

To understand Continuous Integration, install & configure Jenkins with Maven Ant Gradle.

⇒ ① Download Jenkins

Pre-requisite
Java
Git

↓

Build job

↓

execute windows batch command

↓

echo This is first job

↓

Build now

② Download Apache maven → set environment variable

Build maven project ← new item

③ Global tool config → maven → add maven
Name mymaven → save.

④ JDK installation add jdk

☒ install automatically.

version

Create oracle a/c. with gmail

⑤

Configure

Build → invoke top-level maven.
maven version

my maven

Goals

Compile.

→ save

⑥

Configure

Source code management

① git

paste link in url

github.com/jleetutorial/maven-proj

Build

CI/CD pipeline

New item → project compile → freestyle → ok

①

project-compile

Configure → general → Source Code management
@ git

url → jeetutorial/maven-project

↓
go to build → Invoke top-level maven
maven version my maven

goals → Compile

Save → build now

②

project-Test ← Create new build

Configure → Source Code management
@ git → add url

go to build → Invoke top-level maven
maven version my maven

goals → test

Save → build now

⇒ go into project-Test → Status
→ workspace
workspace of test on master

☐ git

☒ server ← click

☐ src

☐ target ← click

☐ pom.xml

Surefire reports

↑

you can see

test cases screen

Server/target/surefire-reports

Configure

↳ post build actions → add post build action → publish JUnit test result reports

Test report Xmls

Server/target/Surefire-reports/*.xml

To perform testcases in group we use *.xml

↓ [Save] → build now

⇒ on your screen you will see latest test result along with graph

How to check test result for multiple testcases → by clicking on the respective graph.

③ [project=package]

Same Steps goals [Package] → save → build now

Go back to project-package

↓ workspace → webapp → target → webapp.war ← respected

package build successfully

console
building war file

Go to dashboard

Click on project-compile → Configure
post build action → add post →
build other project

projects to build project-test
① trigger only if build is stable
Save

In project-compile we will get downstream project i.e. next project

In project-test → Configure
build trigger

↓ ☒ build after other projects are built

Build Triggers project-compile

① trigger only if build is stable



post build action → build other project

project-package

Dashboard → build now → Compiler Project

manage jenkins ↓
manage plugins
→ available → build pipeline ✓
& install w/o restart!

go to dashboard [All] (+) ← click

view name

[Devops CI/CD pipeline]

① build pipeline view [Ok]

upstream/downstream Config

① select initial job
[project-compile]

Restrict trigger | build card [Standard
build card]
① no
[Ok]

will get → build pipeline

Dashboard → Click pipeline → click (Run)

(Configure) ← display option
no. of display [5]