

Title: How to add a dependency to a Spring Boot Jar in another project?

Post Body:

I have a Spring Boot application and I have created a Jar out of that. Following is my pom.xml:

```
<dependencies>
    <dependency>
        <groupId>org.springframework.boot</groupId>
        <artifactId>spring-boot-starter-web</artifactId>
    </dependency>
</dependencies>
```

I want to use this Jar in my other application so added this jar to my application. But when I am calling a method in that Jar, it is throwing a `ClassNotFoundException`.

How can I fix this issue? How can I add a dependency to a Spring Boot JAR?

Accepted Answer:

By default, Spring Boot repackages your JAR into an executable JAR, and it does that by putting all of your classes inside `BOOT-INF/classes`, and all of the dependent libraries inside `BOOT-INF/lib`. The consequence of creating this fat JAR is that you can no longer use it as a dependency for other projects.

From [Custom repackage classifier](#):

By default, the `repackage` goal will replace the original artifact with the repackaged one. That's a sane behaviour for modules that represent an app but if your module is used as a dependency of another module, you need to provide a classifier for the repackaged one.

The reason for that is that application classes are packaged in `BOOT-INF/classes` so that the dependent module cannot load a repackaged jar's classes.

If you want to keep the original main artifact in order to use it as a dependency, you can add a [classifier](#) in the `repackage` goal configuration:

```
<plugin>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-maven-plugin</artifactId>
    <version>1.4.1.RELEASE</version>
    <configuration>
        <repackageClassifier>fat</repackageClassifier>
    </configuration>
</plugin>
```

With this configuration, the Spring Boot Maven Plugin will create 2 JARs: the main one will be the same as a usual Maven project, while the second one will have the classifier appended and be the executable JAR.

Highest Rated Answer:

If you are using `spring-boot-starter-parent`, such execution is already pre-configured with a `repackage` execution ID so that only the plugin definition should be added.

Spring Boot 3.x

```
<build>
    <plugins>
        <plugin>
            <groupId>org.springframework.boot</groupId>
            <artifactId>spring-boot-maven-plugin</artifactId>
        </plugin>
    </plugins>
</build>
```

[Read more](#)

Spring Boot 2.x

```
<plugin>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-maven-plugin</artifactId>
    <executions>
        <execution>
            <id>repackage</id>
            <goals>
                <goal>repackage</goal>
            </goals>
        </execution>
    </executions>
</plugin>
```

[Read more](#)

Spring Boot 1.x

```
<plugin>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-maven-plugin</artifactId>
    <version>1.2.5.RELEASE</version>
</plugin>
```

[Read more](#)