


Jenkins Setup using war file

Step1: Download Jenkins (.war file)

<https://www.jenkins.io/download/>



Jenkins



Build great things at any scale

The leading open source automation server, Jenkins provides hundreds of plugins to support building, deploying and automating any project.

 We stand with the people of Ukraine. Please assist humanitarian efforts for the Ukrainian people and those affected by the military invasion of Ukraine by supporting international aid organizations, including the [Ukrainian Red Cross](#)

[Download](#) [Documentation](#)

Download Jenkins 2.440.3 LTS for:

	Generic Java package (.war)	
	SHA-256: f8d47dbfd59359551aead8388fa4ad7005eda7c47ce21c664c99610ca04ae367	



Step2: Run below command in the windows command prompt (Don't close command prompt until your work is done)

java -jar Jenkins.war

```
C:\Automation>java -jar jenkins.war
Running from: C:\Automation\jenkins.war
webroot: C:\Users\pavan\.jenkins\war
2024-05-09 05:46:10.829+0000 [id=1] INFO winstone.Logger#logInternal: Beginning extraction from war file
2024-05-09 05:46:11.668+0000 [id=1] WARNING o.e.j.s.handler.ContextHandler#setContextPath: Empty contextPath
2024-05-09 05:46:11.723+0000 [id=1] INFO org.eclipse.jetty.server.Server#doStart: jetty-10.0.20; built: 2024-01-29T20:46:45.278Z; git: 3a745c71c23682146
0e; jvm 17.0.9a11-LTS-201
2024-05-09 05:46:11.951+0000 [id=1] INFO o.e.j.w.StandardDescriptorProcessor#visitServlet: NO JSP Support for /, did not find org.eclipse.jetty.jsp.Jetty
2024-05-09 05:46:11.998+0000 [id=1] INFO o.e.j.s.DefaultSessionIdManager#doStart: Session workerName=node0
2024-05-09 05:46:12.366+0000 [id=1] INFO hudson.WebAppMain#contextInitialized: Jenkins home directory: C:\Users\pavan\.jenkins found at: $user.home/.jen
2024-05-09 05:46:12.568+0000 [id=1] INFO o.e.j.s.handler.ContextHandler#doStart: Started w.@23202c31{Jenkins v2.440.3,/,file:///C:/Users/pavan/.jenkins/
ers\pavan\.jenkins\war}
2024-05-09 05:46:12.579+0000 [id=1] INFO o.e.j.server.AbstractConnector#doStart: Started ServerConnector@73302995{HTTP/1.1, (http/1.1)}{0.0.0.0:8080}
2024-05-09 05:46:12.590+0000 [id=1] INFO org.eclipse.jetty.server.Server#doStart: Started Server@51fadaff{STARTING}[10.0.20,sto=0] @2035ms
2024-05-09 05:46:12.590+0000 [id=38] INFO winstone.Logger#logInternal: Winstone Servlet Engine running: controlPort=disabled
2024-05-09 05:46:12.723+0000 [id=46] INFO jenkins.InitReactorRunner$1#onAttained: Started initialization
2024-05-09 05:46:12.778+0000 [id=67] INFO jenkins.InitReactorRunner$1#onAttained: Listed all plugins
2024-05-09 05:46:13.285+0000 [id=75] INFO jenkins.InitReactorRunner$1#onAttained: Prepared all plugins
2024-05-09 05:46:13.285+0000 [id=75] INFO jenkins.InitReactorRunner$1#onAttained: Started all plugins
2024-05-09 05:46:13.299+0000 [id=51] INFO jenkins.InitReactorRunner$1#onAttained: Augmented all extensions
2024-05-09 05:46:13.457+0000 [id=63] INFO jenkins.InitReactorRunner$1#onAttained: System config loaded
2024-05-09 05:46:13.457+0000 [id=73] INFO jenkins.InitReactorRunner$1#onAttained: System config adapted
2024-05-09 05:46:13.457+0000 [id=73] INFO jenkins.InitReactorRunner$1#onAttained: Loaded all jobs
2024-05-09 05:46:13.457+0000 [id=73] INFO jenkins.InitReactorRunner$1#onAttained: Configuration for all jobs updated
2024-05-09 05:46:13.493+0000 [id=88] INFO hudson.util.Retrier#start: Attempt #1 to do the action check updates server
2024-05-09 05:46:13.792+0000 [id=60] 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:

ab0f5e63a08e4e4fbf207328161dc677

This may also be found at: C:\Users\pavan\.jenkins\secrets\initialAdminPassword

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

2024-05-09 05:46:31.806+0000 [id=70] INFO jenkins.InitReactorRunner$1#onAttained: Completed initialization
2024-05-09 05:46:31.806+0000 [id=35] INFO hudson.lifecycle.Lifecycle#onReady: Jenkins is fully up and running
2024-05-09 05:46:32.801+0000 [id=88] INFO h.m.DownloadService$Downloadable#load: Obtained the updated data file for hudson.tasks.Maven.MavenInstaller
2024-05-09 05:46:32.802+0000 [id=88] INFO hudson.util.Retrier#start: Performed the action check updates server successfully at the attempt #1
```

Copy admin password in the note pad (Later we use it).

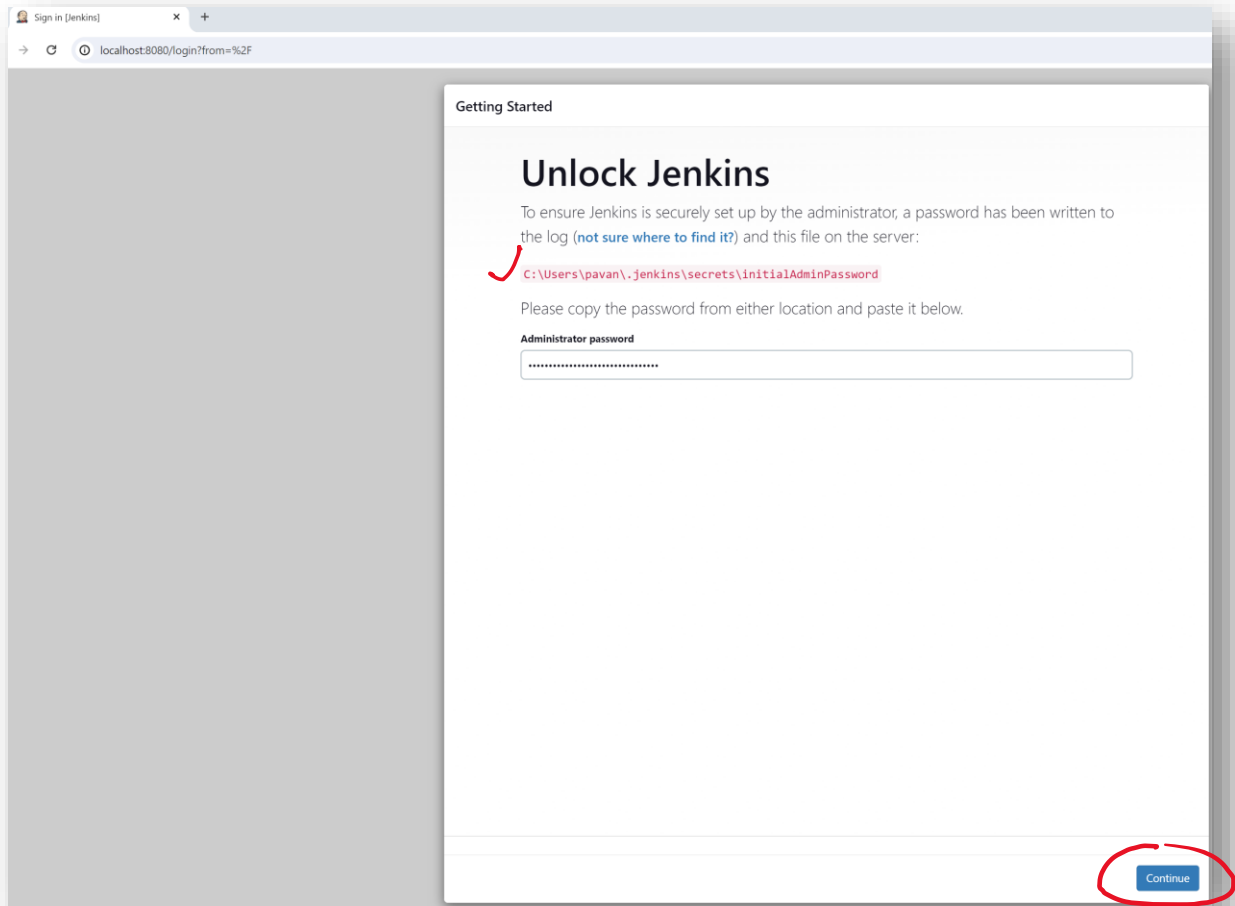
```
Jenkins initial setup is required. An admin user has been created and a password generated.
Please use the following password to proceed to installation:

ab0f5e63a08e4e4fbf207328161dc677

This may also be found at: C:\Users\pavan\.jenkins\secrets\initialAdminPassword

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

2024-05-09 05:46:31.806+0000 [id=70] INFO jenkins.InitReactorRunner$1#onAttained: Completed initialization
2024-05-09 05:46:31.840+0000 [id=35] INFO hudson.lifecycle.Lifecycle#onReady: Jenkins is fully up and running
```



Customize Jenkins

Plugins extend Jenkins with additional features to support many different needs.

Install suggested plugins



Install plugins the Jenkins community finds most useful.

Select plugins to install

Select and install plugins most suitable for your needs.

Getting Started



<input checked="" type="checkbox"/> Folders	<input type="checkbox"/> OWASP Markup Formatter	<input type="checkbox"/> Build Timeout	<input type="checkbox"/> Credentials Binding	** Ionicons API Folders
<input type="checkbox"/> Timestamper	<input type="checkbox"/> Workspace Cleanup	<input type="checkbox"/> Ant	<input type="checkbox"/> Gradle	
<input type="checkbox"/> Pipeline	<input type="checkbox"/> GitHub Branch Source	<input type="checkbox"/> Pipeline: GitHub Groovy Libraries	<input type="checkbox"/> Pipeline: Stage View	
<input type="checkbox"/> Git	<input type="checkbox"/> SSH Build Agents	<input type="checkbox"/> Matrix Authorization Strategy	<input type="checkbox"/> PAM Authentication	
<input type="checkbox"/> LDAP	<input type="checkbox"/> Email Extension	<input type="checkbox"/> Mailer	<input type="checkbox"/> Dark Theme	

Create First Admin User

Username

Password

Confirm password

Full name

E-mail address

Instance Configuration

Jenkins URL:

http://localhost:8080/

The Jenkins URL is used to provide the root URL for absolute links to various Jenkins resources. That means this value is required for proper operation of many Jenkins features including email notifications, PR status updates, and the `BUILD_URL` environment variable provided to build steps.

The proposed default value shown is **not saved yet** and is generated from the current request, if possible. The best practice is to set this value to the URL that users are expected to use. This will avoid confusion when sharing or viewing links.

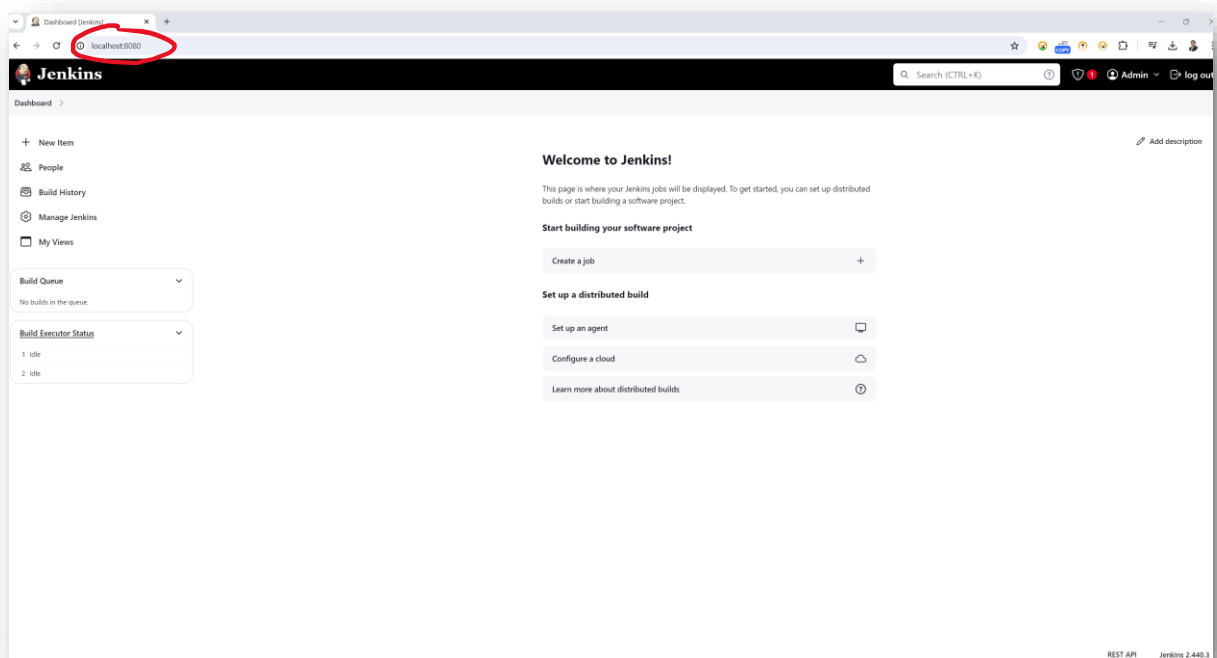
Getting Started

Jenkins is ready!

Your Jenkins setup is complete.

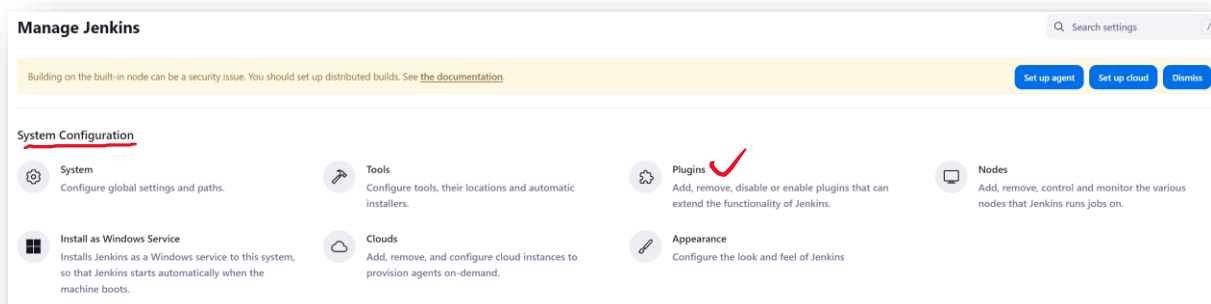
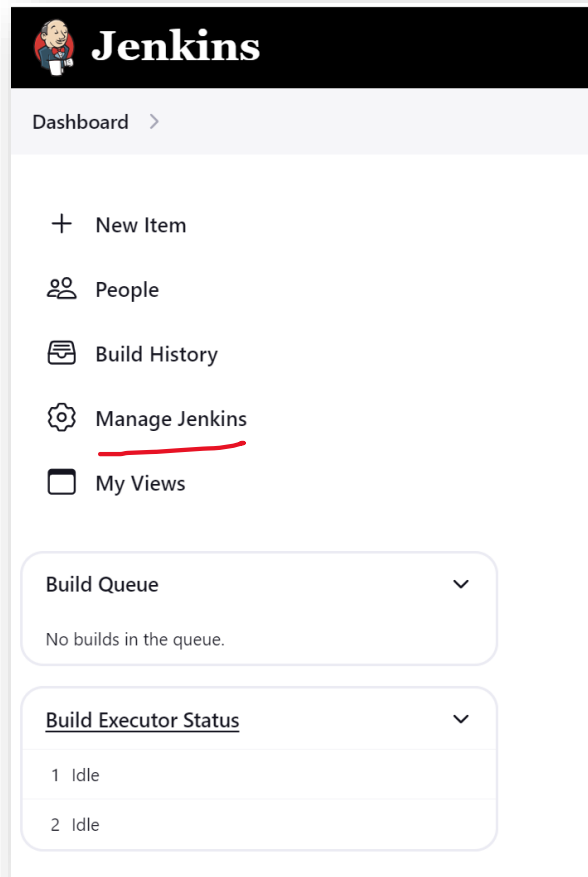
Start using Jenkins

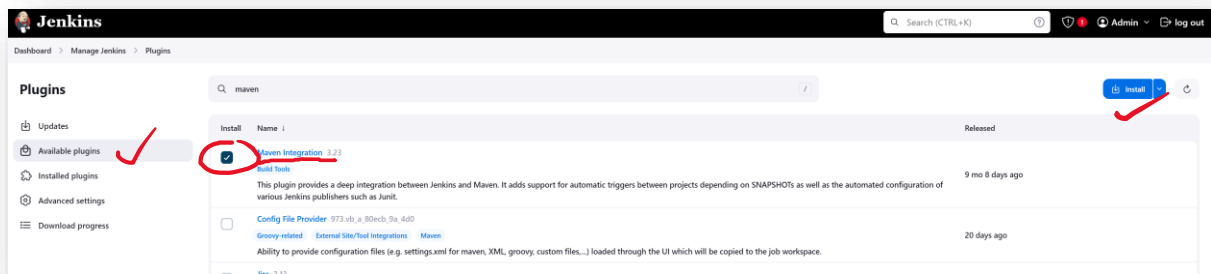
Here you can see Jenkins dashboard.



Install Maven Plugin

Manage Jenkins → Plugins (under System configuration) → Available Plugins → Select Maven Integration → Install.





Download progress

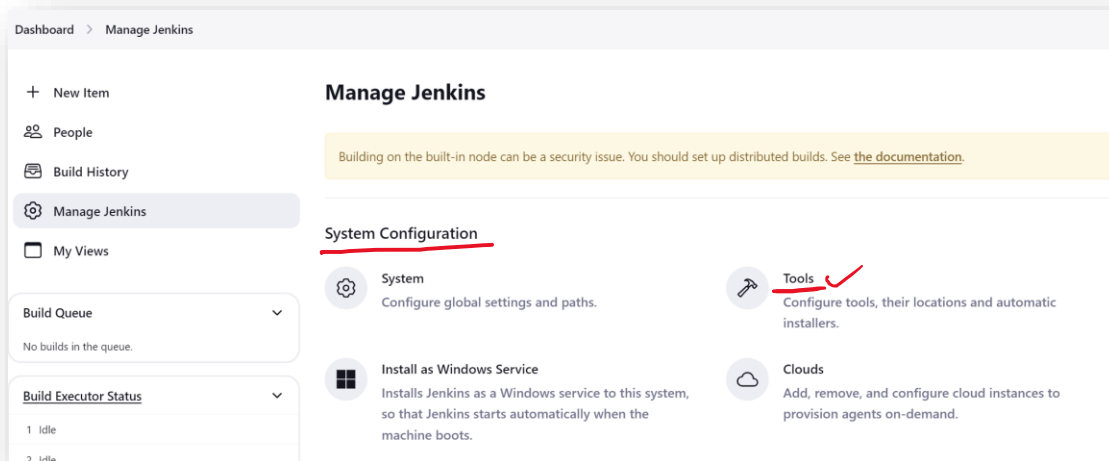
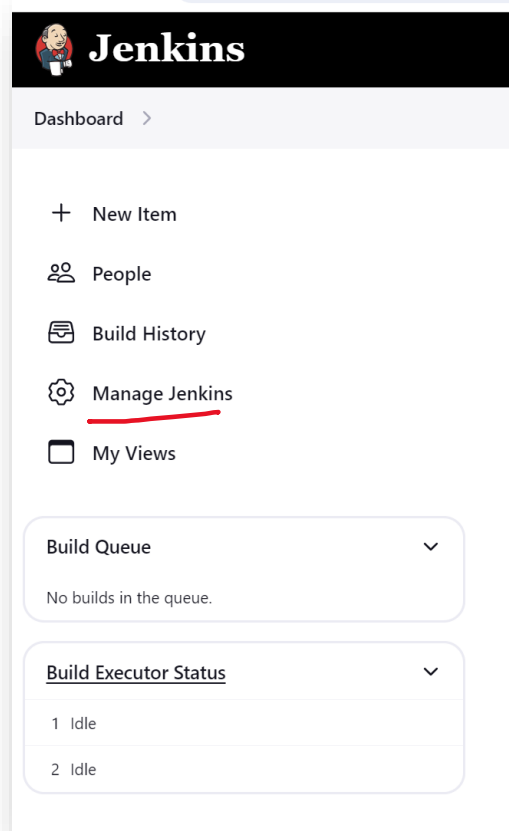
Preparation

- Checking internet connectivity
- Checking update center connectivity
- Success

Icons API	✓ Success
Folders	✓ Success
OWASP Markup Formatter	✓ Success
ASM API	✓ Success
JSON Path API	✓ Success
Structs	✓ Success
Pipeline: Step API	✓ Success
Token Macro	✓ Success
Build Timeout	✓ Success
Credentials	✓ Success
Plain Credentials	✓ Success
Variant	✓ Success
SSH Credentials	✓ Success
Credentials Binding	✓ Success

Configuring JDK, Maven & Git Path's in Jenkins

Dashboard → Manage Jenkins → Tools



Add JDK

JDK installations

✓ Add JDK

≡ JDK

Name

MyJava

JAVA_HOME

C:\Program Files\Java\jdk-17

Add Git

Git installations

≡ Git

Name

MyGit

Path to Git executable ?

C:\Program Files\Git\bin\git.exe

Add Maven

Maven installations

Add Maven


≡ **Maven**

Name

MyMaven

MAVEN_HOME

C:\Program Files\apache-maven-3.9.6

 Jenkins

Dashboard > Manage Jenkins > Tools

Tools

Maven Configuration

Default settings provider

Use default maven settings

Default global settings provider

Use default maven global settings

JDK installations

Add JDK

JDK

Name

MyJave

JAVA_HOME

C:\Program Files\Java\jdk-17

☐ Install automatically ?

Add JDK

Git installations

Add Git

Git

Name

MyGit

Path to Git executable ?

C:\Program Files\Git\bin\git.exe

☐ Install automatically ?

Add Git

Gradle installations

Add Gradle

Ant installations

Add Ant

Maven installations

Add Maven

Maven

Name

MyMaven

MAVEN_HOME

C:\Program Files\apache-maven-3.9.6

☐ Install automatically ?

Save

Apply

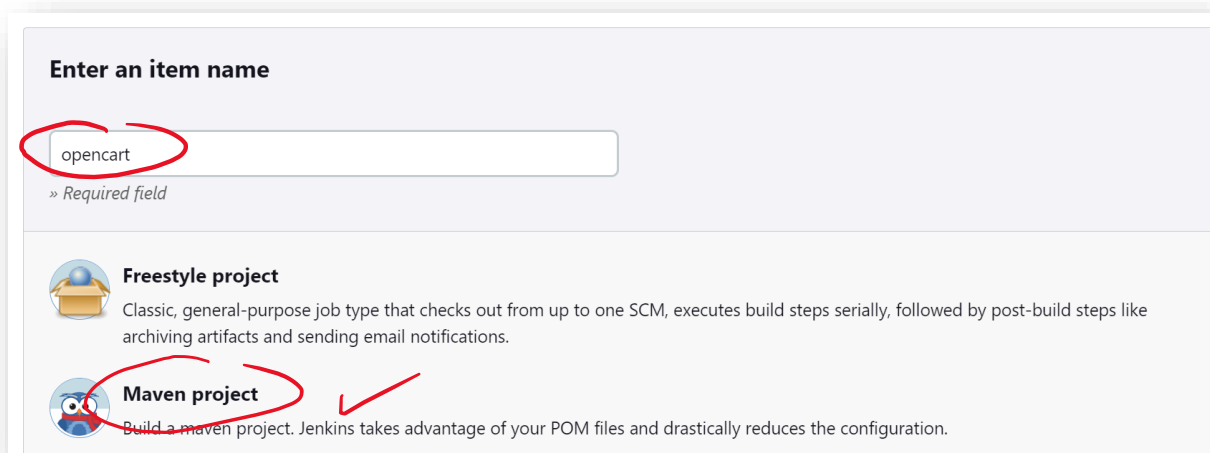
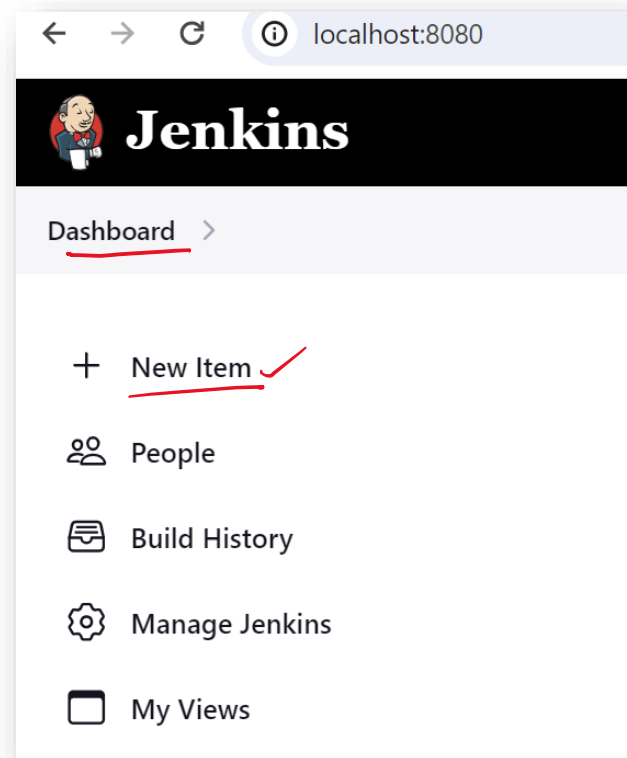


Save

Apply

How to Run GitHub Maven project in Jenkins

Dashboard → New Item → Provide Name → Select Maven Project → Ok



Navigate to Configuration Page...

Source Code Management

☐ None

☒ Git ?

Repositories ?

Repository URL ?

https://github.com/pavanoltraining/OpenCartV121.git

Build

Root POM ?

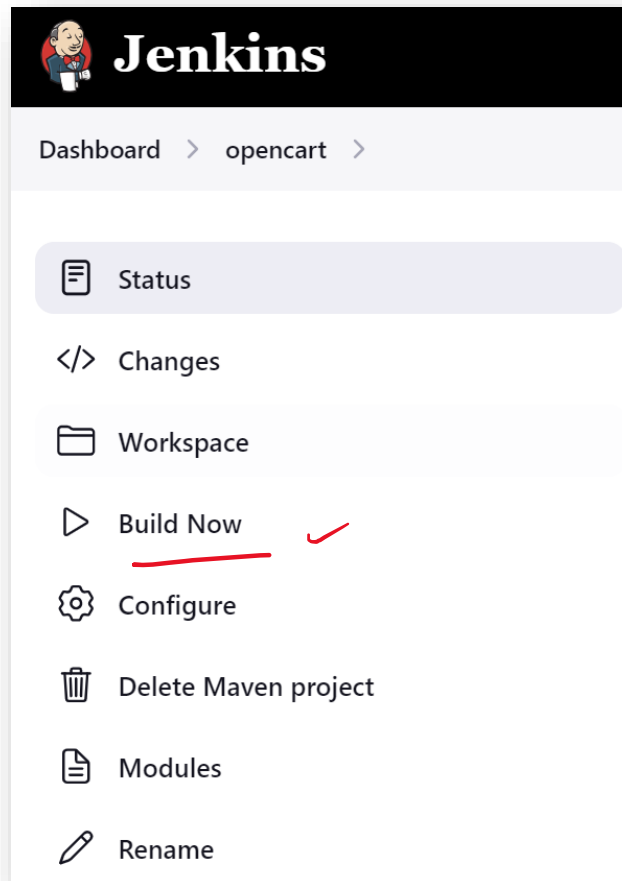
pom.xml

Goals and options ?

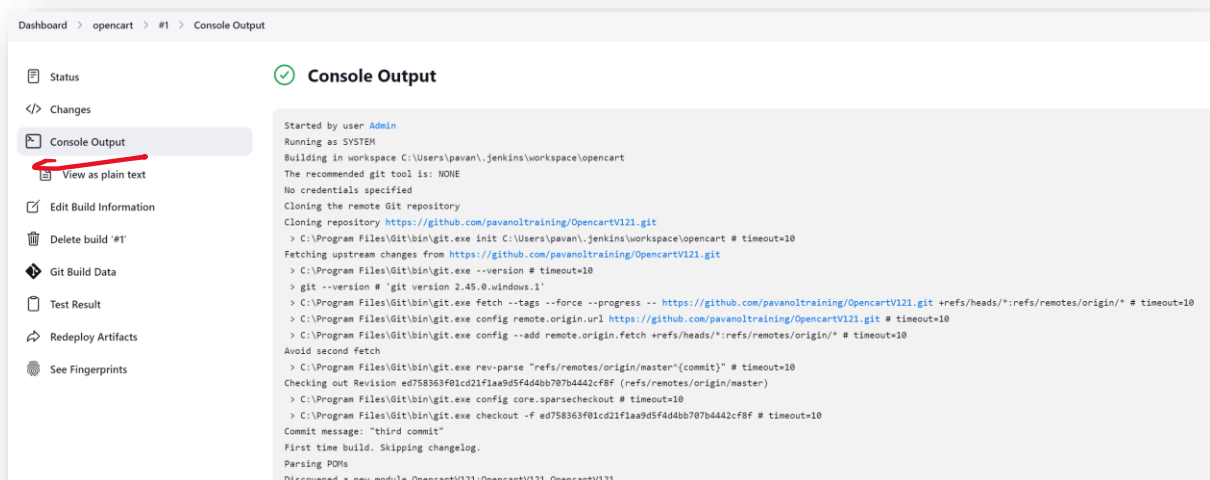
test

☒ Save

Go to Dashboard → Build Now.



See the console logs in execution..



[JENKINS] Recording test results

[INFO] -----

[INFO] BUILD SUCCESS

[INFO] -----

[INFO] Total time: 26.635 s

[INFO] Finished at: 2024-05-09T12:05:47+05:30

[INFO] -----

Waiting for Jenkins to finish collecting data

[JENKINS] Archiving C:\Users\pavan\.jenkins\workspace\opencart\pom.xml to OpencartV121/OpencartV121/0.0.1-SNAPSHOT/OpencartV121-0.0.1-SNAPSHOT.pom
channel stopped

Finished: SUCCESS