

# Maven Build

maven-jar-plugin|maven-assembly-plugin|maven-shade-plugin

## 使用maven-jar-plugin打包

### maven-compiler-plugin

- 设置源码和目标的java|jdk|jre版本
- 设置编码格式

```
<properties>
  <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
  <maven.compiler.source>1.8</maven.compiler.source>
  <maven.compiler.target>1.8</maven.compiler.target>
</properties>

# 或

<plugin>
  <groupId>org.apache.maven.plugins</groupId>
  <artifactId>maven-compiler-plugin</artifactId>
  <version>3.3</version>
  <configuration>
    <source>1.8</source>
    <target>1.8</target>
    <encoding>utf-8</encoding>
  </configuration>
</plugin>

<build>
  <finalName>${project.name}</finalName>
  <plugins>
    <!--<plugin></plugin-->
  </plugins>
</build>
```

### maven-dependency-plugin

- 打包处理单独依赖

```
<plugin>
  <groupId>org.apache.maven.plugins</groupId>
  <artifactId>maven-dependency-plugin</artifactId>
  <version>3.0.2</version>
  <executions>
    <execution>
      <id>copy-dependencies</id>
      <phase>package</phase>
      <goals>
        <goal>copy-dependencies</goal>
      </goals>
    </execution>
  </executions>
</plugin>
```

```

        <configuration>
            <outputDirectory>${project.build.directory}/lib</outputDirectory>
            <overwriteReleases>false</overwriteReleases>
            <overwriteSnapshots>false</overwriteSnapshots>
            <overwriteIfNewer>true</overwriteIfNewer>
        </configuration>
    </execution>
</executions>
</plugin>

```

## maven-jar-plugin

- 设置打包运行主类和依赖
- 排除重复的文件和文件夹

```

<plugin>
    <groupId>org.apache.maven.plugins</groupId>
    <artifactId>maven-jar-plugin</artifactId>
    <version>3.0.2</version>
    <configuration>
        <archive>
            <manifest>
                <mainClass>${main.class}</mainClass>
                <addClasspath>true</addClasspath>
                <classpathPrefix>lib/</classpathPrefix>
            </manifest>
        </archive>
        <excludes>
            <exclude>etc</exclude>
            <exclude>jni</exclude>
            <exclude>log</exclude>
        </excludes>
    </configuration>
</plugin>

```

## maven-resources-plugin

- 打包是将配置文件放在包外

```

<plugin>
    <groupId>org.apache.maven.plugins</groupId>
    <artifactId>maven-resources-plugin</artifactId>
    <version>3.0.2</version>
    <executions>
        <execution>
            <id>copy-resources</id>
            <phase>validate</phase>
            <goals>
                <goal>copy-resources</goal>
            </goals>
            <configuration>
                <outputDirectory>${project.build.directory}</outputDirectory>
                <resources>
                    <resource>
                        <directory>src/main/resources</directory>
                        <filtering>true</filtering>
                    </resource>
                </resources>
            </configuration>
        </execution>
    </executions>
</plugin>

```

```

        <include>etc/*</include>
        <include>jni/*</include>
    </includes>
    <excludes>
        <exclude>log/*</exclude>
    </excludes>
</resource>
</resources>
</configuration>
</execution>
</executions>
</plugin>

```

## 使用maven-assembly-plugin打包

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## 使用maven-shade-plugin打包

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### maven-compiler-plugin

- 设置源码和目标的java|jdk|jre版本
- 设置编码格式

```

<properties>
    <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
    <maven.compiler.source>1.8</maven.compiler.source>
    <maven.compiler.target>1.8</maven.compiler.target>
</properties>

# 或

<plugin>
    <groupId>org.apache.maven.plugins</groupId>
    <artifactId>maven-compiler-plugin</artifactId>
    <version>3.3</version>
    <configuration>
        <source>1.8</source>
        <target>1.8</target>
        <encoding>utf-8</encoding>
    </configuration>
</plugin>

```

### maven-resources-plugin

- 打包是将配置文件放在包外

```
<plugin>
  <groupId>org.apache.maven.plugins</groupId>
  <artifactId>maven-resources-plugin</artifactId>
  <version>3.0.2</version>
  <executions>
    <execution>
      <id>copy-resources</id>
      <phase>validate</phase>
      <goals>
        <goal>copy-resources</goal>
      </goals>
      <configuration>
        <outputDirectory>${project.build.directory}</outputDirectory>
        <resources>
          <resource>
            <directory>src/main/resources</directory>
            <filtering>true</filtering>
            <includes>
              <include>etc/*</include>
              <include>jni/*</include>
            </includes>
            <excludes>
              <exclude>log/*</exclude>
            </excludes>
          </resource>
        </resources>
      </configuration>
    </execution>
  </executions>
</plugin>
```

## maven-shade-plugin

- 设置主类
- 编译版本
- 解决冲突
- 取消证书

```
<plugin>
  <groupId>org.apache.maven.plugins</groupId>
  <artifactId>maven-shade-plugin</artifactId>
  <version>2.4.3</version>
  <executions>
    <execution>
      <goals>
        <goal>shade</goal>
      </goals>
      <configuration>

        <transformers>
          <transformer
implementation="org.apache.maven.plugins.shade.resource.ManifestResourceTransformer">
            <manifestEntries>
              <Main-Class>${main.class}</Main-Class>
```

```

        <X-Compile-Source-JDK>${java.version}</X-Compile-Source-
JDK>
        <X-Compile-Target-JDK>${java.version}</X-Compile-Target-
JDK>
        </manifestEntries>
    </transformer>
    <transformer
implementation="org.apache.maven.plugins.shade.resource.AppendingTransformer">
        <resource>META-INF/spring.handlers</resource>
    </transformer>
    <transformer
implementation="org.apache.maven.plugins.shade.resource.AppendingTransformer">
        <resource>META-INF/spring.schemas</resource>
    </transformer>
</transformers>

    <filters>
        <filter>
            <artifact>*:*</artifact>
            <excludes>
                <exclude>etc/**</exclude>
                <exclude>jni/**</exclude>
                <exclude>log/**</exclude>
                <exclude>META-INF/*.SF</exclude>
                <exclude>META-INF/*.DSA</exclude>
                <exclude>META-INF/*.RSA</exclude>
            </excludes>
        </filter>
    </filters>
</configuration>
</execution>
</executions>
</plugin>

```