

Launch the two instances on aws

Give the names to the instances

<input type="checkbox"/>	devm	i-01fe94a504395bfe3	Running	<a href="#">🔍</a> <a href="#">🔍</a>	t2.micro	⌚ Initializing	<a href="#">View alarms +</a>
<input type="checkbox"/>	sitm	i-06bbcd7c3e27800b4	Running	<a href="#">🔍</a> <a href="#">🔍</a>	t2.micro	⌚ Initializing	<a href="#">View alarms +</a>

## JENKINS SETUP:

Connect to dev machine through git bash

Update the apt repository

Sudo apt-get update

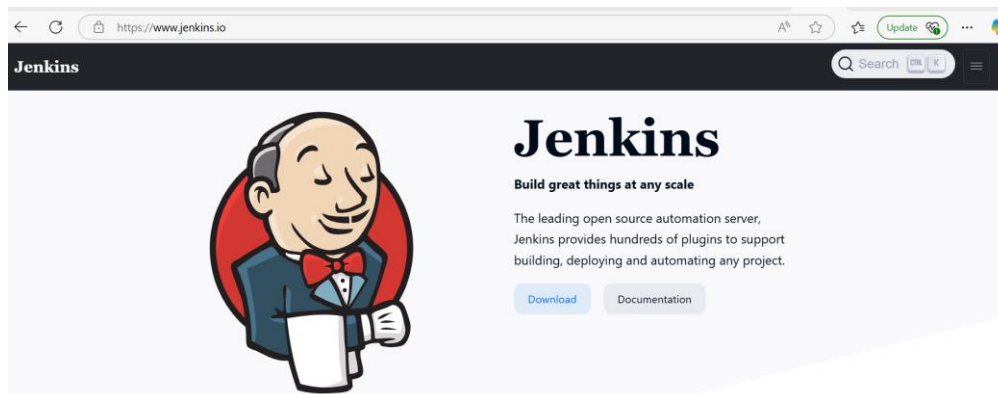
```
ubuntu@ip-172-31-15-229: ~$ sudo apt-get update
```

Download java

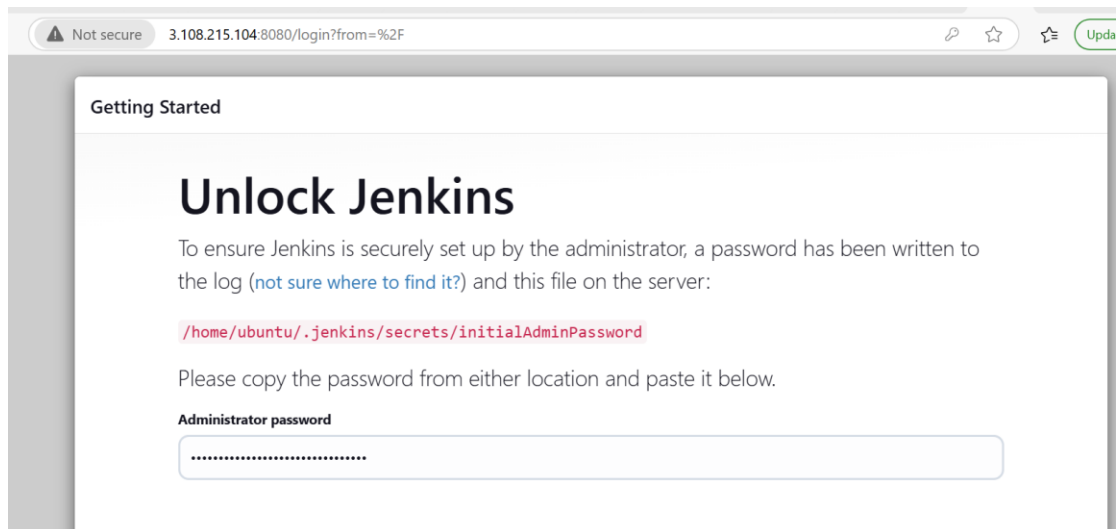
Sudo apt-get install -y openjdk-21-jdk

```
ubuntu@ip-172-31-15-229:~$ sudo apt-get install -y openjdk-21-jdk
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  adwaita-icon-theme alsa-topology-conf alsa-ucm-conf at-spi2-core ca-certificates-java dconf-gsettings-backend dconf-service fontconfig fontconfig-config
  fonts-dejavu-core fonts-dejavu-extra gsettings-desktop-schemas gtk-update-icon-cache hicolor-icon-theme humanity-icon-theme java-common libasound2 libasound2-data
  libatk-bridge2.0-0 libatk-wrapper-java libatk-wrapper-java-jni libatk1.0-0 libatk1.0-data libatspi2.0-0 libavahi-client3 libavahi-common-data libavahi-common3
  libcairo-gobject2 libcairo2 libcolord2 libcups2 libdatrie1 libdconf1 libdeflate0 libdrm-amdgpu1 libdrm-intel1 libdrm-nouveau2 libdrm-radeon1 libepoxy0 libfontconfig1
  libfontenc1 libgdk-pixbuf2.0-0 libgdk-pixbuf2.0-bin libgdk-pixbuf2.0-common libgl1 libgl1-amdgpu1 libgl1-mesa-dri libglapi-mesa libglvnd0 libglx-mesa0
  libglx0 libgraphite2-3 libgtk-3-0 libgtk-3-bin libgtk-3-common libharfbuzz0b libice-dev libice6 libjbig0 libjpeg-turbo8 libjpeg8 liblcms2-2 libl1vm15 libpango-1.0-0
  libpangocairo-1.0-0 libpangoft2-1.0-0 libpciaccess0 libpcsclite1 libpixman-1-0 libpthread-stubs0-dev librsync2-2 librsync2-common libsensors-config libsensors5 libsm-dev
  libsm6 libthai-data libthai0 libtiff5 libwayland-client0 libwayland-cursor0 libwayland-egl1 libwebp7 libx11-dev libx11-xcb1 libxau-dev libxaw7 libxcb-dri2-0
  libxcb-dri3-0 libxcb-glx0 libxcb-present0 libxcb-randr0 libxcb-render0 libxcb-render-util0 libxcb-shape0 libxcb-shm0 libxcb-sync1 libxcb-xfixes0 libxcbl-dev libxcursor1
  libxdamage1 libxdmcp-dev libxfixes3 libxft2 libxi6 libxinerama1 libxcb-common0 libxkbfile1 libxmu6 libxpm4 libxrandr2 libxrender1 libxshmfence1 libxt-dev libxt6 libxtst6
  libxv1 libxxf86dga1 libxxf86vm1 openjdk-21-jdk-headless openjdk-21-jre openjdk-21-jre-headless session-migration ubuntu-mono x11-common x11-utils x11proto-dev
  xorg-sgml-doctools xtrans-dev
```

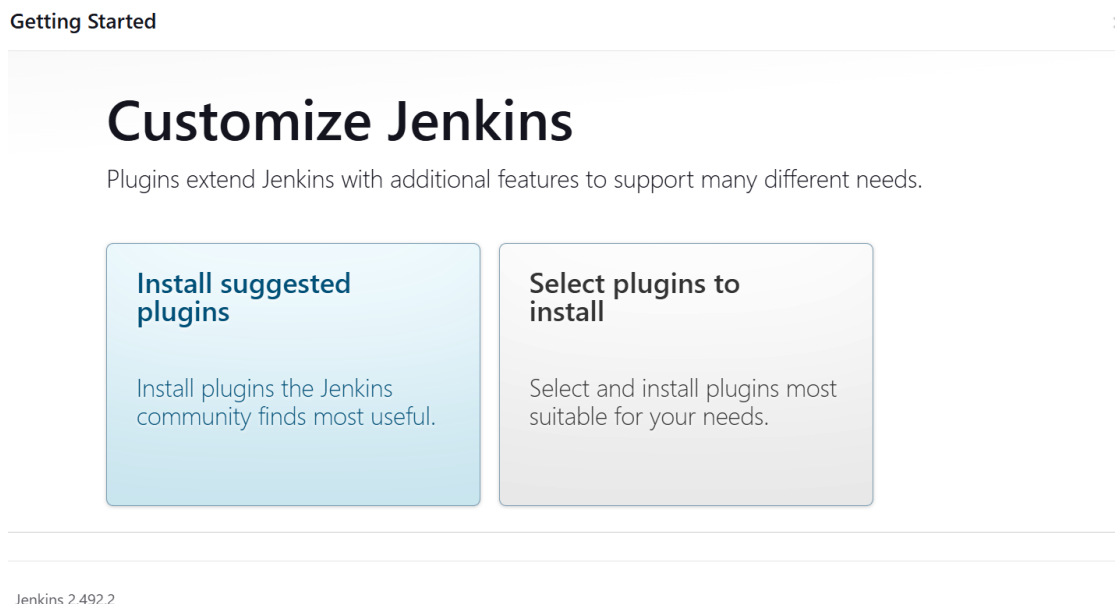
Open the browser type jenkins.io in the url --> click on the download







## Click on install suggested plugin



# Create First Admin User

Username

admin

Password

.....

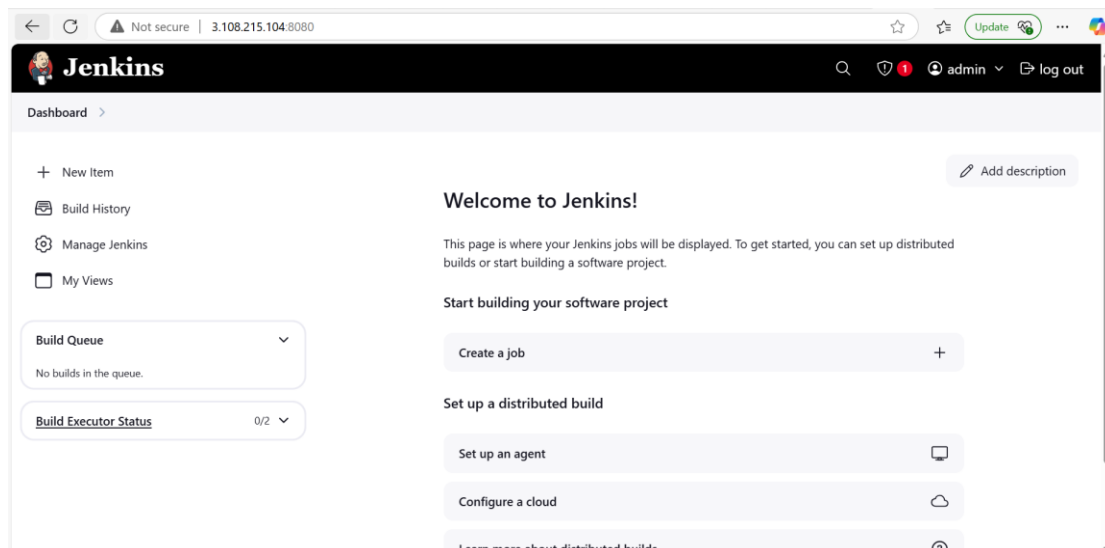
Confirm password

.....

Jenkins 2.492.2

[Skip and continue as admin](#)

[Save and Continue](#)



Build war file:

Connect dev terminal through git

Check java is install or not. If not install then install java

Check maven is install or nto . if not install then install maven

Check jenkins is install or not . if not install then install jenkins

## Maven download:

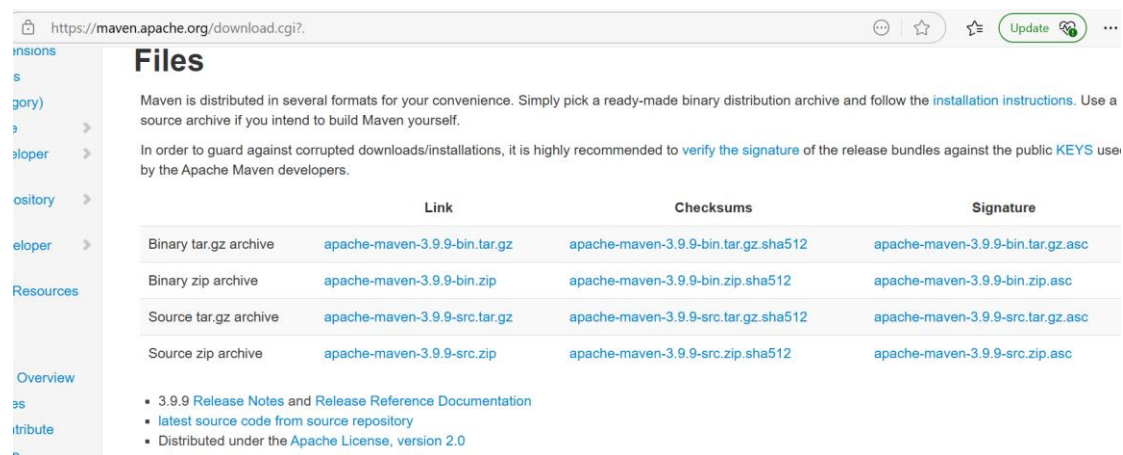
Go to the root directory

Sudo su -

Cd /opt

```
root@ip-172-31-15-229:/opt$ sudo su -
root@ip-172-31-15-229:~# cd /opt
root@ip-172-31-15-229:/opt#
```

Open the browser type maven download



The screenshot shows the Maven download page on the Apache website. The page title is "Files". It contains a table with four columns: "Link", "Checksums", and "Signature". The table lists four download options: Binary tar.gz archive, Binary zip archive, Source tar.gz archive, and Source zip archive. Each option has a corresponding link, checksum, and signature file. Below the table, there are links to the 3.9.9 Release Notes and Release Reference Documentation, and a note about the latest source code from the source repository. The page also mentions that the distribution is under the Apache License, version 2.0.

	Link	Checksums	Signature
Binary tar.gz archive	<a href="https://dlcdn.apache.org/maven/maven-3/3.9.9/binaries/apache-maven-3.9.9-bin.tar.gz">apache-maven-3.9.9-bin.tar.gz</a>	<a href="https://dlcdn.apache.org/maven/maven-3/3.9.9/binaries/apache-maven-3.9.9-bin.tar.gz.sha512">apache-maven-3.9.9-bin.tar.gz.sha512</a>	<a href="https://dlcdn.apache.org/maven/maven-3/3.9.9/binaries/apache-maven-3.9.9-bin.tar.gz.asc">apache-maven-3.9.9-bin.tar.gz.asc</a>
Binary zip archive	<a href="https://dlcdn.apache.org/maven/maven-3/3.9.9/binaries/apache-maven-3.9.9-bin.zip">apache-maven-3.9.9-bin.zip</a>	<a href="https://dlcdn.apache.org/maven/maven-3/3.9.9/binaries/apache-maven-3.9.9-bin.zip.sha512">apache-maven-3.9.9-bin.zip.sha512</a>	<a href="https://dlcdn.apache.org/maven/maven-3/3.9.9/binaries/apache-maven-3.9.9-bin.zip.asc">apache-maven-3.9.9-bin.zip.asc</a>
Source tar.gz archive	<a href="https://dlcdn.apache.org/maven/maven-3/3.9.9/src/apache-maven-3.9.9-src.tar.gz">apache-maven-3.9.9-src.tar.gz</a>	<a href="https://dlcdn.apache.org/maven/maven-3/3.9.9/src/apache-maven-3.9.9-src.tar.gz.sha512">apache-maven-3.9.9-src.tar.gz.sha512</a>	<a href="https://dlcdn.apache.org/maven/maven-3/3.9.9/src/apache-maven-3.9.9-src.tar.gz.asc">apache-maven-3.9.9-src.tar.gz.asc</a>
Source zip archive	<a href="https://dlcdn.apache.org/maven/maven-3/3.9.9/src/apache-maven-3.9.9-src.zip">apache-maven-3.9.9-src.zip</a>	<a href="https://dlcdn.apache.org/maven/maven-3/3.9.9/src/apache-maven-3.9.9-src.zip.sha512">apache-maven-3.9.9-src.zip.sha512</a>	<a href="https://dlcdn.apache.org/maven/maven-3/3.9.9/src/apache-maven-3.9.9-src.zip.asc">apache-maven-3.9.9-src.zip.asc</a>

- 3.9.9 Release Notes and Release Reference Documentation
- latest source code from source repository
- Distributed under the Apache License, version 2.0

Right click on the [apache-maven.3.9.9.bin.tar.gz](https://dlcdn.apache.org/maven/maven-3/3.9.9/binaries/apache-maven-3.9.9-bin.tar.gz) -->copy the link

Wget <https://dlcdn.apache.org/maven/maven-3/3.9.9/binaries/apache-maven-3.9.9-bin.tar.gz>

```
root@ip-172-31-15-229:/opt# wget https://dlcdn.apache.org/maven/maven-3/3.9.9/binaries/apache-maven-3.9.9-bin.tar.gz
--2025-03-10 13:33:04-- https://dlcdn.apache.org/maven/maven-3/3.9.9/binaries/apache-maven-3.9.9-bin.tar.gz
Resolving dlcdn.apache.org (dlcdn.apache.org)... 151.101.2.132, 2a04:4e42::644
Connecting to dlcdn.apache.org (dlcdn.apache.org)|151.101.2.132|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 9102945 (8.7M) [application/x-gzip]
Saving to: 'apache-maven-3.9.9-bin.tar.gz'

apache-maven-3.9.9-bin.tar.gz 100%[=====] 8.68M --.-KB/s in 0.08s

2025-03-10 13:33:04 (113 MB/s) - 'apache-maven-3.9.9-bin.tar.gz' saved [9102945/9102945]

root@ip-172-31-15-229:/opt#
```

## Unzip the maven gip file

Tar -xvzf apache-maven-3.9.9-bin.tar.gz

```
root@ip-172-31-15-229:/opt# ll
total 8900
drwxr-xr-x  2 root root    4096 Mar 10 13:33 ./
drwxr-xr-x 19 root root    4096 Mar 10 13:06 ../
-rw-r--r--  1 root root 9102945 Aug 17  2024 apache-maven-3.9.9-bin.tar.gz
root@ip-172-31-15-229:/opt# tar -xvzf apache-maven-3.9.9-bin.tar.gz
apache-maven-3.9.9/README.txt
apache-maven-3.9.9/LICENSE
```

```
#ll
root@ip-172-31-15-229:/opt# ll
total 8904
drwxr-xr-x  3 root root    4096 Mar 10 13:35 ./
drwxr-xr-x 19 root root    4096 Mar 10 13:06 ../
drwxr-xr-x  6 root root    4096 Mar 10 13:35 apache-maven-3.9.9/
-rw-r--r--  1 root root 9102945 Aug 17  2024 apache-maven-3.9.9-bin.tar.gz
root@ip-172-31-15-229:/opt#
```

## Rename apache-maven-3.9.9 to maven

```
root@ip-172-31-15-229:/opt# mv apache-maven-3.9.9 maven
root@ip-172-31-15-229:/opt# ll
total 8904
drwxr-xr-x  3 root root    4096 Mar 10 13:37 ./
drwxr-xr-x 19 root root    4096 Mar 10 13:06 ../
-rw-r--r--  1 root root 9102945 Aug 17  2024 apache-maven-3.9.9-bin.tar.gz
drwxr-xr-x  6 root root    4096 Mar 10 13:35 maven/
root@ip-172-31-15-229:/opt#
```

## Cd maven

#ll

```
root@ip-172-31-15-229:/opt# cd maven
root@ip-172-31-15-229:/opt/maven# ll
total 56
drwxr-xr-x 6 root root  4096 Mar 10 13:35 ./
drwxr-xr-x 3 root root  4096 Mar 10 13:37 ../
-rw-r--r-- 1 root root 18920 Aug 14  2024 LICENSE
-rw-r--r-- 1 root root  5034 Aug 14  2024 NOTICE
-rw-r--r-- 1 root root  1279 Aug 14  2024 README.txt
drwxr-xr-x 2 root root  4096 Mar 10 13:35 bin/
drwxr-xr-x 2 root root  4096 Mar 10 13:35 boot/
drwxr-xr-x 3 root root  4096 Aug 14  2024 conf/
drwxr-xr-x 4 root root  4096 Mar 10 13:35 lib/
root@ip-172-31-15-229:/opt/maven#
```

Note down the maven path

#pwd

/opt/maven

Move to cd bin

#ll

Note down the maven bin path (/opt/maven/bin)

#pwd

```
root@ip-172-31-15-229:/opt/maven# cd bin
root@ip-172-31-15-229:/opt/maven/bin# ll
total 40
drwxr-xr-x 2 root root 4096 Mar 10 13:35 ./
drwxr-xr-x 6 root root 4096 Mar 10 13:35 ../
-rw-r--r-- 1 root root 327 Aug 14 2024 m2.conf
-rwxr-xr-x 1 root root 5917 Aug 14 2024 mvn*
-rw-r--r-- 1 root root 6324 Aug 14 2024 mvn.cmd
-rwxr-xr-x 1 root root 1684 Aug 14 2024 mvnDebug*
-rw-r--r-- 1 root root 2169 Aug 14 2024 mvnDebug.cmd
-rwxr-xr-x 1 root root 1611 Aug 14 2024 mvnyjp*
root@ip-172-31-15-229:/opt/maven/bin# pwd
/opt/maven/bin
root@ip-172-31-15-229:/opt/maven/bin#
```

Now check the maven is install or not

Mvn --version

```
root@ip-172-31-15-229:/opt/maven/bin# mvn --version
Command 'mvn' not found, but can be installed with:
apt install maven
root@ip-172-31-15-229:/opt/maven/bin#
```

Try with the below command

./mvn --version

```
root@ip-172-31-15-229:/opt/maven/bin# ./mvn --version
Apache Maven 3.9.9 (8e8579a9e76f7d015ee5ec7bfcdc97d260186937)
Maven home: /opt/maven
Java version: 21.0.6, vendor: Ubuntu, runtime: /usr/lib/jvm/java-21-openjdk-amd64
Default locale: en, platform encoding: UTF-8
OS name: "linux", version: "6.8.0-1021-aws", arch: "amd64", family: "unix"
root@ip-172-31-15-229:/opt/maven/bin#
```

Now go back to the roor directory --> cd /

Check the maven version --> mvn --version

It shows maven is not found.

```
root@ip-172-31-15-229:/# mvn --version
Command 'mvn' not found, but can be installed with:
apt install maven
root@ip-172-31-15-229:/# |
```

So we need to create environment variable

Go to root directory with below command

Cd ~

```
apt install maven
root@ip-172-31-15-229:/# cd ~
root@ip-172-31-15-229:~# pwd
/root
root@ip-172-31-15-229:~# |
```

#ll

U can see the .profile file

Open the file with below command

Sudo vim .profile

```
# ~/.profile: executed by Bourne-compatible login shells.

if [ "$BASH" ]; then
  if [ -f ~/.bashrc ]; then
    . ~/.bashrc
  fi
fi

mesg n 2> /dev/null || true

~
```

Go to the insert mode( click on I) and give the maven,java home and m2 paths here



```
# ~/.profile: executed by Bourne-compatible login shells.

if [ "$BASH" ]; then
  if [ -f ~/.bashrc ]; then
    . ~/.bashrc
  fi
fi
M2_HOME=/opt/maven
M2=/opt/maven/bin
JAVA_HOME=/usr/lib/jvm/java-21-openjdk-amd64
PATH=$PATH:$HOME/bin:$JAVA_HOME:$M2_HOME:$M2
mesg n 2> /dev/null || true
```

:wq

To get the java\_home path

#find / -name java-21\* (/usr/lib/jvm/java-21-openjdk-amd64)

```
root@ip-172-31-15-229:~# find / -name java-21*
/usr/share/gdb/auto-load/usr/lib/jvm/java-21-openjdk-amd64
/usr/lib/jvm/java-21-openjdk-amd64
/usr/lib/debug/usr/lib/jvm/java-21-openjdk-amd64
/etc/java-21-openjdk
```

#echo \$PATH

```
root@ip-172-31-15-229:~# echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin
root@ip-172-31-15-229:~#
```

U CANT SEE THE JAVA AND MAVEN PATH ABOVE . SO WE NEED TO RESTART THE .PROFILE FILE with below command

#source .profile

```
root@ip-172-31-15-229:~# source .profile
root@ip-172-31-15-229:~# echo $PATH
/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin:/root/bin:/usr/lib/jvm/java-21-openjdk-amd64:/opt/maven:/opt/maven/bin
root@ip-172-31-15-229:~#
```

Now u can see the java and maven paths

Now check the maven version

#mvn --version -->now u can able to see the maven

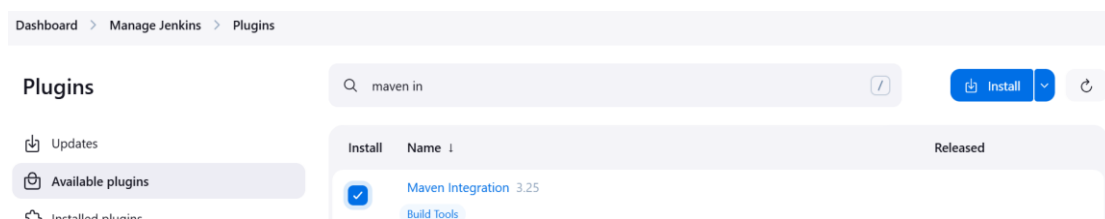
```

root@ip-172-31-15-229:~# mvn --version
Apache Maven 3.9.9 (8e8579a9e76f7d015ee5ec7bfcdc97d260186937)
Maven home: /opt/maven
Java version: 21.0.6, vendor: Ubuntu, runtime: /usr/lib/jvm/java-21-openjdk-amd64
Default locale: en, platform encoding: UTF-8
OS name: "linux", version: "6.8.0-1021-aws", arch: "amd64", family: "unix"
root@ip-172-31-15-229:~# |

```

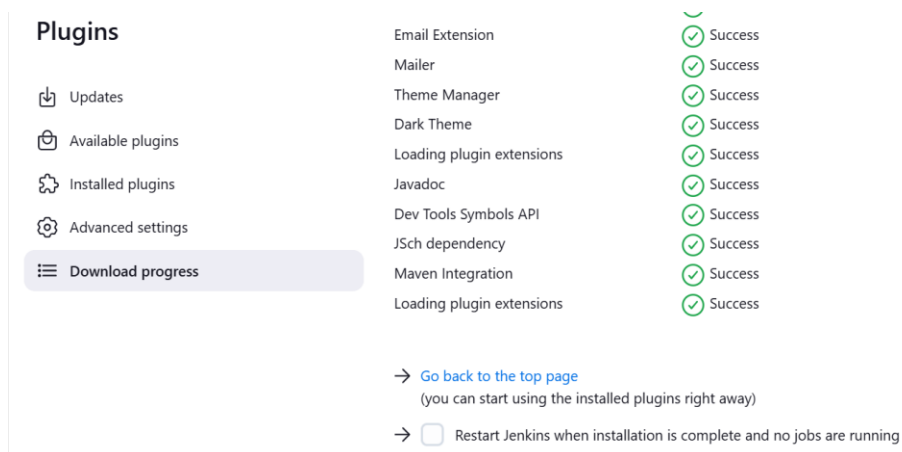
Now go to the jenkins dashboard u need to install one plugin (maven integratin)

Managejenkins-->plugins-->available plugins-->maven integration plugin



Without this plugin we can't able to see the maven project

Once installed , click on the restart jenkins



U need to add java and maven paths in the jenkins

Go to jenkins dashboard-->managejenkins-->tools

Add JDK and add MAVEN

Dashboard > Manage Jenkins > Tools

### JDK installations

Add JDK

≡ **JDK** ×

Name

JAVA -21

JAVA\_HOME

/usr/lib/jvm/java-21-openjdk-amd64

☐ Install automatically ?

Add JDK

UNCHECK THE install automatically

Add maven

### Maven installations

Add Maven

≡ **Maven** ×

Name

maven

MAVEN\_HOME

/opt/maven

☐ Install automatically ?

Add Maven

Click on apply and save it

Now we can create job for war file




Dashboard-->newitem-->war(give any name) select maven project click on ok

Dashboard > All > New Item

## New Item

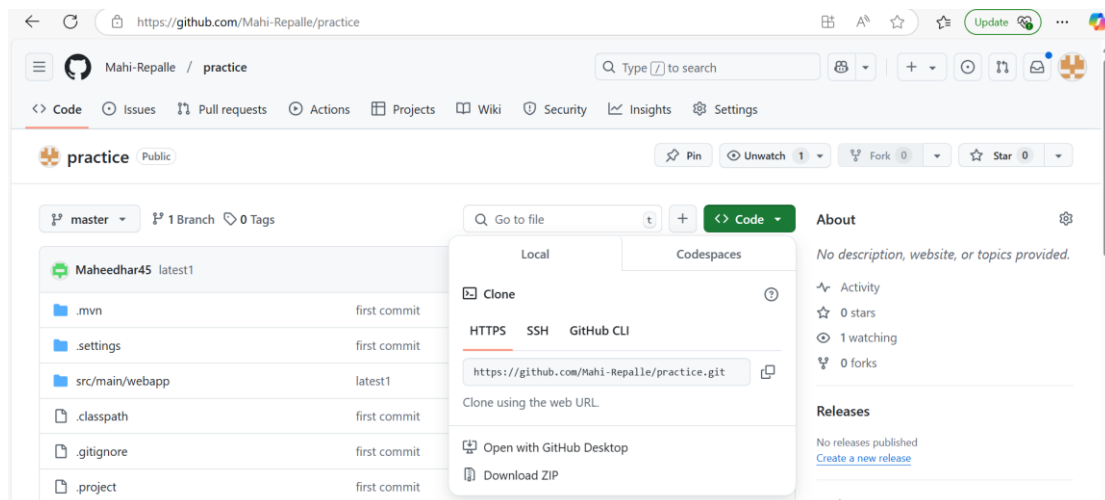
Enter an item name

Select an item type

-  **Freestyle project**  
Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.
-  **Maven project**  
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.
-  **Pipeline**  
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as ...)

OK

Source code management-->select git--> give the github url  
project path(open my github account-->go to the repositories  
Select the practice repository)



Copy the HTTPS path paste it in the jenkins repository url

Dashboard > war > Configuration

### Configure

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

#### Source Code Management

Connect and manage your code repository to automatically pull the latest code for your builds.

☐ None

☒ Git ?

Repositories ?

Repository URL ?

https://github.com/Mahi-Repalle/practice.git

Credentials ?

- none -

+ Add

Save Apply

Select the build goal and options write the command clean install click on apply and save

Dashboard > war > Configuration

### Configure

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

#### Build

Root POM ?

pom.xml

Goals and options ?

clean install

Advanced ▾

#### Post Steps

☐ Run only if build succeeds

☐ Run only if build succeeds or is unstable

Save Apply

Click on build now

If job execution is taking lot of time  
Then  
logout the jenkins  
Stop the dev instance  
Restart the dev instanc  
Start the jenkins server

# Run the job

Now ur job will be excuted

Dashboard >

+ New Item

Build History

Project Relationship

Check File Fingerprint

Manage Jenkins

My Views

All

+

S	W	Name ↓	Last Success	Last Failure	Last Duration
		war	10 min <a href="#">#2</a>	N/A	21 sec

Add description

```
Started by user admin
Running as SYSTEM
Building in workspace /home/ubuntu/.jenkins/workspace/war
The recommended git tool is: NONE
No credentials specified
> git rev-parse --resolve-git-dir /home/ubuntu/.jenkins/workspace/war/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/Mahi-Repalle/practice.git # timeout=10
Fetching upstream changes from https://github.com/Mahi-Repalle/practice.git

[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 10.805 s
[INFO] Finished at: 2025-03-10T14:36:37Z
[INFO] -----
Waiting for Jenkins to finish collecting data
[JENKINS] Archiving /home/ubuntu/.jenkins/workspace/war/pom.xml to DevOpsCourse/MyDevPipeline/0.0.1-SNAPSHOT/MyDevPipeline-0.0.1-SNAPSHOT.pom
[JENKINS] Archiving /home/ubuntu/.jenkins/workspace/war/target/MyDevPipeline.war to DevOpsCourse/MyDevPipeline/0.0.1-SNAPSHOT/MyDevPipeline-0.0.1-SNAPSHOT.war
channel stopped
Finished: SUCCESS
```

## Deploy artifcat into sit server

Connect to sit machine with git bash

```
ubuntu@ip-172-31-8-148: ~  
ubuntu@ip-172-31-8-148:~$ |
```

Update the apt repository

Sudo apt-get update

```
ubuntu@ip-172-31-8-148:~$ sudo apt-get update  
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease  
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]  
Get:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [127 kB]  
Get:4 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]  
Get:5 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]  
Get:6 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]  
Get:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]  
Get:8 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]  
Get:9 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]  
Get:10 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]  
Get:11 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [2377 kB]
```

Install tomcat 9

Sudo apt-get install -y tomcat9

```
ubuntu@ip-172-31-8-148:~$ sudo apt-get install -y tomcat9
```

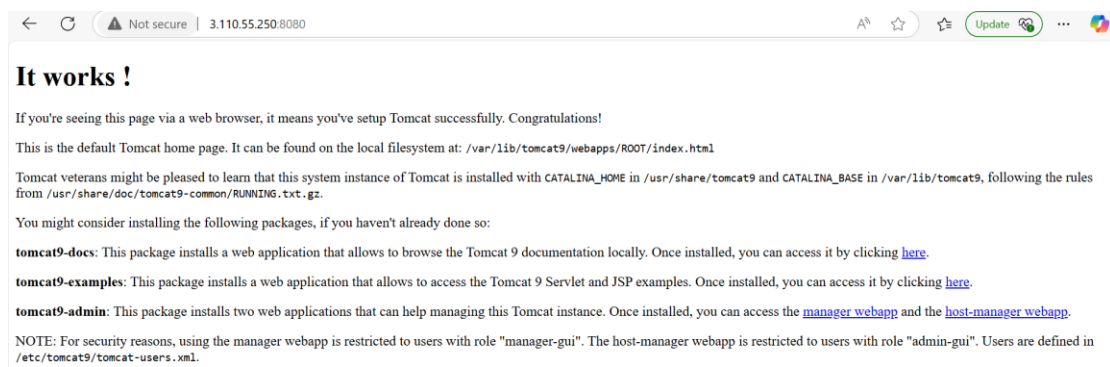
Now install tomcat9 admin as well

Sudo apt-get install tomcat9-admin

```
ubuntu@ip-172-31-8-148:~$ sudo apt-get install tomcat9-admin
```

how can we access the tomcat

Take the publicip of sit server and add 8080(copy paste this command on the browser)



Now go to below path

Cd /etc/tomcat9

\$ll

```
ubuntu@ip-172-31-8-148:/etc$ cd /etc/tomcat9
ubuntu@ip-172-31-8-148:/etc/tomcat9$ ll
total 220
drwxr-xr-x  4 root root    4096 Mar 10 14:28 ./
drwxr-xr-x 97 root root    4096 Mar 10 14:28 ../
drwxrwxr-x  3 root tomcat  4096 Mar 10 14:28 Catalina/
-rw-r----- 1 root tomcat  7276 Jan 15 2022 catalina.properties
-rw-r----- 1 root tomcat  1400 Jan 15 2022 context.xml
-rw-r----- 1 root tomcat  1149 Jan 15 2022 jaspic-providers.xml
-rw-r----- 1 root tomcat  2799 Jul 19 2022 logging.properties
drwxr-xr-x  2 root tomcat  4096 Mar 10 14:28 policy.d/
-rw-r----- 1 root tomcat  7578 Jul 20 2022 server.xml
-rw-r----- 1 root tomcat  2756 Jan 15 2022 tomcat-users.xml
-rw-r----- 1 root tomcat 172359 Jan 15 2022 web.xml
ubuntu@ip-172-31-8-148:/etc/tomcat9$
```

now we need to add user in the tomcat-users.xml file

Sudo vim tomcat-users.xml

Go to the insert mode



```

<?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

    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.
-->
<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">
<!--
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.

Built-in Tomcat manager roles:
- manager-gui - allows access to the HTML GUI and the status pages
- manager-script - allows access to the HTTP API and the status pages
- manager-jmx - allows access to the JMX proxy and the status pages
- manager-status - allows access to the status pages only
-->
<!--
<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="maheedhar" password="mahil359" roles="manager-script,manager-status,manager-gui"/>
</tomcat-users>
-- INSERT --

```

:wq

Now restart the tomcat service

\$sudo service tomcat9 restart

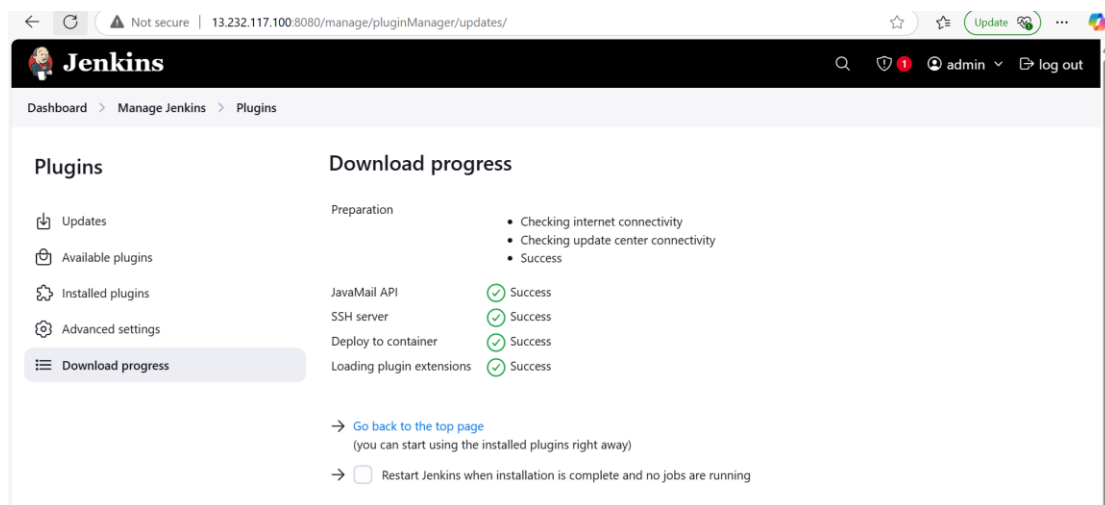
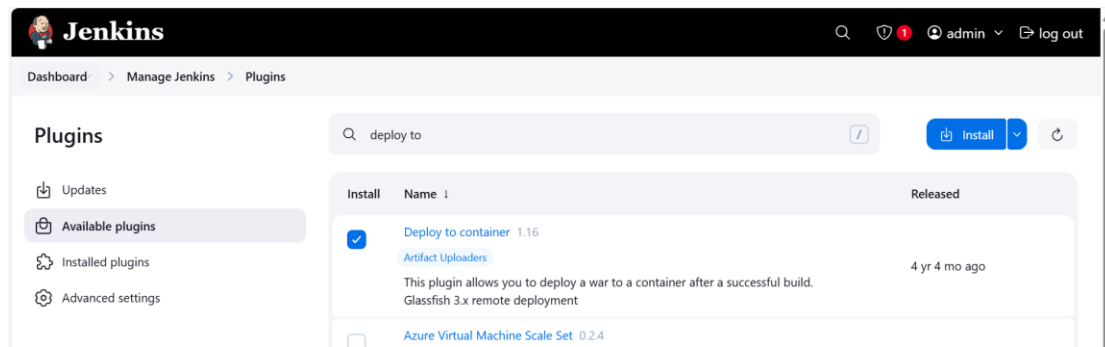
```

ubuntu@ip-172-31-8-148:/etc/tomcat9$ sudo service tomcat9 restart
ubuntu@ip-172-31-8-148:/etc/tomcat9$

```

Now u can add one plugin in the jenkins (deploy to container)

Manage jenkins-->plugins-->available plugins-->select deploy to container and install it

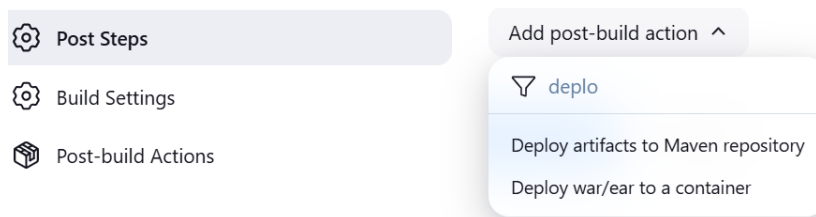


Now go to the Jenkins dashboard

Select the war job

Select the configure

Select the post build action and search deploy war/ear to a container



Dashboard > war > Configuration

### Configure

- General
- Source Code Management
- Triggers
- Environment
- Pre Steps
- Build

#### Post-build Actions

Define what happens after a build completes, like sending notifications, archiving artifacts, or triggering other jobs.

##### Deploy war/ear to a container

WAR/EAR files ?

\*\*/\*.war

Context path ?

sit

## Add container tomcat 9

### Configure

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

#### Post-build Actions

Define what happens after a build completes, like sending notifications, archiving artifacts, or triggering other jobs.

##### Deploy war/ear to a container

WAR/EAR files ?

\*\*/\*.war

Context path ?

sit

Containers

Add Container ^

- tomcat 9
- Tomcat 9.x Remote

Save Apply

## Add the credentials

### Jenkins Credentials Provider: Jenkins

Username ?

maheedhar

☐ Treat username as secret ?

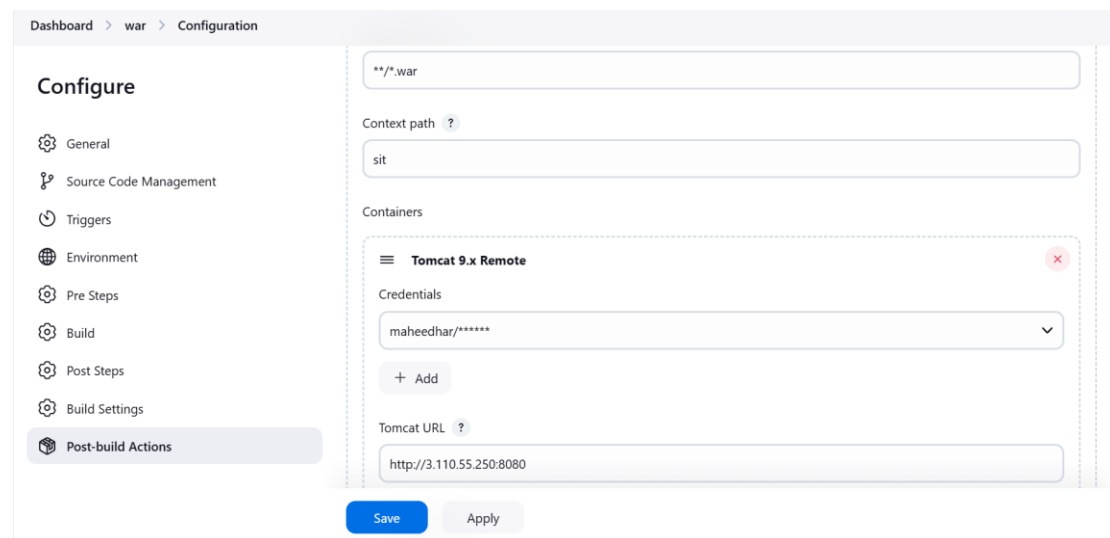
Password ?

\*\*\*\*\*

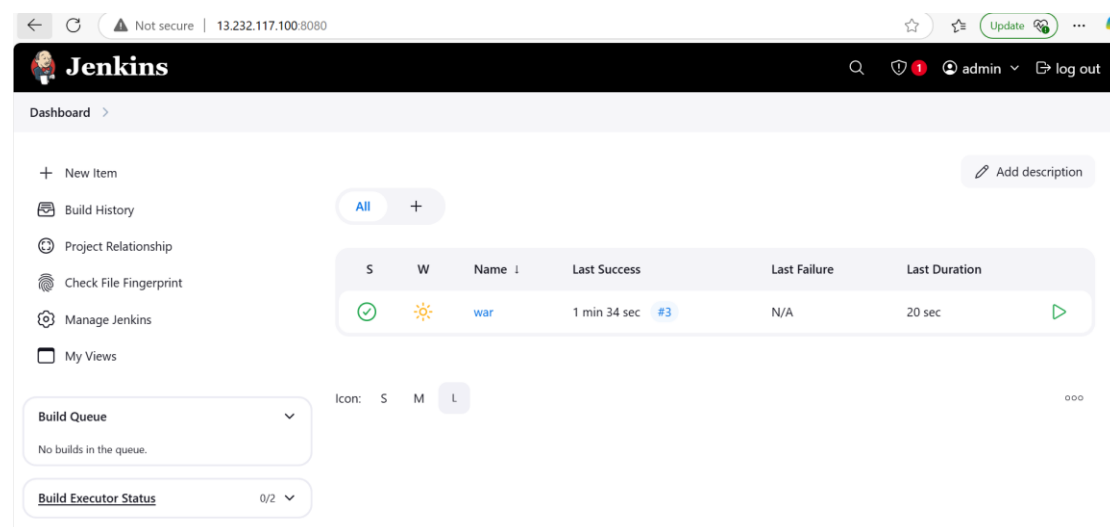
ID ?

Select the credentials and give the tomcat url (sit server path along with 8080 port no)

Click on apply and save  
And run the build now



The image shows the Jenkins Configuration page for a job named 'war'. The left sidebar contains a 'Configure' section with various options: General, Source Code Management, Triggers, Environment, Pre Steps, Build, Post Steps, Build Settings, and Post-build Actions. The main area is titled 'Configure' and contains several fields: 'Context path' set to 'sit', 'Containers' section with 'Tomcat 9.x Remote' selected, 'Credentials' set to 'maheedhar/\*\*\*\*\*', and 'Tomcat URL' set to 'http://3.110.55.250:8080'. At the bottom, there are 'Save' and 'Apply' buttons.



The image shows the Jenkins Dashboard for the 'war' job. The top navigation bar includes 'Dashboard' and 'log out'. The left sidebar contains a 'Build Queue' section with 'No builds in the queue.' and a 'Build Executor Status' section with '0/2'. The main area displays a table of build history for the 'war' job.

S	W	Name	Last Success	Last Failure	Last Duration
✓	☀	war	1 min 34 sec #3	N/A	20 sec

Below the table, there is a section for 'Icon: S M L' and a 'Build Queue' section with 'No builds in the queue.'

How can we check the artifact is deployed or not

Take the sit publicipaddress and port no and give the context path name

Ex: <http://3.110.55.250:8080/sit>

facebook

# hai

← ↻ https://github.com/Mahi-Repalle/practice/blob/master/src/main/webapp/index.jsp

Mahi-Repalle / practice

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

Files

master + 🔍

Go to file

- > .mvn
- > .settings
- ✓ src/main/webapp
  - > WEB-INF
    - index.jsp**
- .classpath
- .gitignore
- .project
- pom.xml

practice / src / main / webapp / index.jsp

Maheedhar45 latest1 b809fbc · 4 days ago History

Code Blame 6 lines (6 loc) · 72 Bytes

Raw

```
1 <html>
2   <head>Facebook</head>
3   <body>
4     <h1> hai </h1>
5   </body>
6 </html>
```

## AUTOMATION THE JENKINS PIPELINE:

Whenever u made some changes in the source file jenkins job run automatically fetch the code from github to dev server and build the war file and deployed into sit

```
Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB
$ git clone https://github.com/Mahi-Repalle/practice.git
Cloning into 'practice'...
remote: Enumerating objects: 59, done.
remote: Counting objects: 100% (59/59), done.
remote: Compressing objects: 100% (36/36), done.
remote: Total 59 (delta 9), reused 53 (delta 3), pack-reused 0 (from 0)
Receiving objects: 100% (59/59), 6.13 KiB | 392.00 KiB/s, done.
Resolving deltas: 100% (9/9), done.

Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB
$ ll
total 11008
-rw-r--r-- 1 Admin 197121 1555602 Feb  1 20:22 Ansible_Setup.docx
-rw-r--r-- 1 Admin 197121  434977 Feb 20 19:38 'Deploy to Server.docx'
-rw-r--r-- 1 Admin 197121  850944 Jan  8 18:19 EXP1-STEPS.doc
-rw-r--r-- 1 Admin 197121 1886107 Jan 27 19:00 Experiment-2.pdf
-rw-r--r-- 1 Admin 197121 1279778 Jan 21 07:47 Jenkins_setup_on_AWS.docx
-rw-r--r-- 1 Admin 197121 1748522 Feb 15 06:44 war_with_Maven.doc
-rw-r--r-- 1 Admin 197121  314368 Feb 21 18:49 automation.doc
-rw-r--r-- 1 Admin 197121 1725354 Feb 19 20:24 docker.docx
drwxr-xr-x 1 Admin 197121      0 Mar 10 20:35 practice/
-rw-r--r-- 1 Admin 197121 1451061 Jan 26 20:35 'war file.docx'
-rw-r--r-- 1 Admin 197121    162 Feb 19 07:08 '~$docker.docx'
-rw-r--r-- 1 Admin 197121    162 Feb 20 06:31 '~$ploy to Server.docx'
-rw-r--r-- 1 Admin 197121    162 Feb 20 11:38 '~$r_with_Maven.doc'
-rw-r--r-- 1 Admin 197121    162 Feb 19 20:34 '~$sible_Setup.docx'

Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB
$ cd practice

Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB/practice (master)
$ ll
total 4
-rw-r--r-- 1 Admin 197121 1896 Mar 10 20:35 pom.xml
drwxr-xr-x 1 Admin 197121  0 Mar 10 20:35 src/

Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB/practice (master)
$ cd src

Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB/practice/src (master)
$ ll
total 0
drwxr-xr-x 1 Admin 197121 0 Mar 10 20:35 main/

Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB/practice/src (master)
$ cd main

Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB/practice/src/main (master)
```

```

$ ll
total 0
drwxr-xr-x 1 Admin 197121 0 Mar 10 20:35 webapp/

Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-
25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB/pract
ice/src/main (master)
$ cd webapp

Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-
25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB/pract
ice/src/main/webapp (master)
$ ll
total 1
drwxr-xr-x 1 Admin 197121 0 Mar 10 20:35 WEB-INF/
-rw-r--r-- 1 Admin 197121 78 Mar 10 20:35 index.jsp

Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-
25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB/pract
ice/src/main/webapp (master)
$ vim index.jsp

Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-
25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB/pract
ice/src/main/webapp (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   index.jsp

no changes added to commit (use "git add" and/or "git commit -a")

Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-
25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB/pract
ice/src/main/webapp (master)
$ git add .

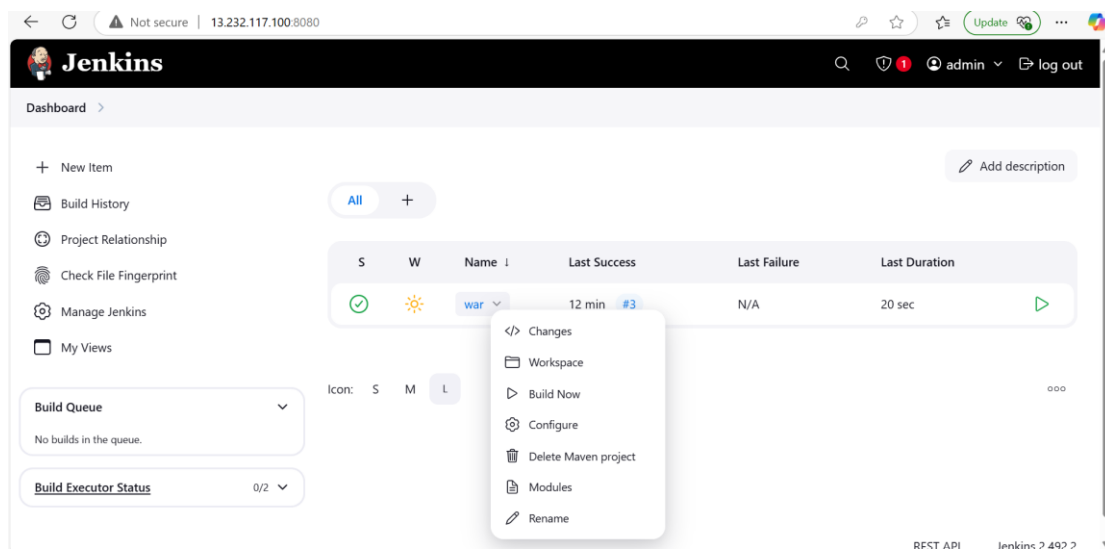
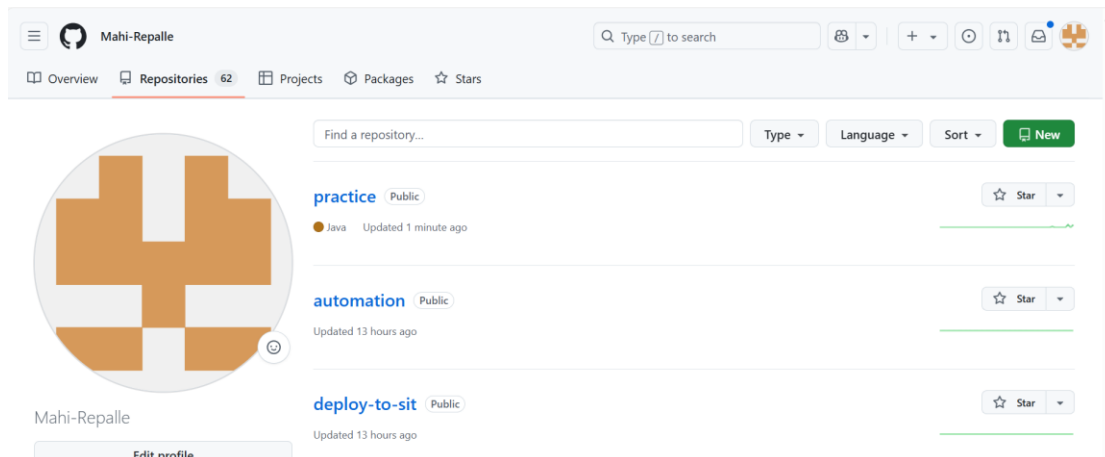
Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-
25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB/pract
ice/src/main/webapp (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   index.jsp

Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-
25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB/pract
ice/src/main/webapp (master)
$ git commit -m "ab"
[master 74b2935] ab
1 file changed, 1 insertion(+), 1 deletion(-)

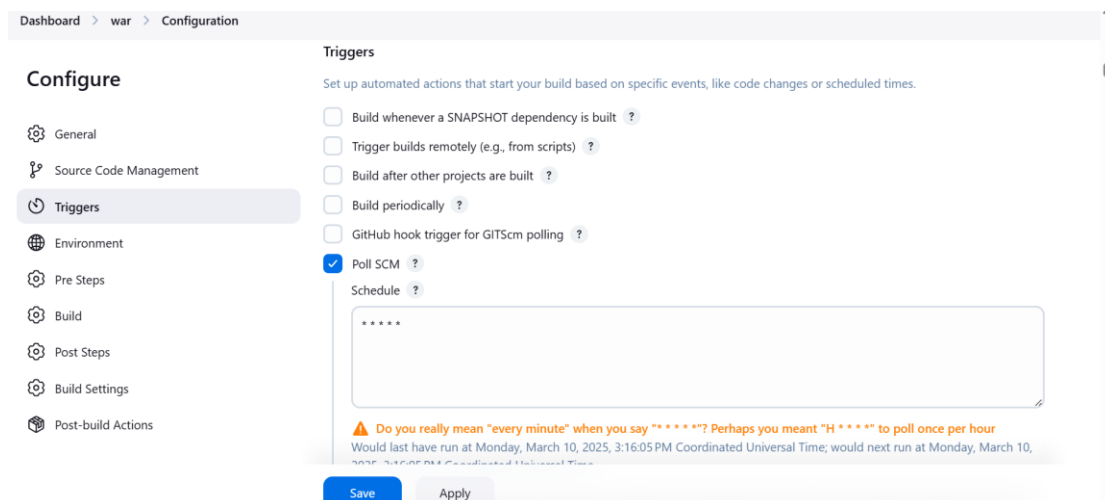
Admin@DESKTOP-ASGG5M3 MINGW64 /d/CMRIT_24_25/24-
25_III_2/DEVOPS/DEVOPS_THEORY_LAB_DOCUMENTS/LAB_EXPERIMENTS/DEVOPS_LAB/pract
ice/src/main/webapp (master)
$ git push origin master
Enumerating objects: 11, done.
Counting objects: 100% (11/11), done.
Delta compression using up to 8 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (6/6), 469 bytes | 469.00 KiB/s, done.
Total 6 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/Mahi-Repalle/practice.git
   b809fbc..74b2935  master -> master

```



Triggers u can select the poll scm and give the crontab values

\* \* \* \* \*





### Configure

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

**⚠ Do you really mean "every minute" when you say "\*\*\*\*\*"? Perhaps you meant "H\*\*\*\*\*" to poll once per hour**

Would last have run at Monday, March 10, 2025, 3:16:05 PM Coordinated Universal Time; would next run at Monday, March 10, 2025, 3:16:05 PM Coordinated Universal Time.

This field follows the syntax of cron (with minor differences). Specifically, each line consists of 5 fields separated by TAB or whitespace:

```
MINUTE HOUR DOM MONTH DOW
```

MINUTE Minutes within the hour (0-59)  
 HOUR The hour of the day (0-23)  
 DOM The day of the month (1-31)  
 MONTH The month (1-12)  
 DOW The day of the week (0-7) where 0 and 7 are Sunday.

To specify multiple values for one field, the following operators are available. In the order of precedence,

- \* specifies all valid values
- M-N specifies a range of values
- M-N/X or \*/X steps by intervals of X through the specified range or whole valid range
- A,B,...,Z enumerates multiple values

To allow periodically scheduled tasks to produce even load on the system, the symbol H (for "hash") should be used

Save

Apply

Click on apply and save the job

Don't run the build now

Jenkins automatically trigger the job

Dashboard > war >

Delete Maven project

Modules

Git Polling Log

Rename

Last completed build (#3), 18 min ago

Builds

Filter

Today

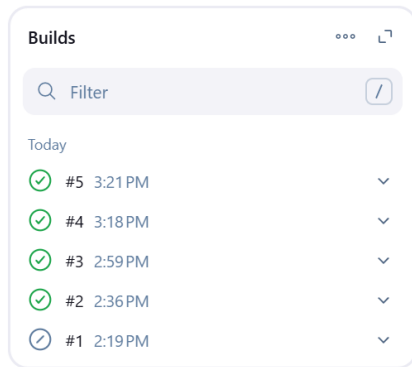
#5 3:21 PM

#4 3:18 PM

#3 2:59 PM

#2 2:36 PM

#1 2:19 PM



Now refresh the sit server latest code changes are reflected in the sit

