



Apache Maven

Beginner to Guru

Maven Lifecycle Plugins



Maven Clean Plugin

- Build Lifecycle - **CLEAN**
- Has only one goal - 'clean'
- Purpose is to remove files generated during build process.
- By default removes /target directory project root and submodule root folders





Maven Compiler Plugin

- Build Lifecycle - **DEFAULT**
- Has two goals - `compiler:compile`, `compiler:testCompile`
- By Default uses the compiler `javax.tools.JavaCompiler`
 - Can be configured to use `javac` if needed
- Default source and target language levels are Java 1.6
 - Apache team encourages these values to be set





Maven Resources Plugin

- Build Lifecycle - **DEFAULT**
- Has 3 goals - `resources:resources`, `resources:testResources`, `resources:copy-resources`
- Purpose is to copy project resources to output directory (target dir)
- Can be configured for encoding, source and target directories
- Rather versatile configuration options for copying files during build processing





Maven Surefire Plugin

- Build Lifecycle - **DEFAULT**
- Has one goal: surefire:test
- The Surefire plugin is used to execute unit test of the project.
- By default supports JUnit 3, JUnit 4, JUnit 5, and TestNG
 - Cucumber runs under JUnit, Spock compiles to JUnit byte code.
- By default includes classes named:
 - `**/Test*.java`; `**/*Test.java`; `**/*Tests.java`; `**/*TestCase.java`





Maven jar plugin

- Build Lifecycle - **DEFAULT**
- Has two goals: `jar:jar`, `jar:test-jar`
- Purpose is to build jars from complied artifacts and project resources
- Can be configured for custom manifests, and to make executable jars.





Maven Deploy Plugin

- Build Lifecycle - **DEFAULT**
- Has two goals - `deploy:deploy`, `deploy:deploy-file`
- Purpose is to deploy project artifacts to remote Maven repositories
- Often done in CI
- Configuration is typically part of the Maven POM





Maven Site Plugin

- Build Lifecycle - **SITE**
- Has 7 goals:
 - site:site - Generate site for project
 - site:deploy - Deploy site via Wagon
 - site:run - Run Site locally using Jetty as web server
 - site:stage - generate site to a local staging directory
 - site:stage-deploy - Deploy site to remote staging location





Maven Site Plugin

- Site Plugin Goals (continued):
 - site:attach-descriptor - adds site.xml (site map file used by search engines) to files for deployment
 - site:jar - bundles site into a jar for deployment to a repository
 - site:effective-site - generates the site.xml file





Examples

- Examples or detailed reviews of each plugin coming up!



