

Submitting spring boot application jar to spark-submit

Asked 7 years, 3 months ago Modified 4 years, 5 months ago Viewed 9k times

I am pretty new to spark, and i am trying to try out spark submit. I created an application in spring boot , used `mvn package` to create a jar . But when i am trying to submit the jar to `spark-submit` , it is **not able to find the Main class** . But the main class is present in the jar.

```
spark-submit --class com.dip.sparkapp.SparkappApplication --master local
target/sparkapp-0.0.1-SNAPSHOT.jar
```

`spring` `apache-spark` `spring-boot`

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edited Jul 20, 2017 at 8:10



VladoDemcak

5,209 ● 4 ● 37 ● 46

asked Jul 19, 2017 at 11:51



dname

dnam 323 ● 3 ● 11

How do you package your spark application? With spring plugin? – VladoDemcak Jul 19, 2017 at 19:26

Yes . I am using spring boot mvn plugin `<build> <plugins> <plugin>`
`<groupId>org.springframework.boot</groupId> <artifactId>spring-boot-maven-plugin</artifactId>`
`</plugin> </plugins> </build>` – dname Jul 20, 2017 at 9:08

4 Answers

Sorted by: Highest score (default)

We ran into the same problem, actually, on the same day you posted this. Our solutions was to use the shade plugin for maven to edit our build a bit. We found that when packaging with the spring-boot-maven plugin it nested our classes in BOOT-INF/classes which spark didn't like. I'll paste the relevant section so you can try it out on your own application -- good luck!

```
<build>
  <plugins>
    <plugin>
      <groupId>org.apache.maven.plugins</groupId>
      <artifactId>maven-shade-plugin</artifactId>
      <dependencies>
        <dependency>
          <groupId>org.springframework.boot</groupId>
          <artifactId>spring-boot-maven-plugin</artifactId>
          <version>${spring-boot-version}</version>
        </dependency>
      </dependencies>
    </plugin>
  </plugins>
</build>
```

```

<keepDependenciesWithProvidedScope>false</keepDependenciesWithProvidedScope>
  <createDependencyReducedPom>false</createDependencyReducedPom>
  <filters>
    <filter>
      <artifact>*:*/artifact>
      <excludes>
        <exclude>META-INF/*.SF</exclude>
        <exclude>META-INF/*.DSA</exclude>
        <exclude>META-INF/*.RSA</exclude>
      </excludes>
    </filter>
  </filters>
  <transformers>
    <transformer
implementation="org.apache.maven.plugins.shade.resource.AppendingTransformer">
      <resource>META-INF/spring.handlers</resource>
    </transformer>
    <transformer
implementation="org.springframework.boot.maven.PropertiesMergingResourceTransformer"
      <resource>META-INF/spring.factories</resource>
    </transformer>
    <transformer
implementation="org.apache.maven.plugins.shade.resource.AppendingTransformer">
      <resource>META-INF/spring.schemas</resource>
    </transformer>
    <transformer
implementation="org.apache.maven.plugins.shade.resource.ServicesResourceTransformer"
  />
    <transformer
implementation="org.apache.maven.plugins.shade.resource.ManifestResourceTransformer"
      <mainClass>${start-class}</mainClass>
    </transformer>
  </transformers>
</configuration>
<executions>
  <execution>
    <phase>package</phase>
    <goals>
      <goal>shade</goal>
    </goals>
  </execution>
</executions>
</plugin>
</plugins>
</build>

```

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answered Jul 25, 2017 at 3:33



Cahlen Humphreys

173 ● 8





I have found that simply skipping the class name from spark-submit works, i.e. --class com.dip.sparkapp.SparkappApplication

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answered Mar 18, 2019 at 22:58

[stephen newman](#)

573 ● 7 ● 20



If your are using gradle this will work for shadow plugin:

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```
import com.github.jengelman.gradle.plugins.shadow.transformers.*

...

plugins {
    id 'com.github.johnrengelman.shadow' version '2.0.4'
}

...

shadowJar {
    zip64 true
    mergeServiceFiles()
    append 'META-INF/spring.handlers'
    append 'META-INF/spring.schemas'
    append 'META-INF/spring.tooling'
    transform(PropertiesFileTransformer) {
        paths = ['META-INF/spring.factories' ]
        mergeStrategy = "append"
    }
}
```



Taken from here: <https://github.com/spring-projects/spring-boot/issues/1828#issuecomment-607352468>

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answered May 14, 2020 at 13:55

[Andrey Serebryanskiy](#)

178 ● 2 ● 12



This works for me

0

```
<transformer
implementation="org.apache.maven.plugins.shade.resource.ManifestResourceTransformer"
<manifestEntries>
    <Main-Class>packagename.classname</Main-Class>
```





```
</manifestEntries>  
</transformer>
```

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answered Oct 15, 2018 at 8:39

[Ponnudurai Periasamy](#)

31 ● 2

