



Maven

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What is Maven?

- Maven is a powerful build management tool.
- This tool primarily used to build Java projects.
- Maven can also be used to build and manage projects written in C#, Ruby, Scala and other languages.
- Maven tool is hosted and developed by Apache Software Foundation.
- Maven software tool is developed with Java.

What Maven does?

- Maven helps us to build the project.

- We can add Jars and other dependents of the project easily using Maven.
- Also, with help of Maven we can build any number of projects into output types like JAR & WAR etc.

Why Maven ?

- Maven has 70% of build tool market for Java applications right now.
 - 20% Marketshare from Gradle.
 - 10% Marketshare from ANT
- Used very common in larger companies.
- Project started in 2002 and launched in 2004.
- Above all Maven is an Open source build tool.

Maven Advantages

- Quick Project setup.
- Mature Dependent Management
- Mature Project lifecycle.
- Robust plugin Community

Maven Disadvantages

- Projects are described in XML document - which is considered as "Outdated"
- Gradle uses Groovy, which can offer more flexibility in-terms of build.

Core concept of Maven

POM Files : Project object Model

- POM files are XM file that contains information related to the project and configuration information such as dependencies, source directory, plugins etc used by Maven to build the project.

- When you execute Maven command it actually reads "pom.xml" file to accomplish its configuration.

Dependencies and Repositories

- Dependencies : External Java libraries required for Project.
- Repositories : Directories of Packaged JAR files.