

### Why Maven :-

- ## Install Maven!

- Verify :- mvn --version (in cmd)

Major terminologies:-

Artifact :- It will identify the sub-project. An artifact is a file, usually a JAR, that gets deployed to a Maven repository.

Create a new Maven project :- "archetype:generate" (through cmd)

→ Integrate Maven with Eclipse : `mvn eclipse:eclipse`

POM.xml :- It is heart of the Maven project.

→ It consist of groupId, artifactId, version, projectName and etc.

Add dependencies :- (from Maven Repository)

\* Selenium dependency

\* TestNG dependency

Add plugin :-

\* Maven Surefire Plugin

→ Maven Surefire plugin helps to execute all the test cases present inside Test Folder. (src/test/java)

Interview Q :- With what plugin you will execute all your tests in Maven project?

Maven commands :-

mvn clean :- It will delete all temporary files or builds inside current project.

→ It is basically cleans the project & delete all the previous references.

mvn compile :- It will compile the complete code & tells if any syntax error.

mvn test :- It will triggers the execution of maven project.

TestNG integration with POM.xml :-

→ TestNG Suite XML File :- This allows flexible configuration of the tests to be run.

→ It need to be added to the Surefire plugin configuration.

<plugin>

<groupId> org.apache.maven.plugins </groupId>

<artifactId> maven-surefire-plugin </artifactId>

<version> 2.20.1 </version>

<configuration>

<suitXmlFiles>

<suiteXmlfile> testing.xml </suiteXmlfile>

</suiteXmlFiles>



→ If you want to run a particular class

→ If you want to run a particular Test class :-

Maven Command :- `mvn -Dtest = SeleniumTest test`

↑  
Named class which you want to execute.

Profile in Maven :-

→ If a project consist of multiple testing suite xml files (like smoke, Regression)  
So in that case we need to update our pom.xml accordingly.

e.g.:-

Suppose the testing xml files are :-  
testing.xml (contains Regression)  
testing2.xml (contains all  
Smoke cases)

Pom.xml :-

```

<profiles>
  <profile>
    <id>Regression</id>
    <build>
      <plugins>
        ...
      </plugins>
      <suiteXmlFiles> testing.xml </suiteXmlFiles>
    </build>
  </profile>
  <profile>
    <id>Smoke</id>
    ...
    <suiteXmlFiles> testing2.xml </suiteXmlFiles>
  </profile>
</profiles>

```

Maven code:-

① To execute Regression profile

`mvn test -Pregression`

② To execute Smoke profile

`mvn test -Psmoke`