)

Other Documentation

[Tomcat Connectors](#)
[mod_jk Documentation](#)
[Tomcat Native](#)
[Deovlar](#)

Get Involved

[Overview](#)
[Source Repositories](#)
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Apache Software Foundation

[Who We Are](#)
[Heritage](#)
[Apache Home](#)
[Resources](#)

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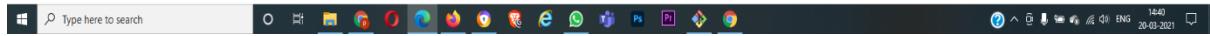


CHANGING OF PORT 8080 TO 8090

```
apache-tomcat-9.0.44/webapps/manager/images/tomcat.svg
apache-tomcat-9.0.44/webapps/manager/index.jsp
apache-tomcat-9.0.44/webapps/manager/status.xsd
apache-tomcat-9.0.44/webapps/manager/xform.xml
apache-tomcat-9.0.44/bin/catalina.sh
apache-tomcat-9.0.44/bin/ciphers.sh
apache-tomcat-9.0.44/bin/configtest.sh
apache-tomcat-9.0.44/bin/daemon.sh
apache-tomcat-9.0.44/bin/digest.sh
apache-tomcat-9.0.44/bin/makebase.sh
apache-tomcat-9.0.44/bin/setclasspath.sh
apache-tomcat-9.0.44/bin/shutdown.sh
apache-tomcat-9.0.44/bin/startup.sh
apache-tomcat-9.0.44/bin/tool-wrapper.sh
apache-tomcat-9.0.44/bin/version.sh
[root@ip-172-31-10-89 opt]# ls
apache-tomcat-9.0.44 apache-tomcat-9.0.44.tar.gz aws rh
[root@ip-172-31-10-89 opt]# cd apache-tomcat-9.0.44
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# ls
bin BUILDING.txt conf CONTRIBUTING.md lib LICENSE logs NOTICE README.md RELEASE-NOTES RUNNING.txt temp webapps work
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# cd bin
[root@ip-172-31-10-89 bin]# ls
bootstrap.jar catalina-tasks.xml commons-daemon.jar configtest.sh digest.sh setclasspath.bat shutdown.sh tomcat-juli.jar tool-wrapper.sh
catalina.bat ciphers.bat commons-daemon-native.tar.gz daemon.sh makebase.bat setclasspath.sh startup.bat tomcat-native.tar.gz version.bat
catalina.sh ciphers.sh configtest.bat digest.bat makebase.sh shutdown.bat startup.sh tool-wrapper.bat version.sh
[root@ip-172-31-10-89 bin]# chmod 777 startup.sh
[root@ip-172-31-10-89 bin]# chmod 777 shutdown.sh
[root@ip-172-31-10-89 bin]# find / -name startup.sh
[root@ip-172-31-10-89 bin]# find / -name shutdown.sh
/opt/apache-tomcat-9.0.44/bin/startup.sh
[root@ip-172-31-10-89 bin]# ln -s /opt/apache-tomcat-9.0.44/bin/startup.sh /usr/bin/tomcatstart
[root@ip-172-31-10-89 bin]# ln -s /opt/apache-tomcat-9.0.44/bin/shutdown.sh /usr/bin/tomcatstop
[root@ip-172-31-10-89 bin]# tomcatstart
Using CATALINA_BASE: /opt/apache-tomcat-9.0.44
Using CATALINA_HOME: /opt/apache-tomcat-9.0.44
Using CATALINA_TMPDIR: /opt/apache-tomcat-9.0.44/temp
Using JRE_HOME: /
Using CLASSPATH: /opt/apache-tomcat-9.0.44/bin/bootstrap.jar:/opt/apache-tomcat-9.0.44/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
[root@ip-172-31-10-89 bin]# cd ..
```

i-0ccb79d2a6327ebfa (Tomcat_Server)

Public IP: 8.143.4.205 Private IP: 172.31.10.89



```
apache-tomcat-9.0.44/webapps/manager/xform.xml
apache-tomcat-9.0.44/bin/catalina.sh
apache-tomcat-9.0.44/bin/ciphers.sh
apache-tomcat-9.0.44/bin/configtest.sh
apache-tomcat-9.0.44/bin/daemon.sh
apache-tomcat-9.0.44/bin/digest.sh
apache-tomcat-9.0.44/bin/makebase.sh
apache-tomcat-9.0.44/bin/setclasspath.sh
apache-tomcat-9.0.44/bin/shutdown.sh
apache-tomcat-9.0.44/bin/startup.sh
apache-tomcat-9.0.44/bin/tool-wrapper.sh
apache-tomcat-9.0.44/bin/version.sh
[root@ip-172-31-10-89 opt]# ls
apache-tomcat-9.0.44 apache-tomcat-9.0.44.tar.gz aws rh
[root@ip-172-31-10-89 opt]# cd apache-tomcat-9.0.44
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# ls
bin BUILDING.txt conf CONTRIBUTING.md lib LICENSE logs NOTICE README.md RELEASE-NOTES RUNNING.txt temp webapps work
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# cd bin
[root@ip-172-31-10-89 bin]# ls
bootstrap.jar catalina-tasks.xml commons-daemon.jar configtest.sh digest.sh setclasspath.bat shutdown.sh tomcat-juli.jar tool-wrapper.sh
catalina.bat ciphers.bat commons-daemon-native.tar.gz daemon.sh makebase.bat setclasspath.sh startup.bat tomcat-native.tar.gz version.bat
catalina.sh ciphers.sh configtest.bat digest.bat makebase.sh shutdown.bat startup.sh tool-wrapper.bat version.sh
[root@ip-172-31-10-89 bin]# chmod 777 startup.sh
[root@ip-172-31-10-89 bin]# chmod 777 shutdown.sh
[root@ip-172-31-10-89 bin]# find / -name startup.sh
[root@ip-172-31-10-89 bin]# find / -name shutdown.sh
/opt/apache-tomcat-9.0.44/bin/startup.sh
[root@ip-172-31-10-89 bin]# ln -s /opt/apache-tomcat-9.0.44/bin/startup.sh /usr/bin/tomcatstart
[root@ip-172-31-10-89 bin]# ln -s /opt/apache-tomcat-9.0.44/bin/shutdown.sh /usr/bin/tomcatstop
[root@ip-172-31-10-89 bin]# tomcatstart
Using CATALINA_BASE: /opt/apache-tomcat-9.0.44
Using CATALINA_HOME: /opt/apache-tomcat-9.0.44
Using CATALINA_TMPDIR: /opt/apache-tomcat-9.0.44/temp
Using JRE_HOME: /
Using CLASSPATH: /opt/apache-tomcat-9.0.44/bin/bootstrap.jar:/opt/apache-tomcat-9.0.44/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
[root@ip-172-31-10-89 bin]# cd ..
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# ls
bin BUILDING.txt conf CONTRIBUTING.md lib LICENSE logs NOTICE README.md RELEASE-NOTES RUNNING.txt temp webapps work
[root@ip-172-31-10-89 apache-tomcat-9.0.44]#
```

i-0ccb79d2a6327ebfa (Tomcat_Server)

Public IP: 8.143.4.205 Private IP: 172.31.10.89



```
Connect to instance | EC2 Manager | i-0ccb79d2a6327ebfa (Tomcat) | tomcat download - Bing | tomcat download for linux - Bing | Apache Tomcat® - Apache Tomcat | Apache Tomcat/9.0.44 | + | - | X | ... | https://us-east-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0ccb79d2a6327ebfa
```

```
apache-tomcat-9.0.44/bin/catalina.sh
apache-tomcat-9.0.44/bin/ciphers.sh
apache-tomcat-9.0.44/bin/configtest.sh
apache-tomcat-9.0.44/bin/daemon.sh
apache-tomcat-9.0.44/bin/digest.sh
apache-tomcat-9.0.44/bin/makebase.sh
apache-tomcat-9.0.44/bin/setclasspath.sh
apache-tomcat-9.0.44/bin/shutdown.sh
apache-tomcat-9.0.44/bin/startup.sh
apache-tomcat-9.0.44/bin/tool-wrapper.sh
apache-tomcat-9.0.44/bin/version.sh
[root@ip-172-31-10-89 opt]# ls
apache-tomcat-9.0.44 apache-tomcat-9.0.44.tar.gz aws rh
[root@ip-172-31-10-89 opt]# cd apache-tomcat-9.0.44
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# ls
bin BUILDING.txt conf CONTRIBUTING.md lib LICENSE logs NOTICE README.md RELEASE-NOTES RUNNING.txt temp webapps work
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# cd bin
[root@ip-172-31-10-89 bin]# ls
bootstrap.jar catalina-tasks.xml commons-daemon.jar configtest.sh digest.sh setclasspath.bat shutdown.sh tomcat-juli.jar tool-wrapper.sh
catalina.bat ciphers.bat commons-daemon-native.tar.gz daemon.sh makebase.bat setclasspath.sh startup.bat tomcat-native.tar.gz version.bat
catalina.sh ciphers.sh configtest.bat digest.bat makebase.sh shutdown.bat startup.sh tool-wrapper.bat version.sh
[root@ip-172-31-10-89 bin]# chmod 777 startup.sh
[root@ip-172-31-10-89 bin]# chmod 777 shutdown.sh
[root@ip-172-31-10-89 bin]# find / -name startup.sh
[root@ip-172-31-10-89 bin]# find / -name shutdown.sh
/opt/apache-tomcat-9.0.44/bin/startup.sh
[root@ip-172-31-10-89 bin]# ln -s /opt/apache-tomcat-9.0.44/bin/startup.sh /usr/bin/tomcatstart
[root@ip-172-31-10-89 bin]# ln -s /opt/apache-tomcat-9.0.44/bin/shutdown.sh /usr/bin/tomcatstop
[root@ip-172-31-10-89 bin]# tomcatstart
Using CATALINA_BASE: /opt/apache-tomcat-9.0.44
Using CATALINA_HOME: /opt/apache-tomcat-9.0.44
Using CATALINA_TMPDIR: /opt/apache-tomcat-9.0.44/temp
Using JRE_HOME: /
Using CLASSPATH: /opt/apache-tomcat-9.0.44/bin/bootstrap.jar:/opt/apache-tomcat-9.0.44/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
[root@ip-172-31-10-89 bin]# cd ..
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# ls
bin BUILDING.txt conf CONTRIBUTING.md lib LICENSE logs NOTICE README.md RELEASE-NOTES RUNNING.txt temp webapps work
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# cd conf
[root@ip-172-31-10-89 conf]#
```

i-0ccb79d2a6327ebfa (Tomcat_Server)

Public IP: 1.143.4.205 Private IP: 172.31.10.89



```
Connect to instance | EC2 Manager | i-0ccb79d2a6327ebfa (Tomcat) | tomcat download - Bing | tomcat download for linux - Bing | Apache Tomcat® - Apache Tomcat | Apache Tomcat/9.0.44 | + | - | X | ... | https://us-east-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0ccb79d2a6327ebfa
```

```
apache-tomcat-9.0.44/bin/daemon.sh
apache-tomcat-9.0.44/bin/digest.sh
apache-tomcat-9.0.44/bin/makebase.sh
apache-tomcat-9.0.44/bin/setclasspath.sh
apache-tomcat-9.0.44/bin/shutdown.sh
apache-tomcat-9.0.44/bin/startup.sh
apache-tomcat-9.0.44/bin/tool-wrapper.sh
apache-tomcat-9.0.44/bin/version.sh
[root@ip-172-31-10-89 opt]# ls
apache-tomcat-9.0.44 apache-tomcat-9.0.44.tar.gz aws rh
[root@ip-172-31-10-89 opt]# cd apache-tomcat-9.0.44
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# ls
bin BUILDING.txt conf CONTRIBUTING.md lib LICENSE logs NOTICE README.md RELEASE-NOTES RUNNING.txt temp webapps work
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# cd bin
[root@ip-172-31-10-89 bin]# ls
bootstrap.jar catalina-tasks.xml commons-daemon.jar configtest.sh digest.sh setclasspath.bat shutdown.sh tomcat-juli.jar tool-wrapper.sh
catalina.bat ciphers.bat commons-daemon-native.tar.gz daemon.sh makebase.bat setclasspath.sh startup.bat tomcat-native.tar.gz version.bat
catalina.sh ciphers.sh configtest.bat digest.bat makebase.sh shutdown.bat startup.sh tool-wrapper.bat version.sh
[root@ip-172-31-10-89 bin]# chmod 777 startup.sh
[root@ip-172-31-10-89 bin]# chmod 777 shutdown.sh
[root@ip-172-31-10-89 bin]# find / -name startup.sh
[root@ip-172-31-10-89 bin]# find / -name shutdown.sh
/opt/apache-tomcat-9.0.44/bin/startup.sh
[root@ip-172-31-10-89 bin]# ln -s /opt/apache-tomcat-9.0.44/bin/startup.sh /usr/bin/tomcatstart
[root@ip-172-31-10-89 bin]# ln -s /opt/apache-tomcat-9.0.44/bin/shutdown.sh /usr/bin/tomcatstop
[root@ip-172-31-10-89 bin]# tomcatstart
Using CATALINA_BASE: /opt/apache-tomcat-9.0.44
Using CATALINA_HOME: /opt/apache-tomcat-9.0.44
Using CATALINA_TMPDIR: /opt/apache-tomcat-9.0.44/temp
Using JRE_HOME: /
Using CLASSPATH: /opt/apache-tomcat-9.0.44/bin/bootstrap.jar:/opt/apache-tomcat-9.0.44/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
[root@ip-172-31-10-89 bin]# cd ..
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# ls
bin BUILDING.txt conf CONTRIBUTING.md lib LICENSE logs NOTICE README.md RELEASE-NOTES RUNNING.txt temp webapps work
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# cd conf
[root@ip-172-31-10-89 conf]# ls
Catalina catalina.properties jaspic-providers.xml logging.properties tomcat-users.xml web.xml
catalina.policy context.xml jaspic-providers.xsd server.xml tomcat-users.xsd
[root@ip-172-31-10-89 conf]#
```

i-0ccb79d2a6327ebfa (Tomcat_Server)

Public IP: 1.143.4.205 Private IP: 172.31.10.89



```
Connect to instance | EC2 Manager | i-0ccb79d2a6327ebfa (Tomcat_5) | tomcat download - Bing | tomcat download for linux - Bing | Apache Tomcat® - Apache Tomcat | Apache Tomcat/9.0.44 | + | - | _ | X | Screenrec | https://us-east-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0ccb79d2a6327ebfa
```

```
apache-tomcat-9.0.44/bin/daemon.sh
apache-tomcat-9.0.44/bin/digest.sh
apache-tomcat-9.0.44/bin/makebase.sh
apache-tomcat-9.0.44/bin/setclasspath.sh
apache-tomcat-9.0.44/bin/shutdown.sh
apache-tomcat-9.0.44/bin/startup.sh
apache-tomcat-9.0.44/bin/tool-wrapper.sh
apache-tomcat-9.0.44/bin/version.sh
[root@ip-172-31-10-89 opt]# ls
apache-tomcat-9.0.44 apache-tomcat-9.0.44.tar.gz aws rh
[root@ip-172-31-10-89 opt]# cd apache-tomcat-9.0.44
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# ls
bin BUILDING.txt conf CONTRIBUTING.md lib LICENSE logs NOTICE README.md RELEASE-NOTES RUNNING.txt temp webapps work
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# cd bin
[root@ip-172-31-10-89 bin]# ls
bootstrap.jar catalina-tasks.xml commons-daemon.jar configtest.sh digest.sh setclasspath.bat shutdown.sh tomcat-juli.jar tool-wrapper.sh
catalina.bat ciphers.bat commons-daemon-native.tar.gz daemon.sh makebase.bat setclasspath.sh startup.bat tomcat-native.tar.gz version.bat
catalina.sh ciphers.sh configtest.bat digest.bat makebase.sh shutdown.bat startup.sh tool-wrapper.bat version.sh
[root@ip-172-31-10-89 bin]# chmod 777 startup.sh
[root@ip-172-31-10-89 bin]# chmod 777 shutdown.sh
[root@ip-172-31-10-89 bin]# find / -name startup.sh
[root@ip-172-31-10-89 bin]# find / -name shutdown.sh
/opt/apache-tomcat-9.0.44/bin/startup.sh
[root@ip-172-31-10-89 bin]# ln -s /opt/apache-tomcat-9.0.44/bin/startup.sh /usr/bin/tomcatstart
[root@ip-172-31-10-89 bin]# ln -s /opt/apache-tomcat-9.0.44/bin/shutdown.sh /usr/bin/tomcatstop
[root@ip-172-31-10-89 bin]# tomcatstart
Using CATALINA_BASE: /opt/apache-tomcat-9.0.44
Using CATALINA_HOME: /opt/apache-tomcat-9.0.44
Using CATALINA_TMPDIR: /opt/apache-tomcat-9.0.44/temp
Using JRE_HOME: /
Using CLASSPATH: /opt/apache-tomcat-9.0.44/bin/bootstrap.jar:/opt/apache-tomcat-9.0.44/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
[root@ip-172-31-10-89 bin]# cd ..
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# ls
bin BUILDING.txt conf CONTRIBUTING.md lib LICENSE logs NOTICE README.md RELEASE-NOTES RUNNING.txt temp webapps work
[root@ip-172-31-10-89 apache-tomcat-9.0.44]# cd conf
[root@ip-172-31-10-89 conf]# ls
Catalina catalina.properties jaspic-providers.xml logging.properties tomcat-users.xml web.xml
catalina.policy context.xml jaspic-providers.xsd server.xml tomcat-users.xsd
[root@ip-172-31-10-89 conf]# vi server.xml
```

i-0ccb79d2a6327ebfa (Tomcat_Server)

Public IP: 8.143.4.205 Private IP: 172.31.10.89

```
Connect to instance | EC2 Manager | i-0ccb79d2a6327ebfa (Tomcat_5) | tomcat download - Bing | tomcat download for linux - Bing | Apache Tomcat® - Apache Tomcat | Apache Tomcat/9.0.44 | + | - | _ | X | Screenrec | https://us-east-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0ccb79d2a6327ebfa
```

```
<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" />
    -->
    <!-- Define an SSL/TLS HTTP/1.1 Connector on port 8443
    "server.xml" 171L, 7588C written
[root@ip-172-31-10-89 conf]# tomcatstop
```

i-0ccb79d2a6327ebfa (Tomcat_Server)

Public IP: 8.143.4.205 Private IP: 172.31.10.89

```
Connect to instance | EC2 Manager | i-0ccb79d2a6327ebfa (Tomcat_5) | tomcat download - Bing | tomcat download for linux - Bing | Apache Tomcat® - Apache Tomcat | Apache Tomcat/9.0.44 | + | - | _ | X | Screenrec | https://us-east-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0ccb79d2a6327ebfa
```

```
<!-- 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="8080" 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" />
    -->
    <!-- Define an SSL/TLS HTTP/1.1 Connector on port 8443
"server.xml" 171L, 7588C written
[root@ip-172-31-10-89 conf]# tomcatstop
Using CATALINA_BASE:  /opt/apache-tomcat-9.0.44
Using CATALINA_HOME:  /opt/apache-tomcat-9.0.44
Using CATALINA_TMPDIR: /opt/apache-tomcat-9.0.44/temp
Using JRE_HOME:      /
Using CLASSPATH:    /opt/apache-tomcat-9.0.44/bin/bootstrap.jar:/opt/apache-tomcat-9.0.44/bin/tomcat-juli.jar
Using CATALINA_OPTS:
[root@ip-172-31-10-89 conf]# tomcatstart[

i-0ccb79d2a6327ebfa (Tomcat_Server)
Public IP: 8.143.4.205 Private IP: 172.31.10.89
```



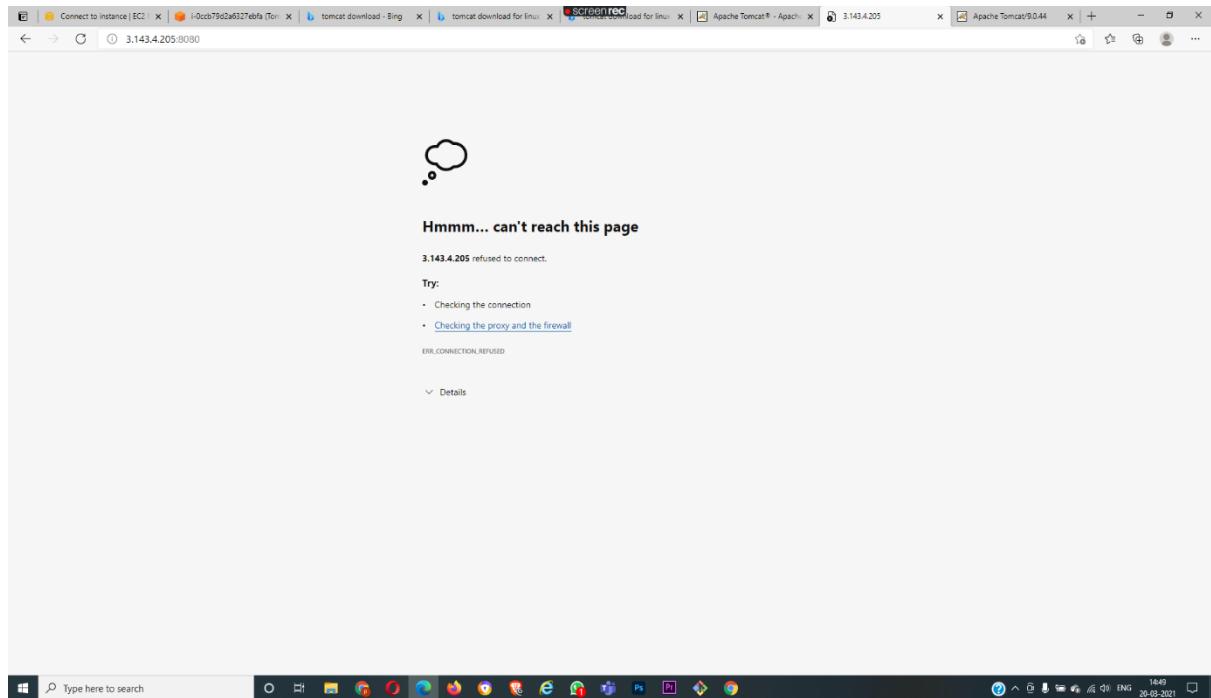
```
<!--
    <Executor name="tomcatThreadPool" namePrefix="catalina-exec-"
        maxThreads="150" minSpareThreads="4"/>
-->

    <!-- 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="8080" 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" />
    -->
    <!-- Define an SSL/TLS HTTP/1.1 Connector on port 8443
"server.xml" 171L, 7588C written
[root@ip-172-31-10-89 conf]# tomcatstop
Using CATALINA_BASE:  /opt/apache-tomcat-9.0.44
Using CATALINA_HOME:  /opt/apache-tomcat-9.0.44
Using CATALINA_TMPDIR: /opt/apache-tomcat-9.0.44/temp
Using JRE_HOME:      /
Using CLASSPATH:    /opt/apache-tomcat-9.0.44/bin/bootstrap.jar:/opt/apache-tomcat-9.0.44/bin/tomcat-juli.jar
Using CATALINA_OPTS:
[root@ip-172-31-10-89 conf]# tomcatstart
Using CATALINA_BASE:  /opt/apache-tomcat-9.0.44
Using CATALINA_HOME:  /opt/apache-tomcat-9.0.44
Using CATALINA_TMPDIR: /opt/apache-tomcat-9.0.44/temp
Using JRE_HOME:      /
Using CLASSPATH:    /opt/apache-tomcat-9.0.44/bin/bootstrap.jar:/opt/apache-tomcat-9.0.44/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
[root@ip-172-31-10-89 conf]# [


i-0ccb79d2a6327ebfa (Tomcat_Server)
Public IP: 8.143.4.205 Private IP: 172.31.10.89
```



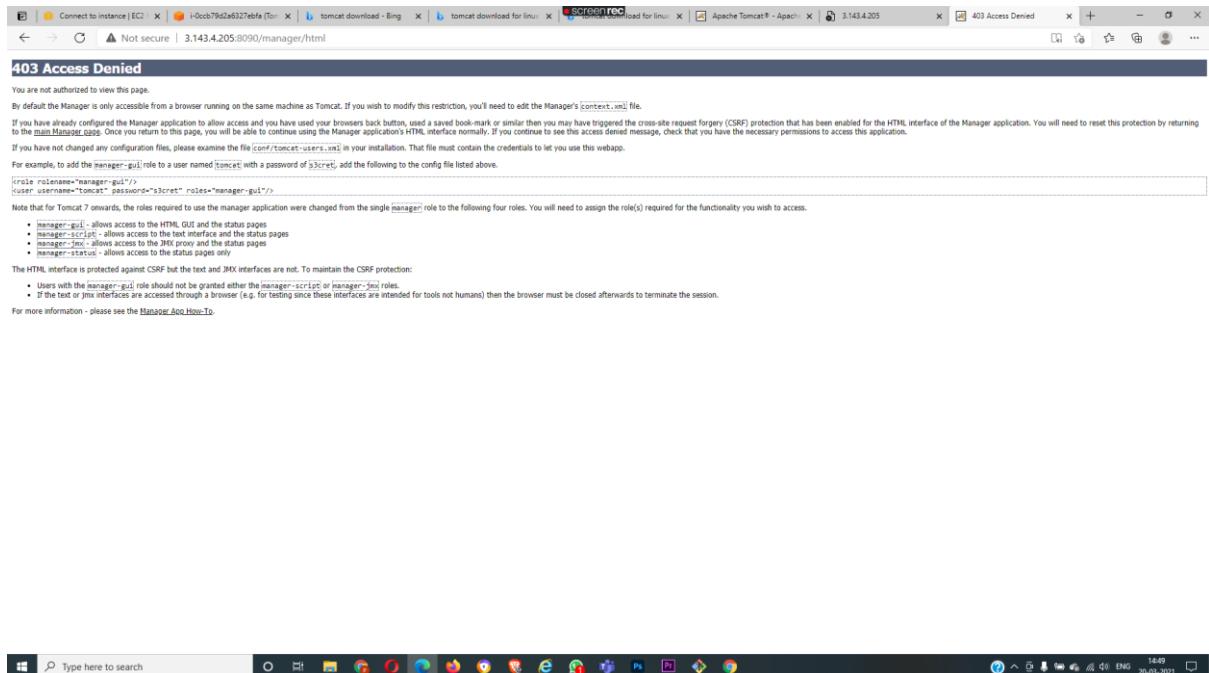
AFTER SHUTDOWN AND STARTUP FOR PORT 8080



IN PORT 8090

A screenshot of a Microsoft Edge browser window displaying the Apache Tomcat 9.0.44 homepage. The address bar shows the URL '3.143.4.205:8090'. The page features a green header bar with the text 'If you're seeing this, you've successfully installed Tomcat. Congratulations!' and a cartoon cat icon. Below the header, there are sections for 'Developer Quick Start', 'Documentation', 'Getting Help', and 'Miscellaneous'. The 'Developer Quick Start' section includes links for 'Tomcat Setup', 'First Web Application', 'Realms & AAA', 'JBDC DataSources', 'Servlet Specifications', and 'Tomcat Versions'. The 'Documentation' section links to 'Tomcat 9.0 Documentation', 'Tomcat 9.0 Configuration', and 'Tomcat Wiki'. The 'Getting Help' section links to 'FAQ and Mailing Lists' and 'tomcat-users'. The 'Miscellaneous' section links to 'Other Downloads', 'Other Documentation', 'Get Involved', 'Miscellaneous', and 'Apache Software Foundation'. At the bottom of the page, there is a copyright notice: 'Copyright ©1999-2021 Apache Software Foundation. All Rights Reserved.' The browser's taskbar at the bottom shows other open tabs and icons.

INITIALLY WE CANT ACCESS THE MANAGER PAGE



EDITING CONTEXT FILE

COMMENTING THE VALUE

```
<!-- 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="8080" protocol="HTTP/1.1"
           connectionTimeout="20000"
           redirectPort="8443" />
<!-- A "Connector" using the shared thread pool-->
<!-->
<Connector executor="tomcatThreadPool"
           ports="8080" protocol="HTTP/1.1"
           connectionTimeout="20000"
           redirectPort="8443" />
-->
<!-- Define an SSL/TLS HTTP/1.1 Connector on port 8443
"server.xml" 171L, 7588C written
[root@ip-172-31-10-89 conf]# tomcatstop
Using CATALINA_BASE:  /opt/apache-tomcat-9.0.44
Using CATALINA_HOME:  /opt/apache-tomcat-9.0.44
Using CATALINA_TMPDIR: /opt/apache-tomcat-9.0.44/temp
Using JRE_HOME:      /
Using CLASSPATH:    /opt/apache-tomcat-9.0.44/bin/bootstrap.jar:/opt/apache-tomcat-9.0.44/bin/tomcat-juli.jar
Using CATALINA_OPTS:
[root@ip-172-31-10-89 conf]# tomcatstart
Using CATALINA_BASE:  /opt/apache-tomcat-9.0.44
Using CATALINA_HOME:  /opt/apache-tomcat-9.0.44
Using CATALINA_TMPDIR: /opt/apache-tomcat-9.0.44/temp
Using JRE_HOME:      /
Using CLASSPATH:    /opt/apache-tomcat-9.0.44/bin/bootstrap.jar:/opt/apache-tomcat-9.0.44/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started
[root@ip-172-31-10-89 conf]# ls
Catalina          catalina.properties  jaspic-providers.xml  logging.properties  tomcat-users.xml  web.xml
catalina.policy   context.xml        jaspic-providers.xsd  server.xml       tomcat-users.xsd
[root@ip-172-31-10-89 conf]# vi context.xml
```

i-0ccb79d2a6327ebfa (Tomcat_Server)

Public IP: 3.143.4.205 Private IP: 172.31.10.89





```
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http://www.apache.org/licenses/LICENSE-2.0  
  
Unless required by applicable law or agreed to in writing, software  
distributed under the License is distributed on an "AS IS" BASIS,  
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.  
See the License for the specific language governing permissions and  
limitations under the License.  
-->  
<!-- The contents of this file will be loaded for each web application -->  
<Context>  
  
    <!-- Default set of monitored resources. If one of these changes, the -->  
    <!-- web application will be reloaded. -->  
    <WatchedResource>WEB-INF/web.xml</WatchedResource>  
    <WatchedResource>WEB-INF/tomcat-web.xml</WatchedResource>  
    <WatchedResource>${catalina.base}/conf/web.xml</WatchedResource>  
  
    <!-- Uncomment this to disable session persistence across Tomcat restarts -->  
    <!--  
    <Manager pathname="" />  
    -->  
</Context>  
  
:  
:  
:  
:  
:  
:  
:  
:  
:  
  
"context.xml" 31L, 1400C written  
[root@ip-172-31-10-89 conf]# find / -name context.xml  
/opt/apache-tomcat-9.0.44/conf/context.xml  
/opt/apache-tomcat-9.0.44/webapps/examples/META-INF/context.xml  
/opt/apache-tomcat-9.0.44/webapps/host-manager/META-INF/context.xml  
/opt/apache-tomcat-9.0.44/webapps/manager/META-INF/context.xml  
[root@ip-172-31-10-89 conf]# vi /opt/apache-tomcat-9.0.44/webapps/manager/META-INF/context.xml
```



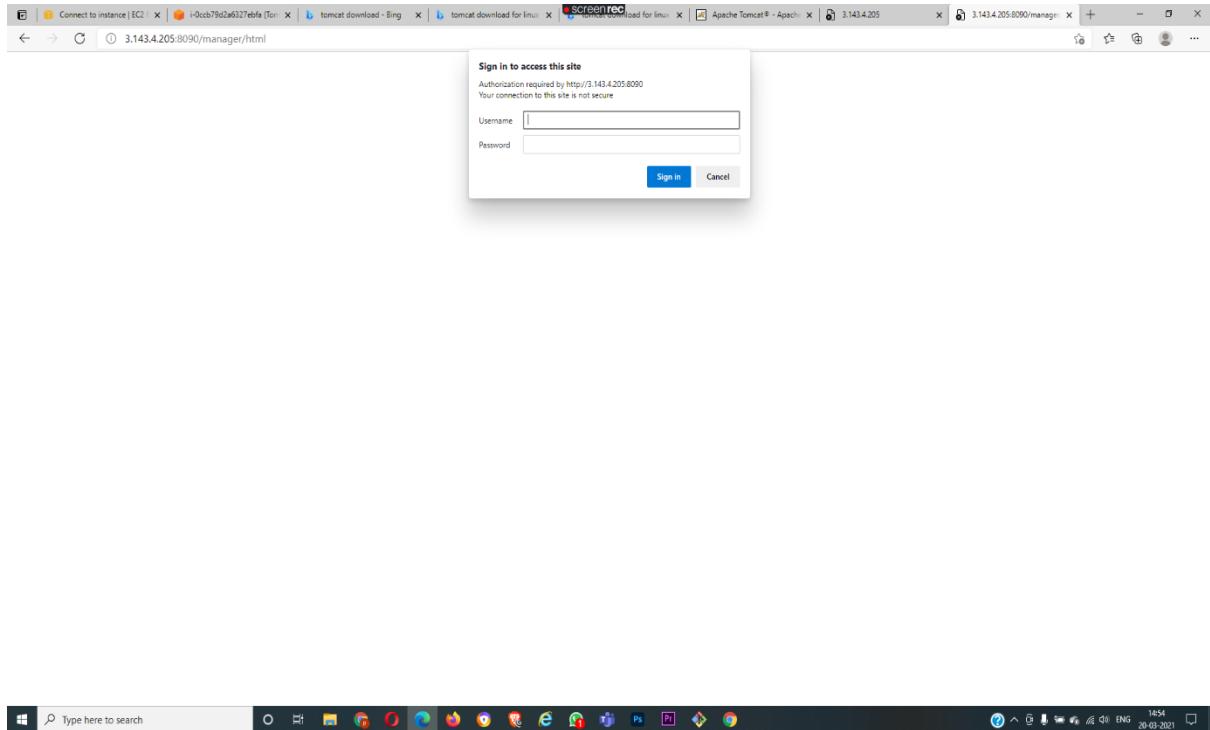
```
<?xml version="1.0" encoding="UTF-8"?>
<!--
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contributor license agreements. See the NOTICE file distributed with
this work for additional information regarding copyright ownership.
The ASF licenses this file to You under the Apache License, Version 2.0
(the "License"); you may not use this file except in compliance with
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    http://www.apache.org/licenses/LICENSE-2.0

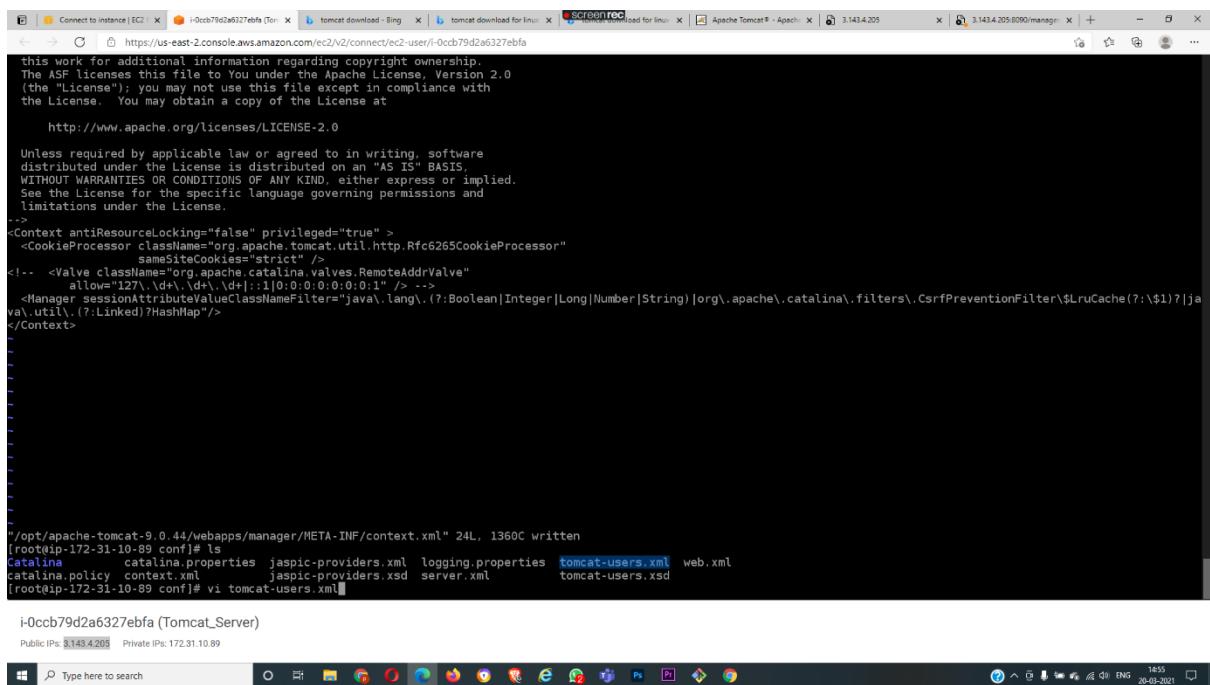
Unless required by applicable law or agreed to in writing, software
distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.
-->
<Context antiResourceLocking="false" privileged="true" >
<CookieProcessor className="org.apache.tomcat.util.http.Rfc6265CookieProcessor"
    sameSiteCookies="strict" />
<Valve className="org.apache.catalina.valves.RemoteAddrValve"
    allow="127\.\d+\.\d+\.\d+|::1|0:0:0:0:0:0:0:1" />
<Manager sessionAttributeValueClassNameFilter="java\.lang\.(\?:Boolean|Integer|Long|Number|String)|org\.apache\.catalina\.filters\.CsrfPreventionFilter\$LruCache(?:\$1)?|ja
va\.util\.(\?:Linked)?HashMap"/>
</Context>
<!--
-- INSERT --
--
```



NEED USERNAME AND PASSWORD



CREATING USER AND ROLES



```
<?xml version="1.0" encoding="UTF-8"?>
<!--
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contributor license agreements. See the NOTICE file distributed with
this work for additional information regarding copyright ownership.
The ASF licenses this file to You under the Apache License, Version 2.0
(the "License"); you may not use this file except in compliance with
the License. You may obtain a copy of the License at
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distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.
-->
<tomcat-users xmlns="http://tomcat.apache.org/xml"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://tomcat.apache.org/xml tomcat-users.xsd"
  version="1.0">
<!--
NOTE: By default, no user is included in the "manager-gui" role required
to operate the "/manager/html" web application. If you wish to use this app,
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="tomcat"/>
<role rolename="role1"/>
<user username="tomcat" password=<must-be-changed> roles="tomcat"/>
-->
"tomcat-users.xml" 44L, 2164C
```

i-0ccb79d2a6327ebfa (Tomcat_Server)

Public IPs: 8.143.4.205 Private IPs: 172.31.10.89

```
<?xml version="1.0" encoding="UTF-8"?>
<!--
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contributor license agreements. See the NOTICE file distributed with
this work for additional information regarding copyright ownership.
The ASF licenses this file to You under the Apache License, Version 2.0
(the "License"); you may not use this file except in compliance with
the License. You may obtain a copy of the License at
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distributed under the License is distributed on an "AS IS" BASIS,
WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
See the License for the specific language governing permissions and
limitations under the License.
-->
<tomcat-users xmlns="http://tomcat.apache.org/xml"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://tomcat.apache.org/xml tomcat-users.xsd"
  version="1.0">
<!--
NOTE: By default, no user is included in the "manager-gui" role required
to operate the "/manager/html" web application. If you wish to use this app,
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="vino123" roles="manager-gui,manager-script,manager-jmx,manager-status"/>
<user username="deployer" password="vino123" roles="manager-script"/>
<user username="tomcat" password="vino123" roles="manager-gui"/>
<!--
<role rolename="tomcat"/>
<role rolename="role1"/>
<user username="tomcat" password=<must-be-changed> roles="tomcat"/>
<user username="both" password=<must-be-changed> roles="tomcat,role1"/>
-->
```

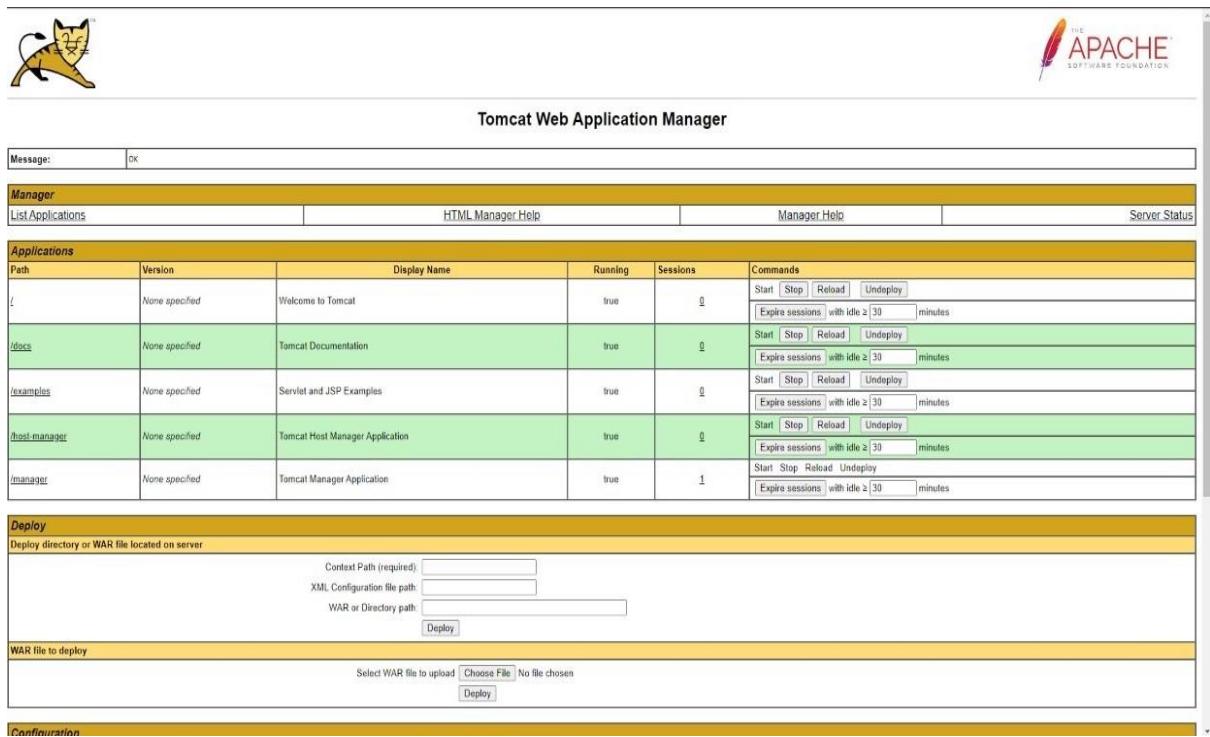
i-0ccb79d2a6327ebfa (Tomcat_Server)

Public IPs: 8.143.4.205 Private IPs: 172.31.10.89



RESTARTING THE TOMCAT SERVER

```
Connect to instance | EC2 | i-0ccb79d2a6327ebfa (Tomcat) | tomcat download - Bing | tomcat download for Linux | SCREENREC | Apache Tomcat® - Apache | 3.143.4.205 | 3.143.4.205:8090/manage | ...  
https://us-east-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0ccb79d2a6327ebfa  
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="vino123" roles="manager-gui,manager-script,manager-jmx,manager-status"/>  
<user username="deployer" password="vino123" roles="manager-script"/>  
<user username="tomcat" password="vino123" roles="manager-gui"/>  
<!--  
<role rolename="tomcat"/>  
<role rolename="role1"/>  
<user username="tomcat" password=<must-be-changed> roles="tomcat"/>  
<user username="both" password=<must-be-changed> roles="tomcat,role1"/>  
tomcat-users.xml" 51L, 2536C written  
[root@ip-172-31-10-89 conf]# tomcatstop  
Using CATALINA_BASE: /opt/apache-tomcat-9.0.44  
Using CATALINA_HOME: /opt/apache-tomcat-9.0.44  
Using CATALINA_TMPDIR: /opt/apache-tomcat-9.0.44/temp  
Using JRE_HOME: /  
Using CLASSPATH: /opt/apache-tomcat-9.0.44/bin/bootstrap.jar:/opt/apache-tomcat-9.0.44/bin/tomcat-juli.jar  
Using CATALINA_OPTS:  
[root@ip-172-31-10-89 conf]# tomcatstart  
Using CATALINA_BASE: /opt/apache-tomcat-9.0.44  
Using CATALINA_HOME: /opt/apache-tomcat-9.0.44  
Using CATALINA_TMPDIR: /opt/apache-tomcat-9.0.44/temp  
Using JRE_HOME: /  
Using CLASSPATH: /opt/apache-tomcat-9.0.44/bin/bootstrap.jar:/opt/apache-tomcat-9.0.44/bin/tomcat-juli.jar  
Using CATALINA_OPTS:  
Tomcat started.  
[root@ip-172-31-10-89 conf]#  
  
i-0ccb79d2a6327ebfa (Tomcat_Server)  
Public IP: 3.143.4.205 Private IP: 172.31.10.89  
Type here to search 14:58 ENG 20-03-2021
```



The screenshot shows the Apache Tomcat Web Application Manager interface. At the top, there's a navigation bar with links for Manager, List Applications, HTML Manager Help, Manager Help, and Server Status. Below the navigation bar is a table titled "Applications" showing the following data:

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	Tamcat Host Manager Application	True	0	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes
/manager	None specified	Tamcat Manager Application	True	1	Start Stop Reload Undeploy Expire sessions with idle ≥ 30 minutes

Below the applications table is a "Deploy" section for deploying WAR files. It includes fields for Context Path (required), XML Configuration file path, and WAR or Directory path, along with a Deploy button. There's also a "WAR file to deploy" section with a "Select WAR file to upload" field, a "Choose File" button, and a Deploy button.

THANK YOU