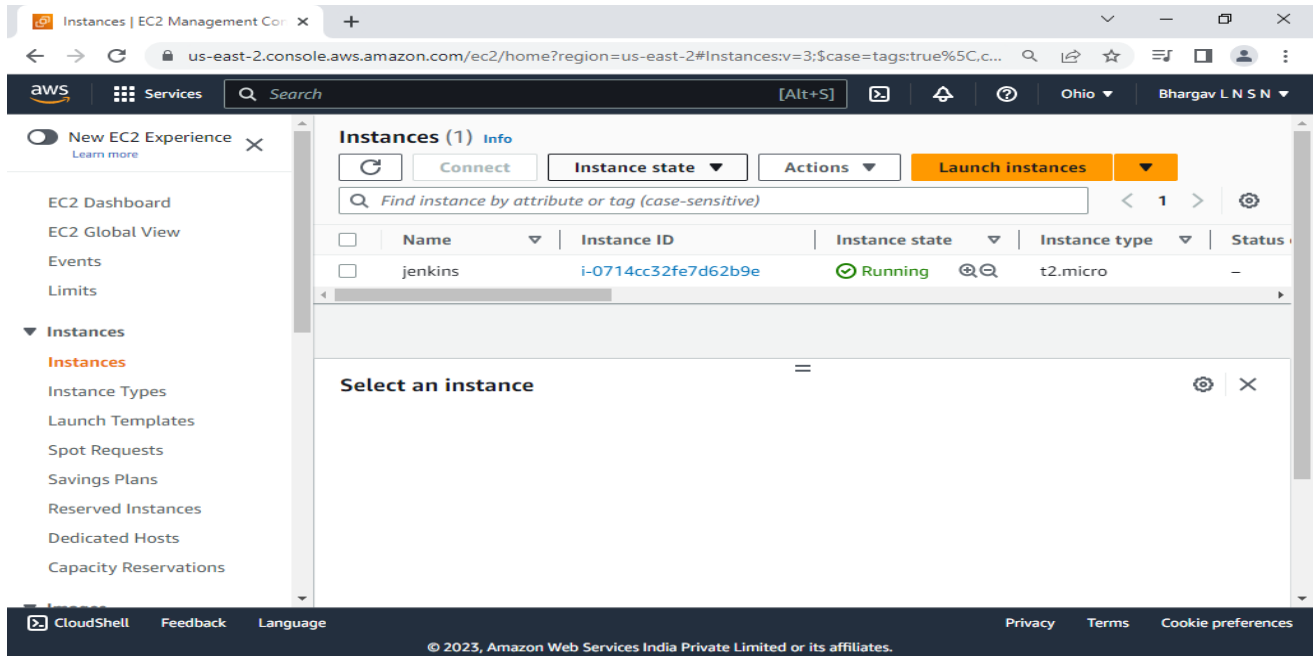
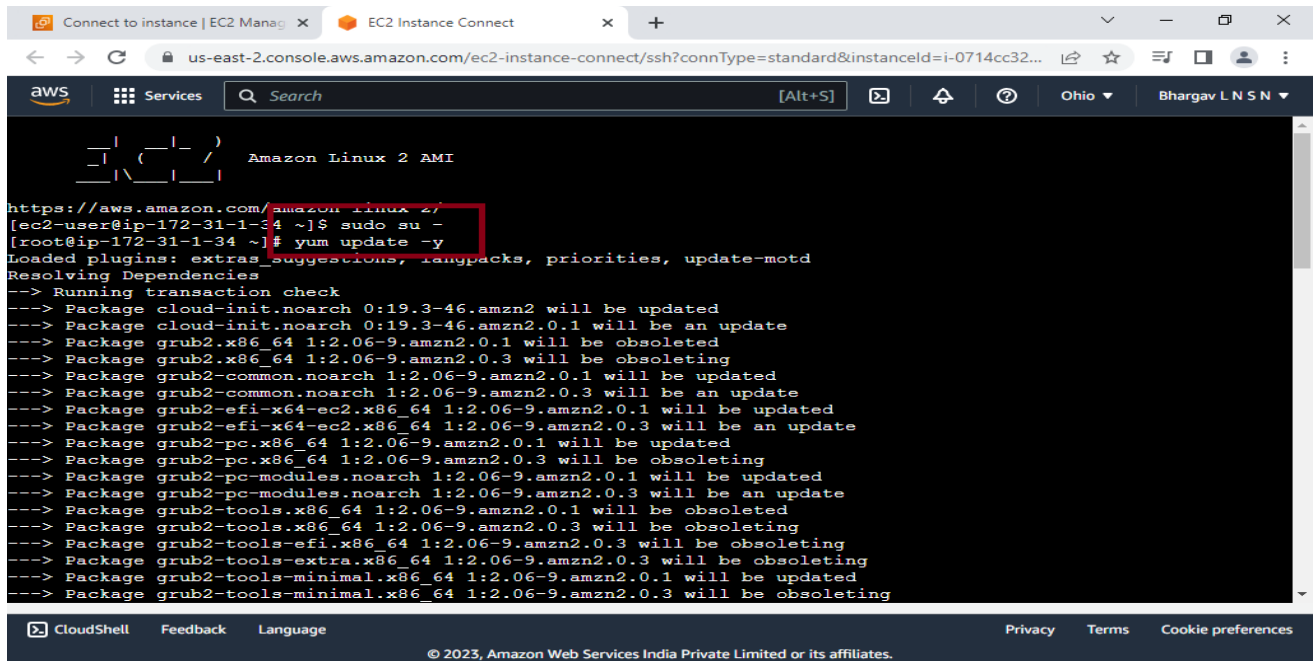


.War file deploying in Tomcat using Jenkins

Create an Ec2 instance and connect it with Ec2 Instance connect or any ssh.

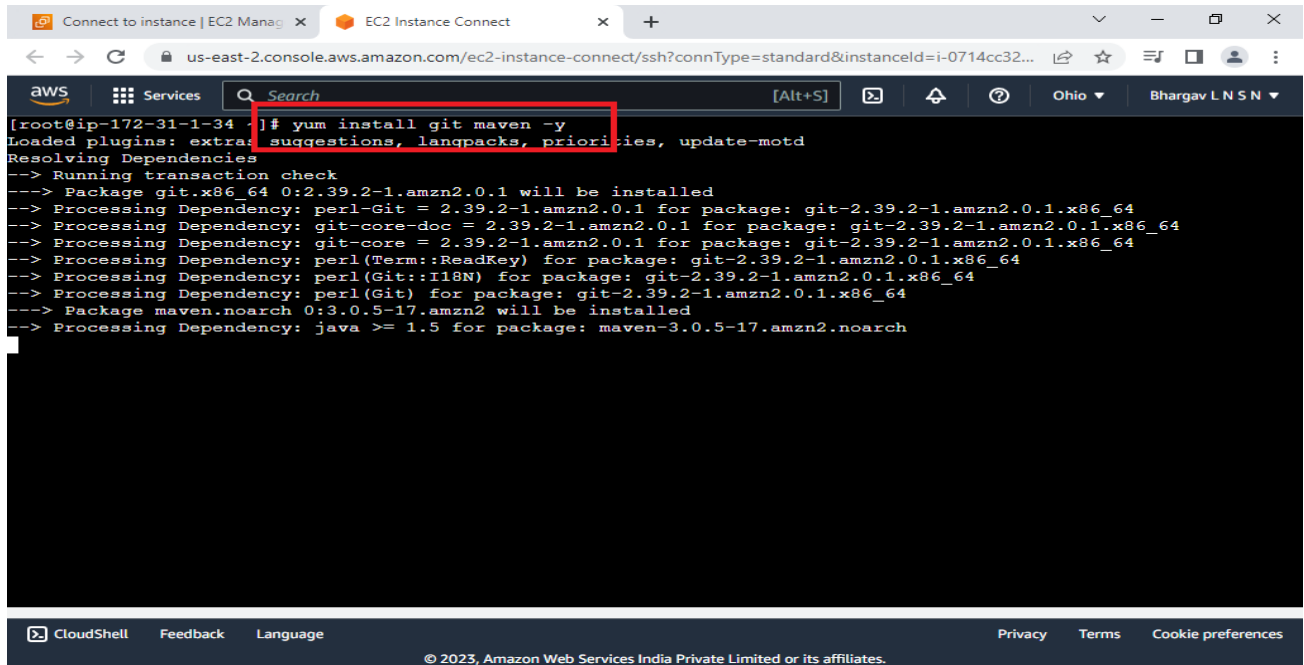


Go to root user and update Instance



Install Git and maven in the server.

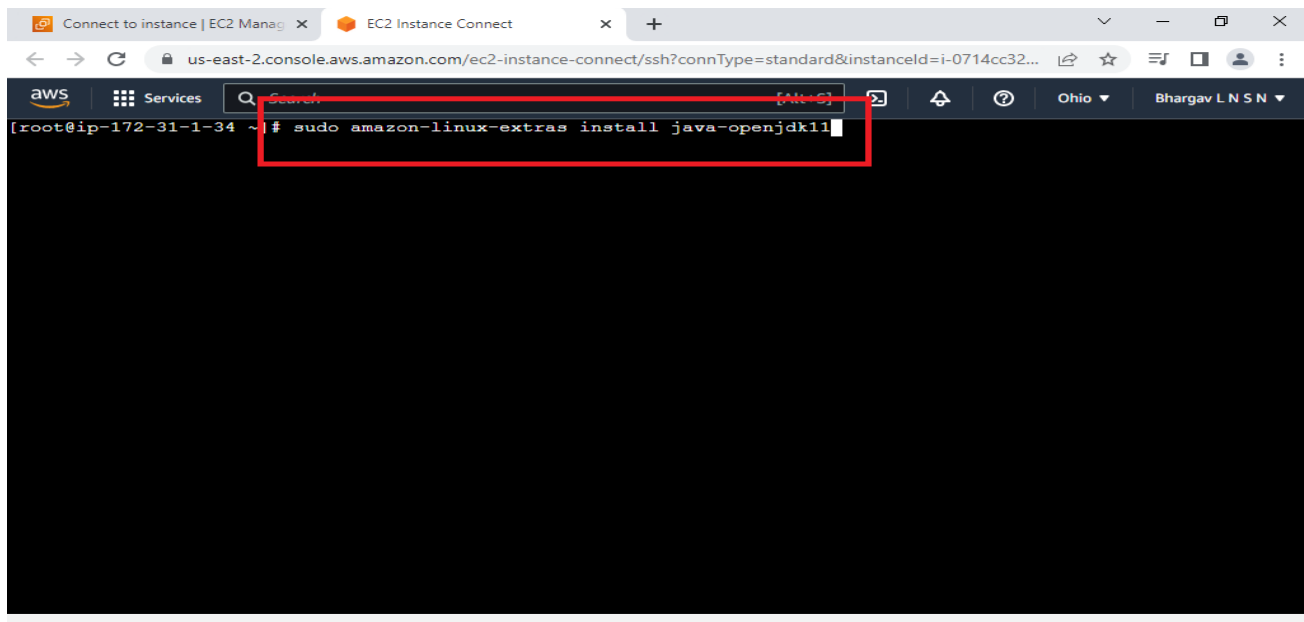
```
yum install git maven -y
```



The screenshot shows the AWS CloudShell interface. The terminal window displays the command `yum install git maven -y` being executed. The output shows the resolution of dependencies for both packages. The command is highlighted with a red box. The output text is as follows:

```
[root@ip-172-31-1-34 ~]# yum install git maven -y
Loaded plugins: extras, suggestions, langpacks, priorities, update-motd
Resolving Dependencies
--> Running transaction check
--> Package git.x86_64 0:2.39.2-1.amzn2.0.1 will be installed
--> Processing Dependency: perl-Git = 2.39.2-1.amzn2.0.1 for package: git-2.39.2-1.amzn2.0.1.x86_64
--> Processing Dependency: git-core-doc = 2.39.2-1.amzn2.0.1 for package: git-2.39.2-1.amzn2.0.1.x86_64
--> Processing Dependency: git-core = 2.39.2-1.amzn2.0.1 for package: git-2.39.2-1.amzn2.0.1.x86_64
--> Processing Dependency: perl(Term::ReadKey) for package: git-2.39.2-1.amzn2.0.1.x86_64
--> Processing Dependency: perl(Git::I18N) for package: git-2.39.2-1.amzn2.0.1.x86_64
--> Processing Dependency: perl(Git) for package: git-2.39.2-1.amzn2.0.1.x86_64
--> Package maven.noarch 0:3.0.5-17.amzn2 will be installed
--> Processing Dependency: java >= 1.5 for package: maven-3.0.5-17.amzn2.noarch
```

Install java `sudo amazon-linux-extras install java-openjdk11`



The screenshot shows the AWS CloudShell interface. The terminal window displays the command `sudo amazon-linux-extras install java-openjdk11` being entered. The command is highlighted with a red box. The terminal prompt is `[root@ip-172-31-1-34 ~]#`.

Install jar file using wget <https://get.jenkins.io/war-stable/2.387.1/jenkins.war>

Launch jenkins on port 80.

```
aws Connect to instance | EC2 Manag x EC2 Instance Connect x +
us-east-2.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0714cc32...
aws Services Search [Alt+S] Ohio Bhargav L N S N
[root@ip-172-31-1-34 ~]# wget https://get.jenkins.io/war-stable/2.387.1/jenkins.war
--2023-05-24 08:06:20-- https://get.jenkins.io/war-stable/2.387.1/jenkins.war
Resolving get.jenkins.io (get.jenkins.io)... 52.167.253.43
Connecting to get.jenkins.io (get.jenkins.io)|52.167.253.43|:443... connected.
HTTP request sent, awaiting response... 302 Found
Location: https://ftp-nyc.osuosl.org/pub/jenkins/war-stable/2.387.1/jenkins.war [following]
--2023-05-24 08:06:21-- https://ftp-nyc.osuosl.org/pub/jenkins/war-stable/2.387.1/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|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 98336194 (94M) [application/x-java-archive]
Saving to: 'jenkins.war'

100%[=====>] 98,336,194 5.10MB/s in 19s

2023-05-24 08:06:39 (5.01 MB/s) - 'jenkins.war' saved [98336194/98336194]

[root@ip-172-31-1-34 ~]# java -jar jenkins.war --httpPort=80
Running from: /root/.jenkins/war
webroot: /root/.jenkins/war
```

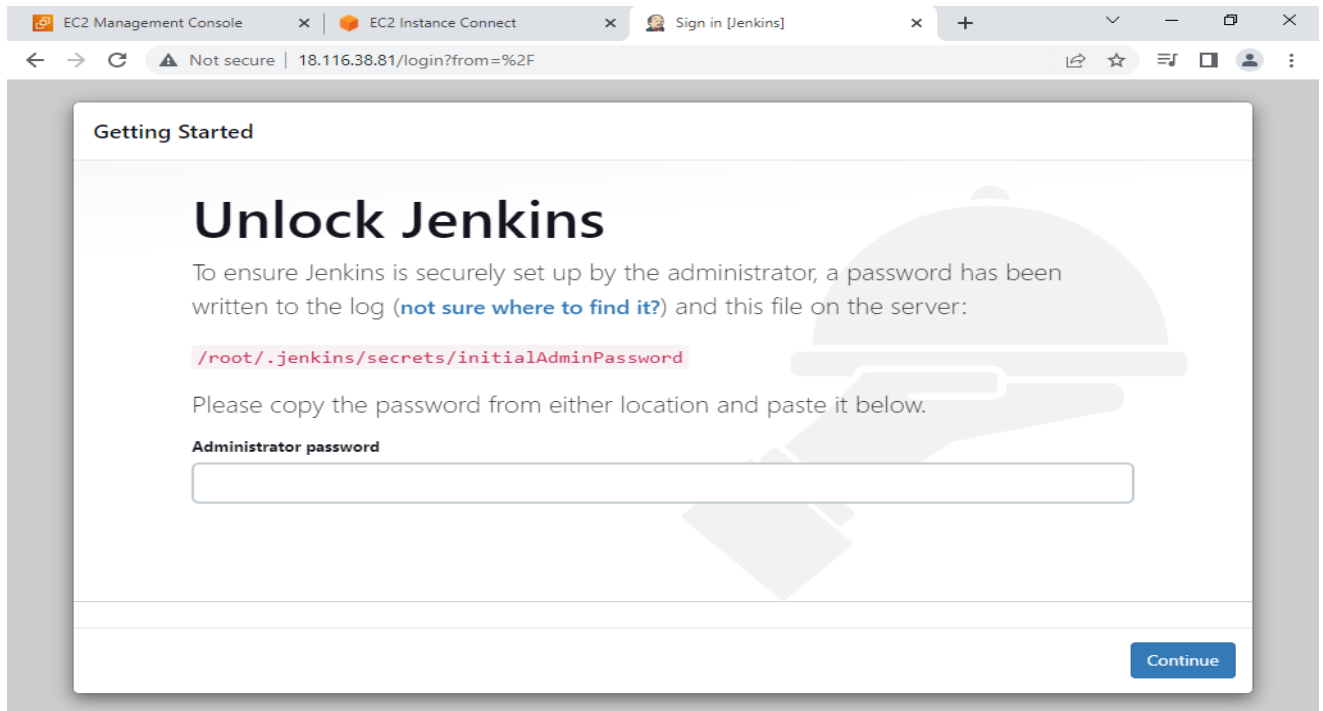
```
aws Connect to instance | EC2 Manag x EC2 Instance Connect x +
us-east-2.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0714cc32...
aws Services Search [Alt+S] Ohio Bhargav L N S N
2023-05-24 08:07:19.327+0000 [id=31] INFO jenkins.InitReactorRunner$1$onAttained: Listed all plugins
2023-05-24 08:07:21.255+0000 [id=31] INFO jenkins.InitReactorRunner$1$onAttained: Prepared all plugins
2023-05-24 08:07:21.262+0000 [id=31] INFO jenkins.InitReactorRunner$1$onAttained: Started all plugins
2023-05-24 08:07:21.298+0000 [id=32] INFO jenkins.InitReactorRunner$1$onAttained: Augmented all extensions
2023-05-24 08:07:21.756+0000 [id=32] INFO jenkins.InitReactorRunner$1$onAttained: System config loaded
2023-05-24 08:07:21.757+0000 [id=32] INFO jenkins.InitReactorRunner$1$onAttained: System config adapted
2023-05-24 08:07:21.757+0000 [id=32] INFO jenkins.InitReactorRunner$1$onAttained: Loaded all jobs
2023-05-24 08:07:21.759+0000 [id=32] INFO jenkins.InitReactorRunner$1$onAttained: Configuration for all jobs updated
2023-05-24 08:07:22.422+0000 [id=45] INFO hudson.util.Retrier#start: Attempt #1 to do the action check updates server
2023-05-24 08:07:22.878+0000 [id=31] INFO jenkins.install.SetupWizard#init:

*****
*****
*****

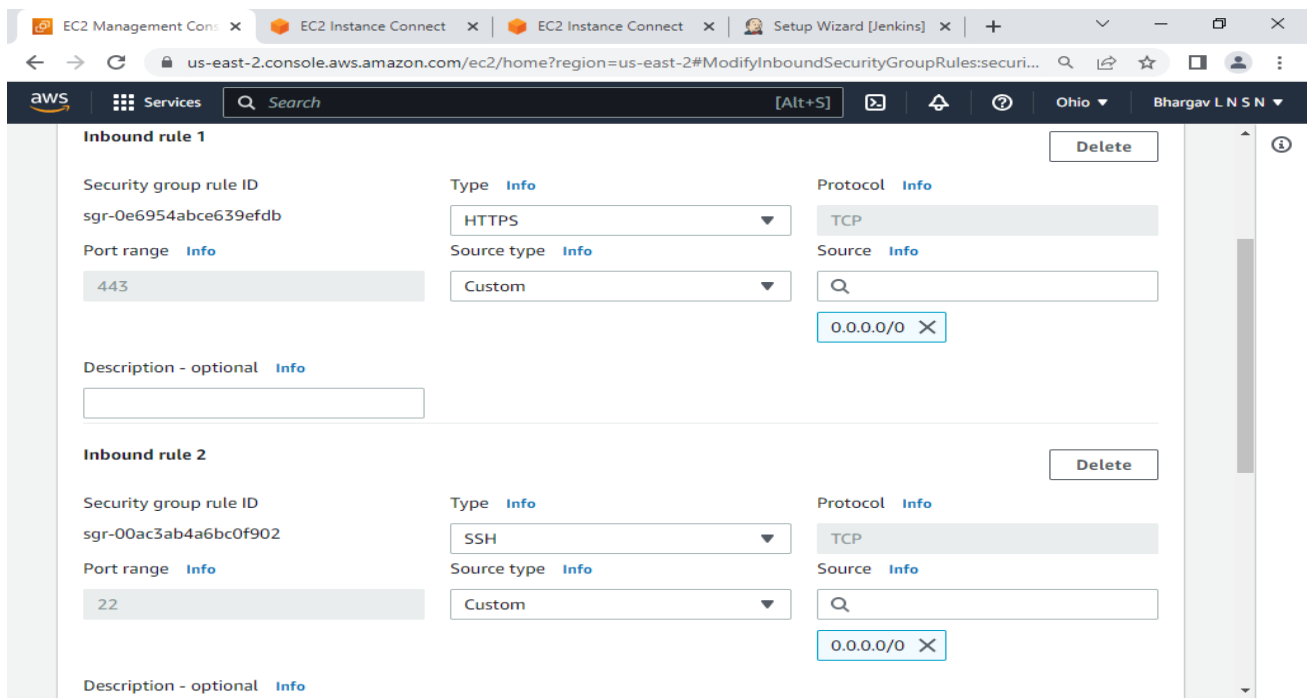
Jenkins initial setup is required. An admin user has been created and a password generated.
Please use the following password to proceed to installation:
ec7061213762455a929fa9320820fe22

This may also be found at: /root/.jenkins/secrets/initialAdminPassword

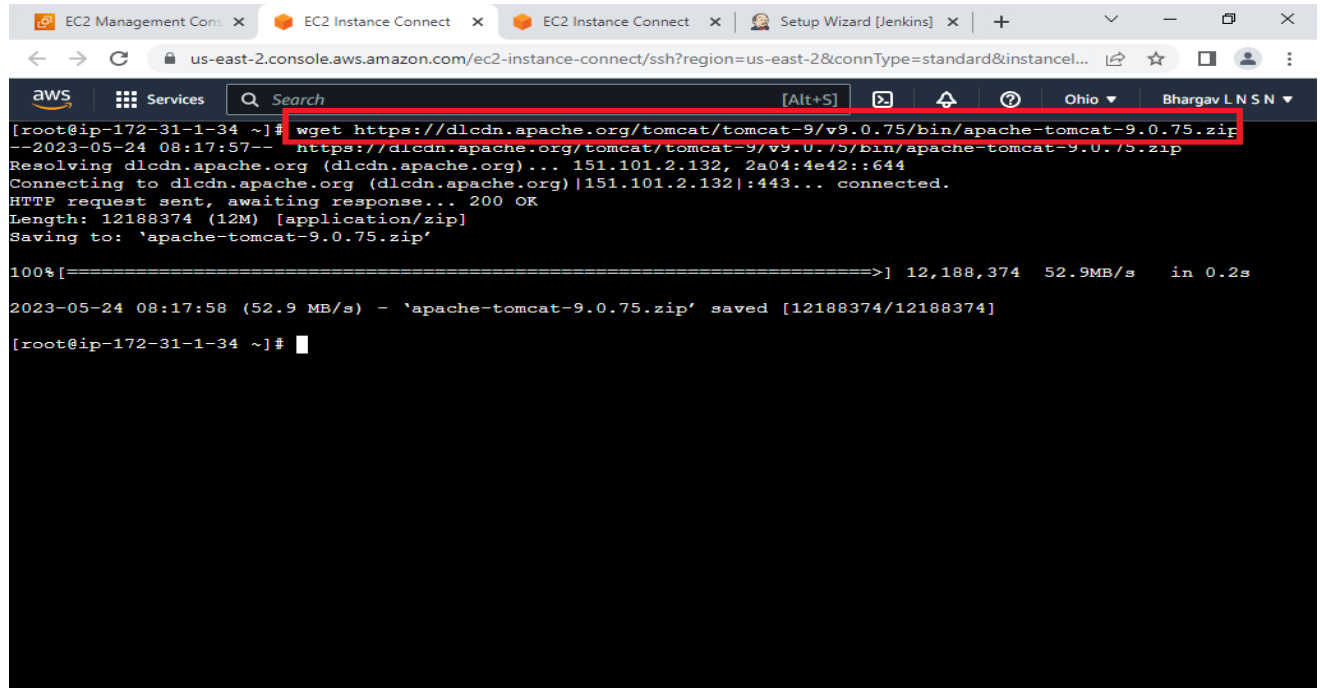
*****
*****
*****
```



Securitygroup add rule of 443 port and 80 port.



## Install Tomcat and change port to 80



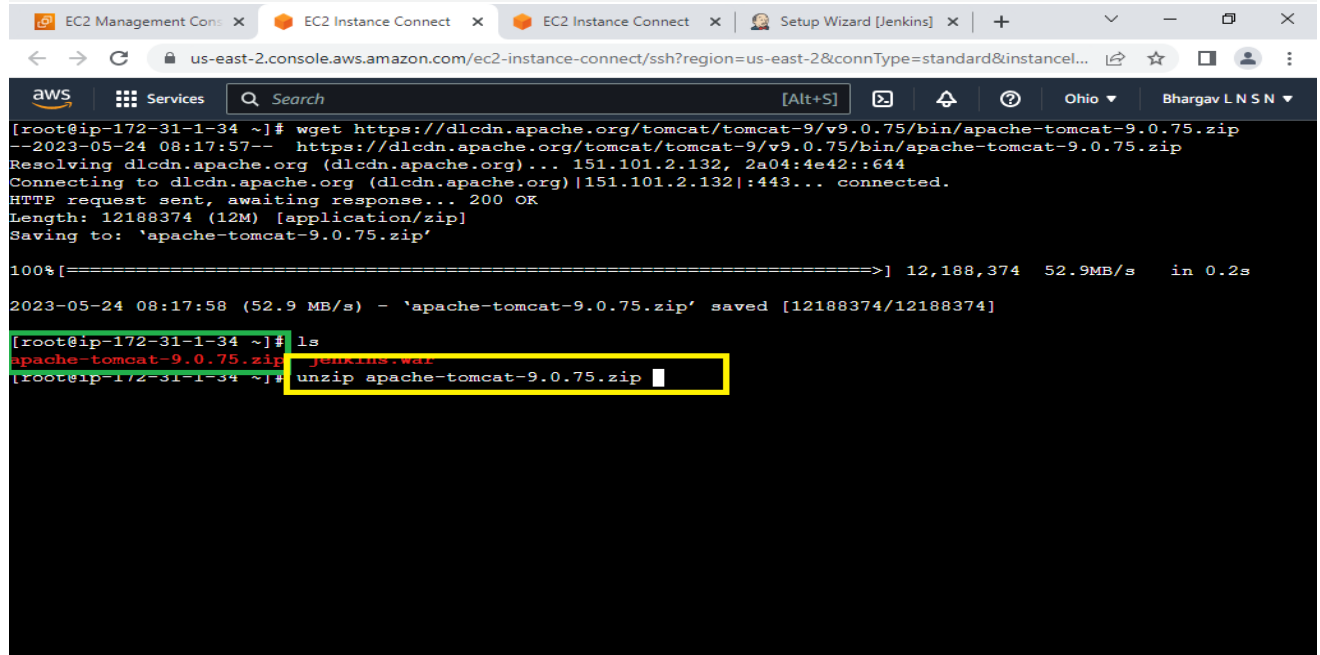
The screenshot shows the AWS Management Console with the EC2 Instance Connect terminal open. The user is running the command `wget https://d1cdn.apache.org/tomcat/tomcat-9/v9.0.75/bin/apache-tomcat-9.0.75.zip`. The terminal output shows the file being downloaded from the specified URL. The download progress is 100% and the file is saved as `apache-tomcat-9.0.75.zip`.

```
[root@ip-172-31-1-34 ~]# wget https://d1cdn.apache.org/tomcat/tomcat-9/v9.0.75/bin/apache-tomcat-9.0.75.zip
--2023-05-24 08:17:57-- https://d1cdn.apache.org/tomcat/tomcat-9/v9.0.75/bin/apache-tomcat-9.0.75.zip
Resolving d1cdn.apache.org (d1cdn.apache.org)... 151.101.2.132, 2a04:4e42::644
Connecting to d1cdn.apache.org (d1cdn.apache.org)|151.101.2.132|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 12188374 (12M) [application/zip]
Saving to: 'apache-tomcat-9.0.75.zip'

100%[=====>] 12,188,374 52.9MB/s in 0.2s

2023-05-24 08:17:58 (52.9 MB/s) - 'apache-tomcat-9.0.75.zip' saved [12188374/12188374]

[root@ip-172-31-1-34 ~]#
```



The screenshot shows the AWS Management Console with the EC2 Instance Connect terminal open. The user is running the command `wget https://d1cdn.apache.org/tomcat/tomcat-9/v9.0.75/bin/apache-tomcat-9.0.75.zip`. The terminal output shows the file being downloaded from the specified URL. The download progress is 100% and the file is saved as `apache-tomcat-9.0.75.zip`. The user then runs `ls` and `unzip apache-tomcat-9.0.75.zip`.

```
[root@ip-172-31-1-34 ~]# wget https://d1cdn.apache.org/tomcat/tomcat-9/v9.0.75/bin/apache-tomcat-9.0.75.zip
--2023-05-24 08:17:57-- https://d1cdn.apache.org/tomcat/tomcat-9/v9.0.75/bin/apache-tomcat-9.0.75.zip
Resolving d1cdn.apache.org (d1cdn.apache.org)... 151.101.2.132, 2a04:4e42::644
Connecting to d1cdn.apache.org (d1cdn.apache.org)|151.101.2.132|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 12188374 (12M) [application/zip]
Saving to: 'apache-tomcat-9.0.75.zip'

100%[=====>] 12,188,374 52.9MB/s in 0.2s

2023-05-24 08:17:58 (52.9 MB/s) - 'apache-tomcat-9.0.75.zip' saved [12188374/12188374]

[root@ip-172-31-1-34 ~]# ls
apache-tomcat-9.0.75.zip jenkins.war
[root@ip-172-31-1-34 ~]# unzip apache-tomcat-9.0.75.zip
```

EC2 Management Console | EC2 Instance Connect | EC2 Instance Connect | Setup Wizard [Jenkins] | +

us-east-2.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-2&connType=standard&instancel...

aws | Services | Search [Alt+S] | Ohio | Bhargav L N S N

```
[root@ip-172-31-1-34 ~]# ls
apache-tomcat-9.0.75  apache-tomcat-9.0.75.zip  jenkins.war
[root@ip-172-31-1-34 ~]# mv apache-tomcat-9.0.75.zip /opt/
[root@ip-172-31-1-34 ~]# cd /opt/
-bash: cd: opt/: No such file or directory
[root@ip-172-31-1-34 ~]# ls
apache-tomcat-9.0.75  jenkins.war
[root@ip-172-31-1-34 ~]# cd /opt
[root@ip-172-31-1-34 opt]# ls
apache-tomcat-9.0.75.zip  aws  rh
[root@ip-172-31-1-34 opt]#
```

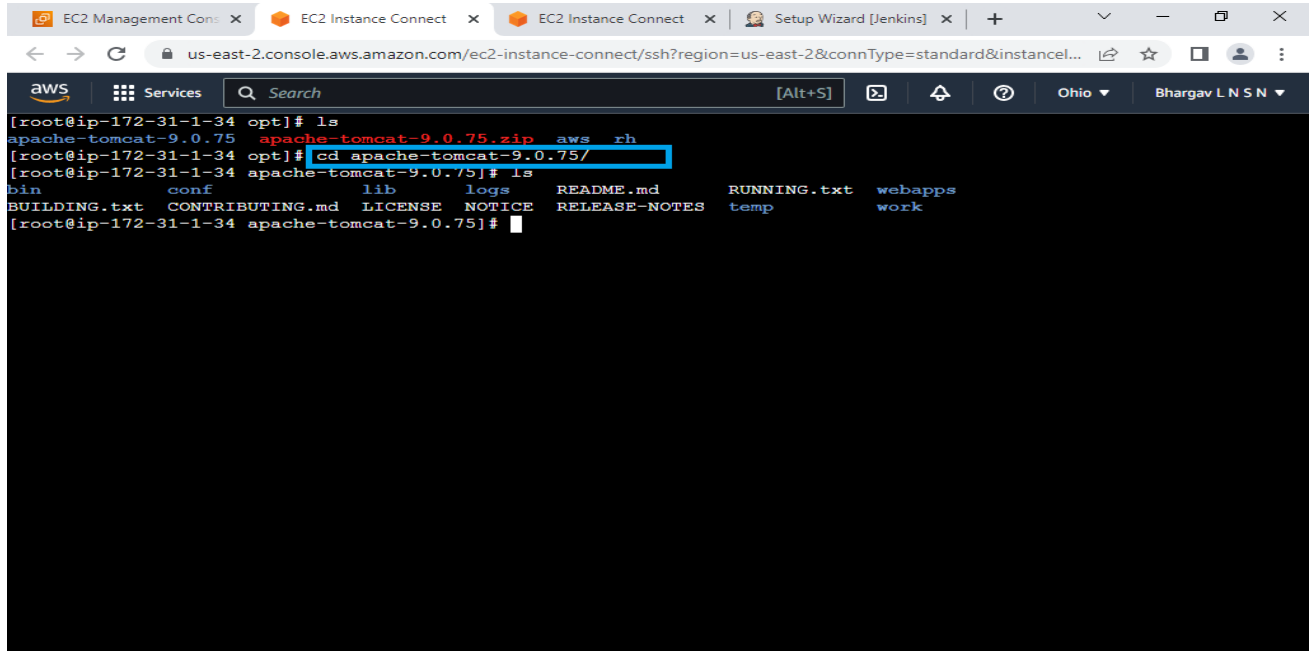
EC2 Management Console | EC2 Instance Connect | EC2 Instance Connect | Setup Wizard [Jenkins] | +

us-east-2.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-2&connType=standard&instancel...

aws | Services | Search [Alt+S] | Ohio | Bhargav L N S N

```
[root@ip-172-31-1-34 ~]# ls
apache-tomcat-9.0.75  apache-tomcat-9.0.75.zip  jenkins.war
[root@ip-172-31-1-34 ~]# mv apache-tomcat-9.0.75.zip /opt/
[root@ip-172-31-1-34 ~]# cd /opt/
-bash: cd: opt/: No such file or directory
[root@ip-172-31-1-34 ~]# ls
apache-tomcat-9.0.75  jenkins.war
[root@ip-172-31-1-34 ~]# cd /opt
[root@ip-172-31-1-34 opt]# ls
apache-tomcat-9.0.75.zip  aws  rh
[root@ip-172-31-1-34 opt]# unzip apache-tomcat-9.0.75.zip
Archive:  apache-tomcat-9.0.75.zip
  creating: apache-tomcat-9.0.75/
  creating: apache-tomcat-9.0.75/bin/
  creating: apache-tomcat-9.0.75/conf/
  creating: apache-tomcat-9.0.75/lib/
  creating: apache-tomcat-9.0.75/logs/
  creating: apache-tomcat-9.0.75/temp/
  creating: apache-tomcat-9.0.75/webapps/
  creating: apache-tomcat-9.0.75/webapps/ROOT/
  creating: apache-tomcat-9.0.75/webapps/ROOT/WEB-INF/
  creating: apache-tomcat-9.0.75/webapps/docs/
  creating: apache-tomcat-9.0.75/webapps/docs/META-INF/
  creating: apache-tomcat-9.0.75/webapps/docs/WEB-INF/
  creating: apache-tomcat-9.0.75/webapps/docs/WEB-INF/jsp/
  creating: apache-tomcat-9.0.75/webapps/docs/annotationapi/
  creating: apache-tomcat-9.0.75/webapps/docs/api/
  creating: apache-tomcat-9.0.75/webapps/docs/appdev/
  creating: apache-tomcat-9.0.75/webapps/docs/appdev/sample/
  creating: apache-tomcat-9.0.75/webapps/docs/appdev/sample/docs/
  creating: apache-tomcat-9.0.75/webapps/docs/appdev/sample/src/
  creating: apache-tomcat-9.0.75/webapps/docs/appdev/sample/src/myPackage/
```

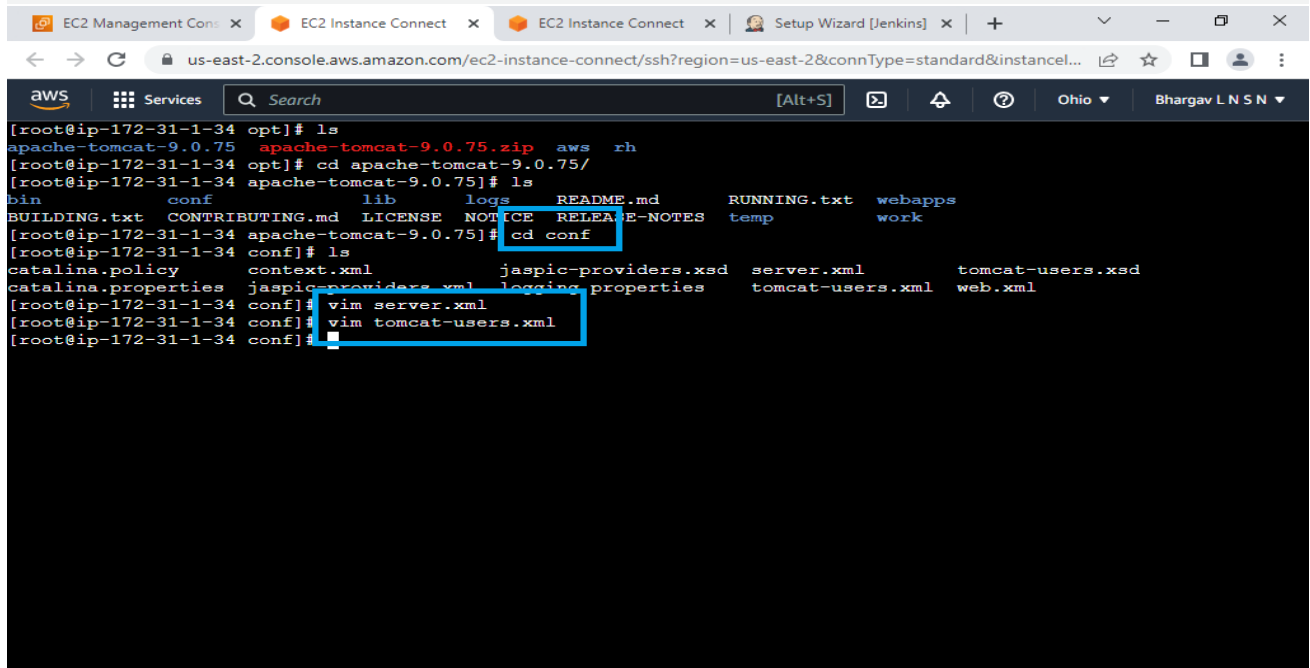
Now cd to apache file



The screenshot shows the AWS Management Console with the EC2 Instance Connect terminal open. The terminal displays the following commands and output:

```
[root@ip-172-31-1-34 opt]# ls
apache-tomcat-9.0.75  apache-tomcat-9.0.75.zip  aws  rh
[root@ip-172-31-1-34 opt]# cd apache-tomcat-9.0.75/
[root@ip-172-31-1-34 apache-tomcat-9.0.75]# ls
bin      conf      lib      logs      README.md  RUNNING.txt  webapps
BUILDING.txt  CONTRIBUTING.md  LICENSE  NOTICE  RELEASE-NOTES  temp      work
```

The command `cd apache-tomcat-9.0.75/` is highlighted with a blue box.

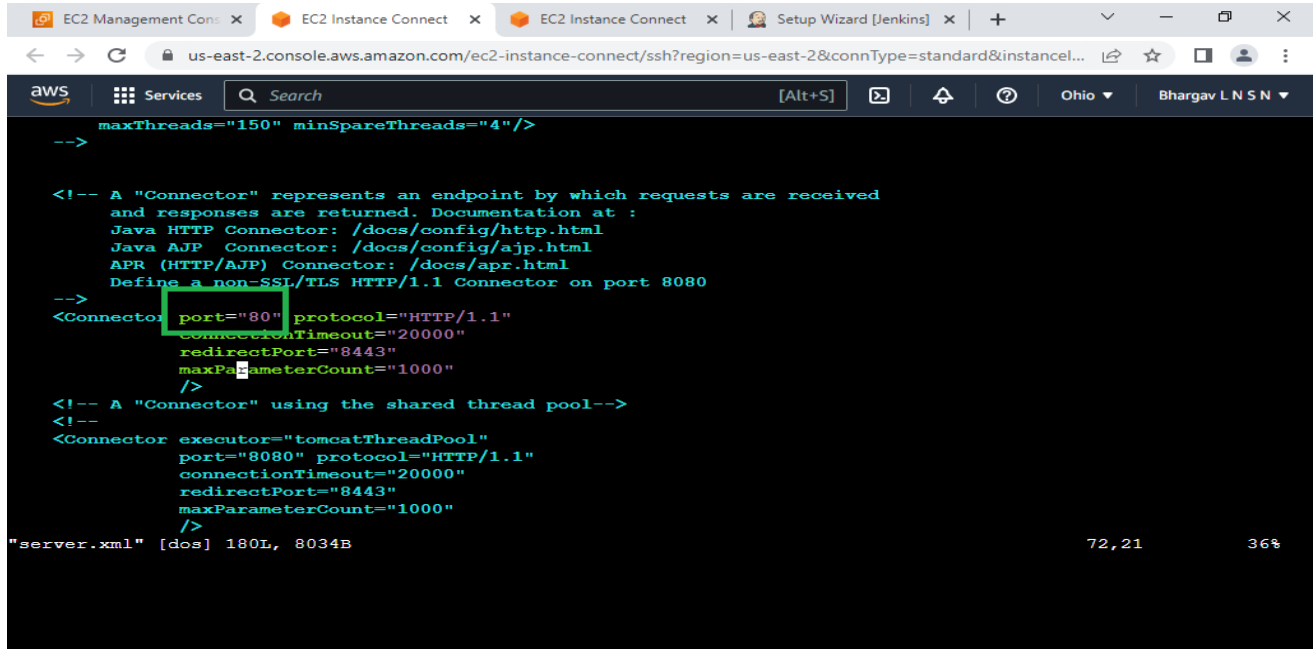


The screenshot shows the AWS Management Console with the EC2 Instance Connect terminal open. The terminal displays the following commands and output:

```
[root@ip-172-31-1-34 opt]# ls
apache-tomcat-9.0.75  apache-tomcat-9.0.75.zip  aws  rh
[root@ip-172-31-1-34 opt]# cd apache-tomcat-9.0.75/
[root@ip-172-31-1-34 apache-tomcat-9.0.75]# ls
bin      conf      lib      logs      README.md  RUNNING.txt  webapps
BUILDING.txt  CONTRIBUTING.md  LICENSE  NOTICE  RELEASE-NOTES  temp      work
[root@ip-172-31-1-34 apache-tomcat-9.0.75]# cd conf
[root@ip-172-31-1-34 conf]# ls
catalina.policy  context.xml  jaspic-providers.xsd  server.xml  tomcat-users.xsd
catalina.properties  jaspic-providers.xml  logging.properties  tomcat-users.xml  web.xml
[root@ip-172-31-1-34 conf]# vim server.xml
[root@ip-172-31-1-34 conf]# vim tomcat-users.xml
```

The command `cd conf` is highlighted with a blue box. The command `vim server.xml` is also highlighted with a blue box.

cd to conf folder and change the server.xml and tomcat-users.xml file

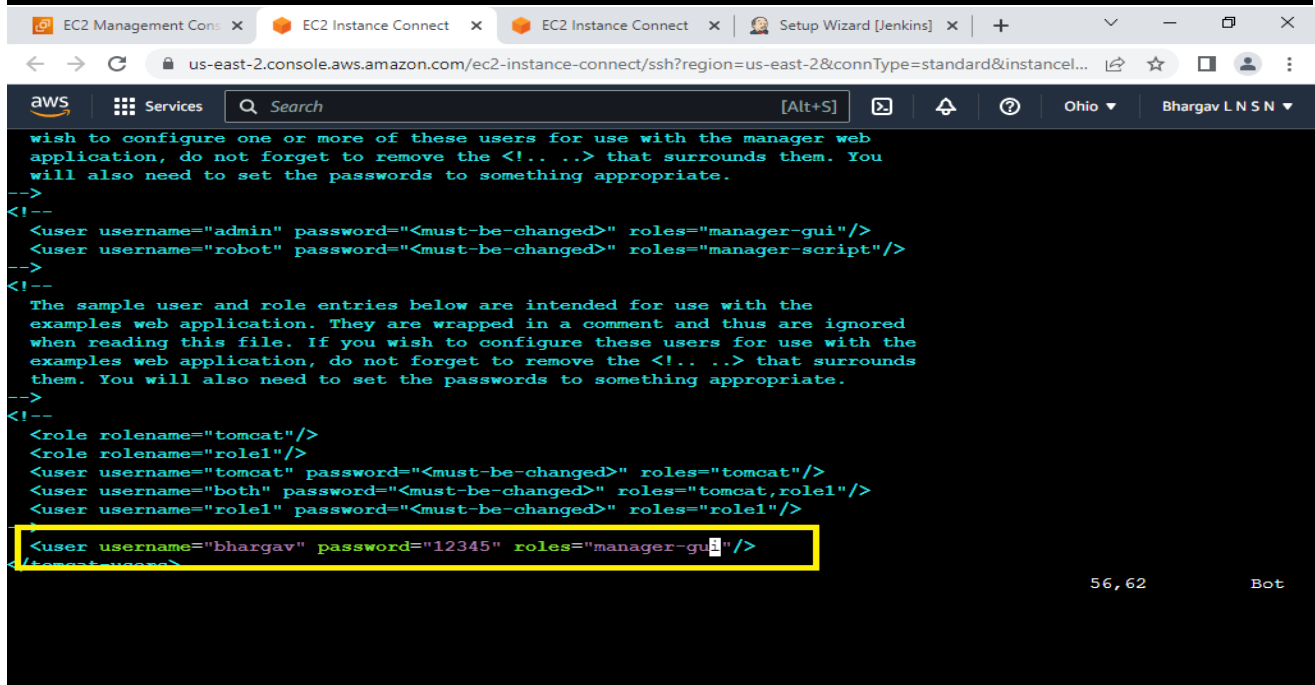


The screenshot shows the AWS Management Console interface with the 'EC2 Instance Connect' tab selected. The terminal window displays the content of the 'server.xml' file. The file is an XML configuration for a web server, defining connectors and executors. The first connector is on port 80, and the second is on port 8080. The file is named 'server.xml' and has a size of 1801B.

```
-->
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="80" protocol="HTTP/1.1"
           connectionTimeout="20000"
           redirectPort="8443"
           maxParameterCount="1000"
           />

<!-- A "Connector" using the shared thread pool-->
<!--
<Connector executor="tomcatThreadPool"
           port="8080" protocol="HTTP/1.1"
           connectionTimeout="20000"
           redirectPort="8443"
           maxParameterCount="1000"
           />
"server.xml" [dos] 1801B, 8034B 72,21 36%
```



The screenshot shows the AWS Management Console interface with the 'EC2 Instance Connect' tab selected. The terminal window displays the content of the 'tomcat-users.xml' file. The file contains user and role definitions for the Tomcat web application. The user 'bhargav' is defined with the password '12345' and the role 'manager-gui'. The file is named 'tomcat-users.xml' and has a size of 56B.

```
-->
wish to configure one or more of these users for use with the manager web
application, do not forget to remove the <!-- ... --> that surrounds them. You
will also need to set the passwords to something appropriate.
-->
<!--
<user username="admin" password="<must-be-changed>" roles="manager-gui"/>
<user username="robot" password="<must-be-changed>" roles="manager-script"/>
-->
<!--
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"/>
<user username="both" password="<must-be-changed>" roles="tomcat,role1"/>
<user username="role1" password="<must-be-changed>" roles="role1"/>
<user username="bhargav" password="12345" roles="manager-gui"/>
-->
"tomcat-users.xml" [dos] 56B, 8034B 56,62 Bot
```





```
EC2 Management Cons x EC2 Instance Connect x EC2 Instance Connect x Setup Wizard [Jenkins] x + - - - - -
us-east-2.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-2&connType=standard&instancel...
aws Services Search [Alt+S] Ohio Bhargav L N S N
<!--
Licensed to the Apache Software Foundation (ASF) under one or more
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

    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)?|java\.util\.(?:Linked)?HashMap"/>
</Context>
-- INSERT -- 22,56 Bot
```

```
EC2 Management Cons x EC2 Instance Connect x EC2 Instance Connect x Setup Wizard [Jenkins] x + - - - - -
us-east-2.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-2&connType=standard&instancel...
aws Services Search [Alt+S] Ohio Bhargav L N S N
apache-tomcat-9.0.75 apache-tomcat-9.0.75.zip aws rh
[root@ip-172-31-1-34 opt]# cd apache-tomcat-9.0.75/
[root@ip-172-31-1-34 apache-tomcat-9.0.75]# ls
bin conf lib logs README.md RUNNING.txt webapps
BUILDING.txt CONTRIBUTING.md LICENSE NOTICE RELEASE-NOTES temp work
[root@ip-172-31-1-34 apache-tomcat-9.0.75]# cd conf
[root@ip-172-31-1-34 conf]# ls
catalina.policy context.xml jaspic-providers.xsd server.xml tomcat-users.xsd
catalina.properties jaspic-providers.xml logging.properties tomcat-users.xml web.xml
[root@ip-172-31-1-34 conf]# vim server.xml
[root@ip-172-31-1-34 conf]# vim tomcat-users.xml
[root@ip-172-31-1-34 conf]# vim server.xml
[root@ip-172-31-1-34 conf]# vim tomcat-users.xml
[root@ip-172-31-1-34 conf]# ls
catalina.policy context.xml jaspic-providers.xsd server.xml tomcat-users.xsd
catalina.properties jaspic-providers.xml logging.properties tomcat-users.xml web.xml
[root@ip-172-31-1-34 conf]# cd ..
[root@ip-172-31-1-34 apache-tomcat-9.0.75]# cd webapps/
[root@ip-172-31-1-34 webapps]# ls
docs examples host-manager manager ROOT
[root@ip-172-31-1-34 webapps]# cd host-manager/
[root@ip-172-31-1-34 host-manager]# ls
css images index.jsp META-INF WEB-INF
[root@ip-172-31-1-34 host-manager]# cd META-INF/
[root@ip-172-31-1-34 META-INF]# ls
context.xml
[root@ip-172-31-1-34 META-INF]# vim context.xml
[root@ip-172-31-1-34 META-INF]# cd ..
[root@ip-172-31-1-34 host-manager]# cd ..
[root@ip-172-31-1-34 webapps]# ls
docs examples host-manager manager ROOT
[root@ip-172-31-1-34 webapps]# cd manager/
```

```
EC2 Management Console x EC2 Instance Connect x EC2 Instance Connect x Setup Wizard [Jenkins] x + - - X
us-east-2.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-2&connType=standard&instanceId=...
aws Services Search [Alt+S] Ohio Bhargav L N S N
<!--
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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

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)?|java\.util\.(?:Linked)?HashMap"/>
</Context>
-- INSERT --
22,56 Bot
```

```
EC2 Management Console x EC2 Instance Connect x EC2 Instance Connect x Setup Wizard [Jenkins] x + - - X
us-east-2.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-2&connType=standard&instanceId=...
aws Services Search [Alt+S] Ohio Bhargav L N S N
[root@ip-172-31-1-34 manager]# ls
css images index.jsp META-INF status.xsd WEB-INF xform.xml
[root@ip-172-31-1-34 manager]# cd META-INF/
[root@ip-172-31-1-34 META-INF]# ls
context.xml
[root@ip-172-31-1-34 META-INF]# vim context.xml
[root@ip-172-31-1-34 META-INF]# cd /bin
[root@ip-172-31-1-34 bin]# ls
[
a2p javap resizecons
abs2rel jcmd rev
ac jconsole rm
acpi_listen jdb rmail
addr2line jdeprscan rmail.postfix
alias jfr rmdir
amazon-linux-extras jhsdb rmiregistry
amazon-ssm-agent jimage rnano
apropos jinfo rngtest
ar jlink rpagen
arch jmap rpm
as jmod rpm2cpio
aserver jobs rpmdb
at join rpmkeys
atq journalctl rpmquery
atrm jpackage rpmverify
attr jp.py rst2html
aulast jp.py-2 rst2html-3.7
aulastlog jp.py-2.7 rst2html4-3.7
ausyscall jps rst2html4-3.7
avirt jrunscript rst2html5-3.7
awk jshell rst2html5-3.7
aws jsonpointer rst2latex
```

```
us-east-2.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-2&connType=standard&instancel...

aws Services Search [Alt+S] Ohio Bhargav L N S N

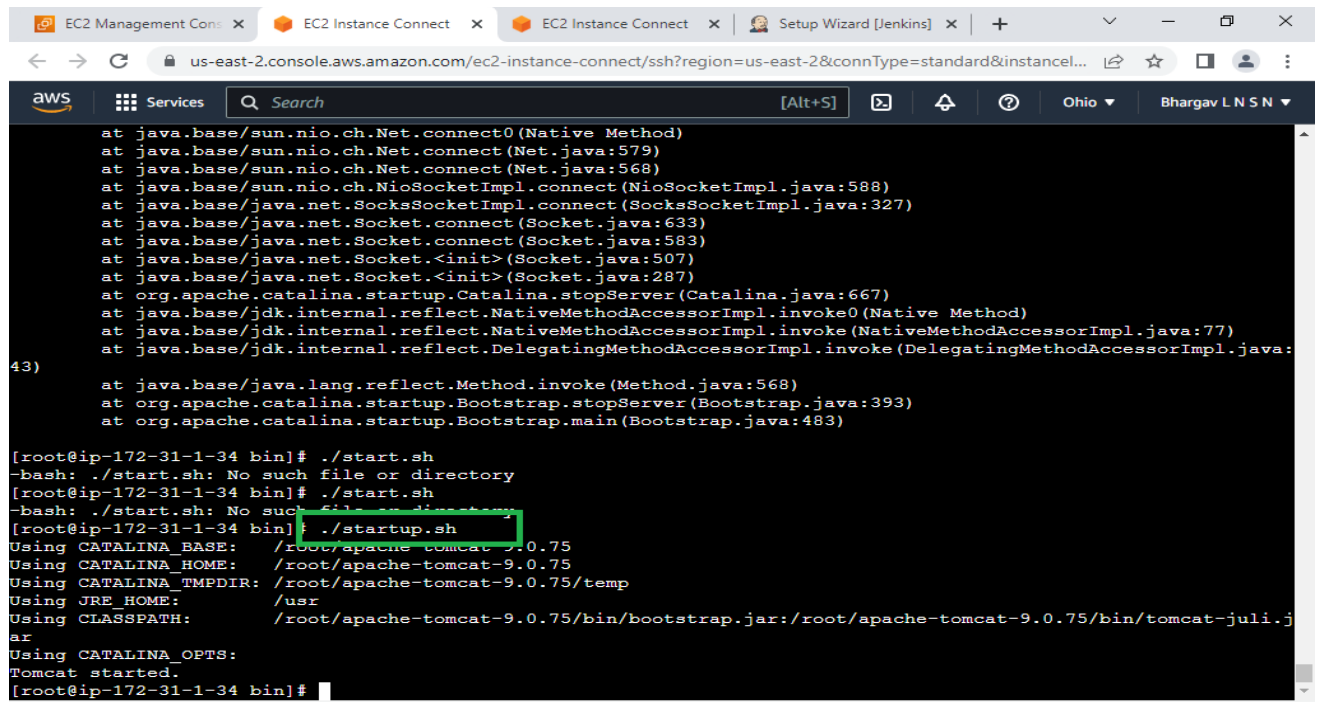
hibinit-agent python2-config xzgrep
host python3 xzless
hostid python3.7 xzmore
hostname python3.7m yes
hostnamectl python-config ypdomainname
hunsPELL pyvenv yum
i386 pyvenv-3.7 yum-builddep
iconv quota yum-config-manager
id quotasync yum-debug-dump
idiag-socket-details ranlib yum-debug-restore
idn raw yumdownloader
igawk rdate yum-groups-manager
info read zoat
infocmp readelf zcmp
infokey readlink zdiff
infotocap realpath zegrep
install rebuild-jar-repository zfgrep
ionice recode-sr-latin zforce
iostat red zgrep
ipcalc rename zip
ipcmk renice zipcloak
iperm repoclosure zipgrep
ipes repodiff zipinfo
iptables-xml repo-graph zipnote
isosize repomanage zipsplit
jar repoquery zless
jarsigner repo-rss zmore
java reposync znew
javac repotrack zsoelim
javadoc reset

[root@ip-172-31-1-34 bin]# chmod +x *.sh
[root@ip-172-31-1-34 bin]#
```

```
CloudShell Feedback Language
EC2 Management Console EC2 Instance Connect EC2 Instance Connect Setup Wizard [Jenkins]
us-east-2.console.aws.amazon.com/ec2-instance-connect/ssh?region=us-east-2&connType=standard&instancel...

aws Services Search [Alt+S] Ohio Bhargav L N S N

[root@ip-172-31-1-34 ~]# ls
apache-tomcat-9.0.75 enkins.war
[root@ip-172-31-1-34 ~]# cd apache-tomcat-9.0.75/
[root@ip-172-31-1-34 apache-tomcat-9.0.75]# ls
bin conf lib logs README.md RUNNING.txt webapps
BUILDING.txt CONTRIBUTING.md LICENSE NOTICE RELEASE-NOTES temp work
[root@ip-172-31-1-34 apache-tomcat-9.0.75]# cd bin/
[root@ip-172-31-1-34 bin]# ls
bootstrap.jar commons-daemon.jar digest.sh shutdown.sh tool-wrapper.sh
catalina.bat commons-daemon-native.tar.gz makebase.bat startup.bat version.bat
catalina.sh configtest.bat makebase.sh startup.sh version.sh
catalina-tasks.xml configtest.sh setclasspath.bat tomcat-juli.jar
ciphers.bat daemon.sh setclasspath.sh tomcat-native.tar.gz
ciphers.sh digest.bat shutdown.bat tool-wrapper.bat
[root@ip-172-31-1-34 bin]# chmod +x *.sh
[root@ip-172-31-1-34 bin]# ./shutdown.sh
Using CATALINA_BASE: /root/apache-tomcat-9.0.75
Using CATALINA_HOME: /root/apache-tomcat-9.0.75
Using CATALINA_TMPDIR: /root/apache-tomcat-9.0.75/temp
Using JRE_HOME: /usr
Using CLASSPATH: /root/apache-tomcat-9.0.75/bin/bootstrap.jar:/root/apache-tomcat-9.0.75/bin/tomcat-juli.jar
Using CATALINA_OPTS:
NOTE: Picked up JDK_JAVA_OPTIONS: --add-opens=java.base/java.lang=ALL-UNNAMED --add-opens=java.base/java.io=ALL-UNNAMED --add-opens=java.base/java.util=ALL-UNNAMED --add-opens=java.base/java.util.concurrent=ALL-UNNAMED --add-opens=java.rmi/sun.rmi.transport=ALL-UNNAMED
May 24, 2023 8:31:11 AM org.apache.catalina.startup.Catalina stopServer
SEVERE: Could not contact [localhost:8005] (base port [8005] and offset [0]). Tomcat may not be running.
May 24, 2023 8:31:11 AM org.apache.catalina.startup.Catalina stopServer
SEVERE: Error stopping Catalina
java.net.ConnectException: Connection refused
at java.base/sun.nio.ch.Net.connect0(Native Method)
```



The screenshot shows a web browser window with multiple tabs for EC2 Management Console, EC2 Instance Connect, and Setup Wizard [Jenkins]. The active tab displays a terminal session for an EC2 instance. The terminal output shows a Java stack trace for a connection attempt, followed by shell commands to start a service. The command `./startup.sh` is highlighted with a green box. The output of this command shows environment variables for CATALINA, JRE, and CLASSPATH, and a message indicating that Tomcat has started.

```
at java.base/sun.nio.ch.Net.connect0(Native Method)
at java.base/sun.nio.ch.Net.connect(Net.java:579)
at java.base/sun.nio.ch.Net.connect(Net.java:568)
at java.base/sun.nio.ch.NioSocketImpl.connect(NioSocketImpl.java:588)
at java.base/java.net.SocksSocketImpl.connect(SocksSocketImpl.java:327)
at java.base/java.net.Socket.connect(Socket.java:633)
at java.base/java.net.Socket.connect(Socket.java:583)
at java.base/java.net.Socket.<init>(Socket.java:507)
at java.base/java.net.Socket.<init>(Socket.java:287)
at org.apache.catalina.startup.Catalina.stopServer(Catalina.java:667)
at java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
at java.base/jdk.internal.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:77)
at java.base/jdk.internal.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:43)
at java.base/java.lang.reflect.Method.invoke(Method.java:568)
at org.apache.catalina.startup.Bootstrap.stopServer(Bootstrap.java:393)
at org.apache.catalina.startup.Bootstrap.main(Bootstrap.java:483)

[root@ip-172-31-1-34 bin]# ./start.sh
-bash: ./start.sh: No such file or directory
[root@ip-172-31-1-34 bin]# ./start.sh
-bash: ./start.sh: No such file or directory
[root@ip-172-31-1-34 bin]# ./startup.sh
Using CATALINA_BASE:   /root/apache-tomcat-9.0.75
Using CATALINA_HOME:   /root/apache-tomcat-9.0.75
Using CATALINA_TMPDIR: /root/apache-tomcat-9.0.75/temp
Using JRE_HOME:        /usr
Using CLASSPATH:       /root/apache-tomcat-9.0.75/bin/bootstrap.jar:/root/apache-tomcat-9.0.75/bin/tomcat-juli.jar
Using CATALINA_OPTS:
Tomcat started.
[root@ip-172-31-1-34 bin]#
```

Now go Jenkins and do a job:

- I. Login with password that is generated.
- II. Add username password and gmail.
- III. Fork a github repository to your github
- IV. Now install extra plugins like github integration maven integration and deploy to container.
- V. Add build step add executeshell.
- VI. Apply and save
- VII. Build now and configure.

Instances | EC2 | x | EC2 Instance Co x | EC2 Instance Co x | Apache Tomcat x | Setup Wizard [J x

Not secure | 18.116.38.81:443

## Getting Started

# Create First Admin User

Username

Password

Confirm password

Full name

Jenkins 2.387.1

[Skip and continue as admin](#) [Save and Continue](#)

Instances | EC2 | x | EC2 Instance Co x | EC2 Instance Co x | Apache Tomcat x | Available plugin: x

Not secure | 18.116.38.81:443/manage/pluginManager/available

Dashboard > Manage Jenkins > Plugin Manager

Available plugins

Installed plugins

Advanced settings

Download progress

Q deploy to conta

Install	Name ↓	Released
<input checked="" type="checkbox"/>	<a href="#">GitHub Integration</a> 0.5.0 <a href="#">emailxtext</a> <a href="#">Build Triggers</a> GitHub Integration Plugin for Jenkins	3 mo 15 days ago
<input checked="" type="checkbox"/>	<a href="#">Maven Integration</a> 3.22 <a href="#">Build Tools</a> This plugin provides a deep integration between Jenkins and Maven. It adds support for automatic triggers between projects depending on SNAPSHOTS as well as the automated configuration of various Jenkins publishers such as Junit.	26 days ago
<input checked="" type="checkbox"/>	<a href="#">Deploy to container</a> 1.16 <a href="#">Artifact Uploaders</a> This plugin allows you to deploy a war to a container after a successful build.	2 yr 6 mo ago

[Install without restart](#) [Download now and install after restart](#) Update information obtained: 6 min 39 sec ago

[Check now](#)

Instances | EC2 | x | EC2 Instance Co x | EC2 Instance Co x | Apache Tomcat x | Download prog x

Not secure | 18.116.38.81:443/manage/pluginManager/updates/

# Jenkins

Search (CTRL+K) ?

admin log out

Dashboard > Manage Jenkins > Plugin Manager

## Download progress

Updates

Available plugins

Installed plugins

Advanced settings

Download progress

Preparation

- Checking internet connectivity
- Checking update center connectivity
- Success

Folders	✓ Already Installed
OWASP Markup Formatter	✓ Already Installed
Build Timeout	✓ Already Installed
Credentials Binding	✓ Already Installed
Timestampers	✓ Already Installed
Workspace Cleanup	✓ Already Installed
Ant	✓ Already Installed
Gradle	✓ Already Installed
Pipeline	✓ Already Installed
GitHub Branch Source	✓ Already Installed
Pipeline: GitHub Groovy Libraries	✓ Already Installed
Pipeline: Stage View	✓ Already Installed
Git	✓ Already Installed

Instances | EC2 | x | EC2 Instance Co x | EC2 Instance Co x | Apache Tomcat x | Freestyle-jenkins x

Not secure | 18.116.38.81:443/job/Freestyle-jenkins%20with%20maven/configure

# Jenkins

Search (CTRL+K) ?

admin log out

Dashboard > Freestyle-jenkins with maven > Configuration

## Configure

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

## General

Enabled

Description

[Plain text] [Preview](#)

☐ Discard old builds ?

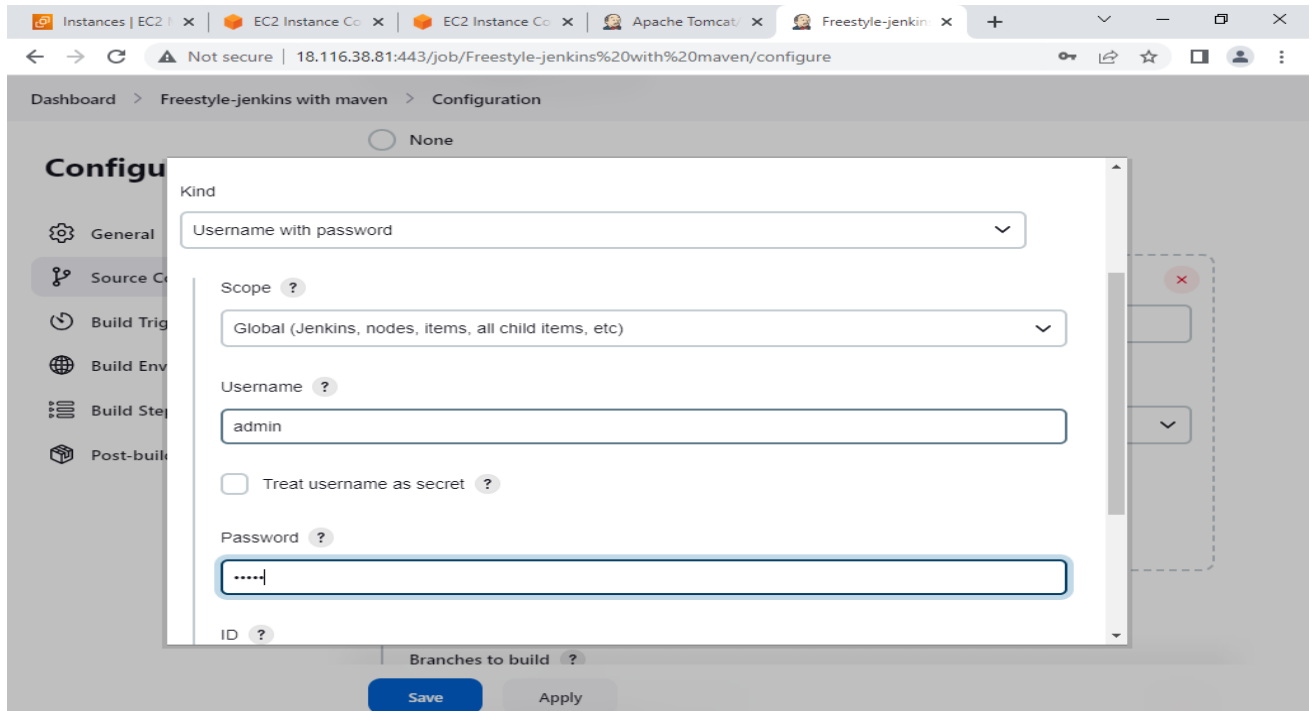
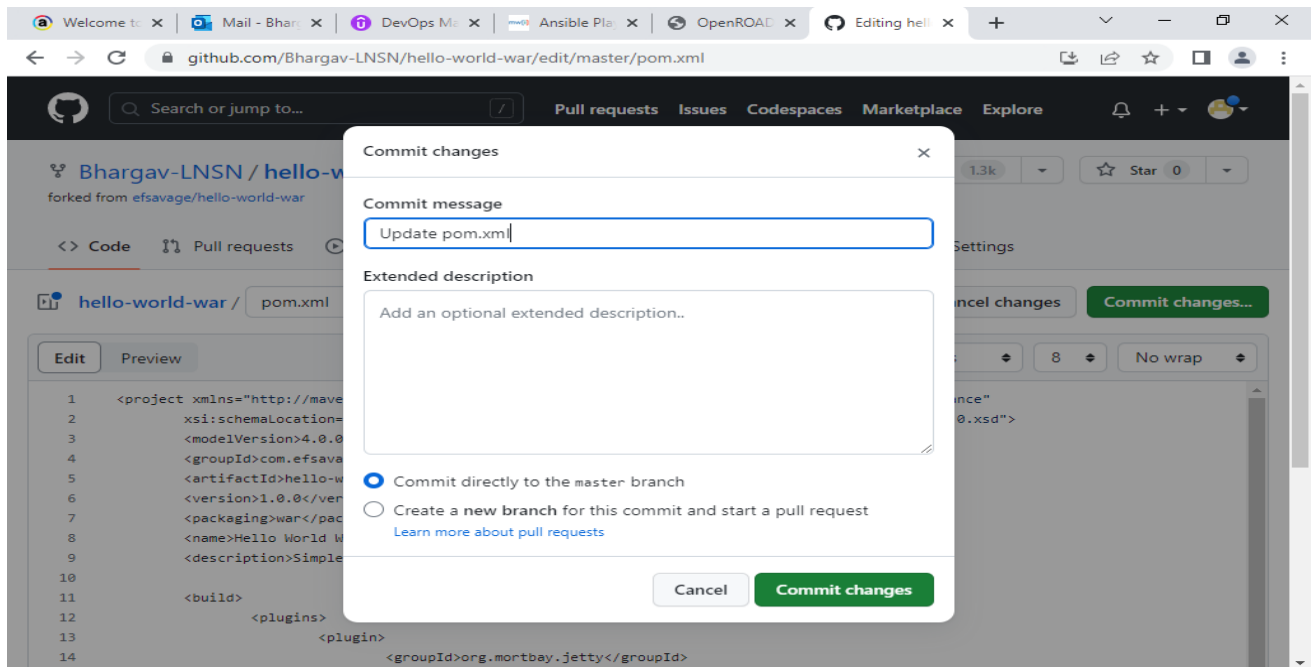
☐ GitHub project

☐ This project is parameterized ?

☐ Throttle builds ?

☐ Execute concurrent builds if necessary ?

Save Apply





Instances | EC2 | x | EC2 Instance Co | x | EC2 Instance Co | x | Apache Tomcat | x | Freestyle-jenkins | x

Not secure | 18.116.38.81:443/job/Freestyle-jenkins%20with%20maven/configure

Dashboard > Freestyle-jenkins with maven > Configuration

## Configure

☐ None

☒ Git ?

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

Repositories ?

Repository URL ?

https://github.com/Bhargav-LNSN/hello-world-war.git

Credentials ?

admin/\*\*\*\*\*

Add

Advanced

Add Repository

Branches to build ?

Save Apply

Instances | EC2 | x | EC2 Instance Co | x | EC2 Instance Co | x | Apache Tomcat | x | Freestyle-jenkins | x

Not secure | 18.116.38.81:443/job/Freestyle-jenkins%20with%20maven/1/console

Dashboard > Freestyle-jenkins with maven > #1 > Console Output

Status

Changes

Console Output

View as plain text

Edit Build Information

Delete build '#1'

Git Build Data

## Console Output

```
Started by user admin
Running as SYSTEM
Building in workspace /root/.jenkins/workspace/Freestyle-jenkins with maven
The recommended git tool is: NONE
using credential 92734793-7f28-4acf-9c8a-11dcf6c0d04e
Cloning the remote Git repository
Cloning repository https://github.com/Bhargav-LNSN/hello-world-war.git
> git init /root/.jenkins/workspace/Freestyle-jenkins with maven # timeout=10
Fetching upstream changes from https://github.com/Bhargav-LNSN/hello-world-war.git
> git --version # timeout=10
> git --version # 'git version 2.39.2'
using GIT_ASKPASS to set credentials
> git fetch --tags --force --progress -- https://github.com/Bhargav-LNSN/hello-world-war.git
+refs/heads/*:refs/remotes/origin/* # timeout=10
> git config remote.origin.url https://github.com/Bhargav-LNSN/hello-world-war.git #
timeout=10
> git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
Avoid second fetch
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
Checking out Revision 7e8afa0f8000276c68a6a4a6dea91945f35ad5ed (refs/remotes/origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f 7e8afa0f8000276c68a6a4a6dea91945f35ad5ed # timeout=10
```

Instances | EC2 | x | EC2 Instance Co x | EC2 Instance Co x | Apache Tomcat: x | Freestyle-jenkins: x

Not secure | 18.116.38.81:443/job/Freestyle-jenkins%20with%20maven/configure

Dashboard > Freestyle-jenkins with maven > Configuration

### Configure

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps**
- Post-build Actions

#### Build Steps

##### Execute shell ?

Command

See [the list of available environment variables](#)

```
mvn clean install
```

Advanced ▾

Add build step ▾

#### Post-build Actions

**Saved** Apply

Instances | EC2 | x | EC2 Instance Co x | EC2 Instance Co x | Apache Tomcat: x | Freestyle-jenkins: x

Not secure | 18.116.38.81:443/job/Freestyle-jenkins%20with%20maven/

Dashboard > Freestyle-jenkins with maven >

## Project Freestyle-jenkins with maven

[Add description](#)

[Disable Project](#)

#### Permalinks

- Last build (#1), 1 min 11 sec ago
- Last stable build (#1), 1 min 11 sec ago
- Last successful build (#1), 1 min 11 sec ago
- Last completed build (#1), 1 min 11 sec ago

#### Build History

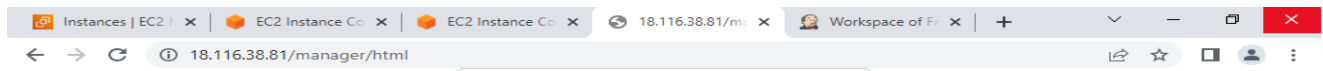
trend ▾

Filter builds... /

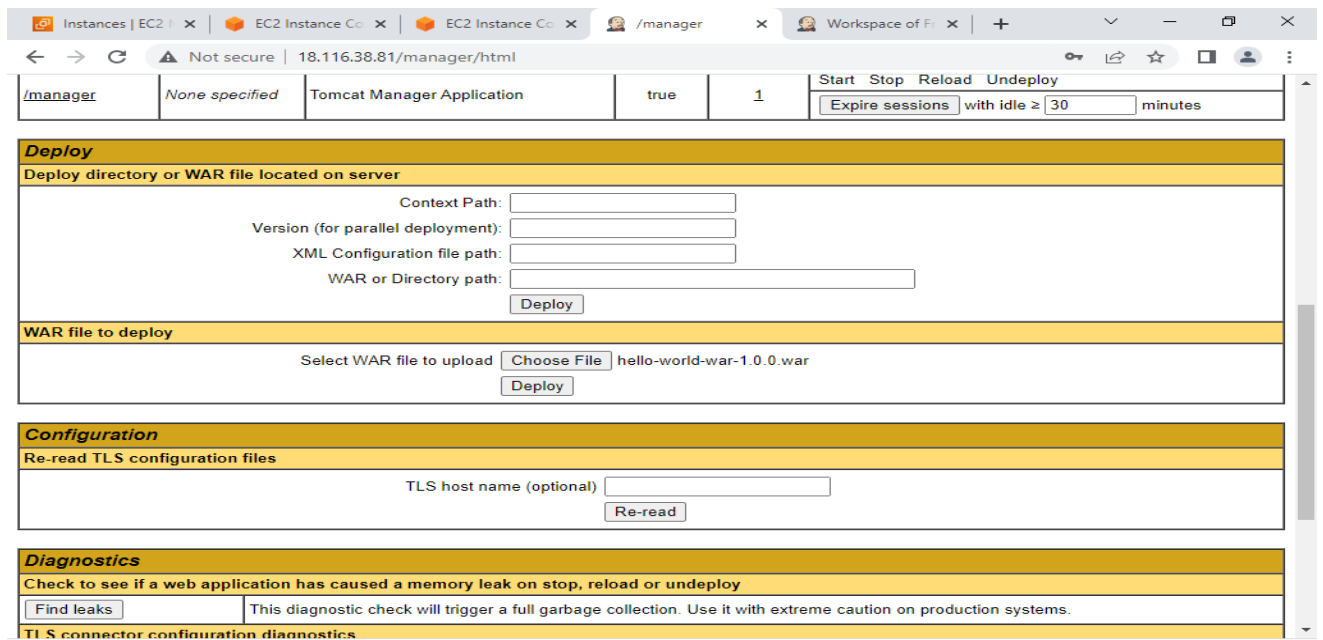
- #2  
May 24, 2023, 8:59 AM
- #1  
May 24, 2023, 8:58 AM

[Atom feed for all](#) [Atom feed for failures](#)

REST API Jenkins 2.387.1



Deploy the .war in Tomcat server.



Instances | EC2 | x | EC2 Instance Co | x | EC2 Instance Co | x | /manager | x | Workspace of F | x | + | - | x

Not secure | 18.116.38.81/manager/html/upload;sessionId=940BA339AA4217B66061CE9D86356EF8?org.apache... | ☆ | x | x | x

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
/hello-world-war-1.0.0	None specified		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:

Version (for parallel deployment):

XML Configuration file path:

WAR or Directory path:

18.116.38.81/hello-world-war-1.0.0/

Instances | EC2 | x | EC2 Instance Co | x | EC2 Instance Co | x | Hello World! | x | Workspace of F | x | + | - | x

Not secure | 18.116.38.81/hello-world-war-1.0.0/ | ☆ | x | x | x

# Hello World!

It is now Wed May 24 09:40:35 UTC 2023

You are coming from 106.51.122.2