

Title: Error when running docker container 'NoClassDefFoundError'

Post Body:

I am trying to dockerize a simple Spring Boot Application, built with Maven.

Dockerfile:

```
FROM openjdk:latest COPY target/backend-1.0-SNAPSHOT.jar app.jar ENTRYPOINT ['java', '-jar', 'app.jar']
```

When I run the .jar without the container (java -jar target/backend-1.0-SNAPSHOT.jar), everything works fine and the app is running.

Now I create the container with docker build -t company/backend .

But when I try to run the docker container with docker run -p 8080:8080 company/backend the following error occurs:

```
Exception in thread 'main' java.lang.NoClassDefFoundError: org/springframework/boot/SpringApplication at de.company.ba
```

It seems like docker does not find the main class, even though it is defined in my pom.xml:

```
<properties>      <maven.compiler.source>1.8</maven.compiler.source>      <maven.compiler.target>1.8</maven.compiler.target>
```

Main Class:

```
package de.company.backend; import org.springframework.boot.SpringApplication; import org.springframework.boot.autoconfigure.
```

Accepted Answer:

In your pom.xml, the copy-dependencies goal is specified at the install phase : too late the package of the jar was already done.

I am trying to dockerize a simple Spring Boot Application, built with Maven.

You don't need to declare any plugin to create a fat jar with spring boot that could be run by a docker container.

Declaring these plugins is error prone (and should be used only in corner cases) while [the repackage goal of the spring boot maven plugin](#) attached by default to the package phase of maven will create for you the fat jar :

Repackages existing JAR and WAR archives so that they can be executed from the command line using java -jar

Juste remove these plugins declarations and execute mvn clean package and it should be good.

Side note :

```
FROM openjdk:latest
```

Don't use latest as image version but favor a specific version of the image othewise you could have bad surprises. As you use JDK 8, you could specify a JRE or a JDK 8 such as : FROM openjdk:8-jre-alpine.

Highest Rated Answer:

I had the same problem as you.

you need to add plugin in your pom.xml.

```
<build>      <plugins>      <plugin>      <groupId>org.springframework.boot</groupId>
```

If you input as above, it works normally.

and check MANIFEST.MF (in .jar file)

```
Main-Class: org.springframework.boot.loader.JarLauncher      Start-Class: {your main class}
```