

Spark Scala Application Development

- 1) Set up Spark scala IDE
- 2) Create new scala project and add Spark assembly jars in the reference library
- 3) Code the application in scala project
- 4) After successful completion, execute/ Debug the code in eclipse
- 5) Package the jar using sbt-assembly packaging tool (include dependency libraries also in the jar)
- 6) Execute the assembly jar from spark-submit executor

How to package Spark Scala Application using sbt-assembly

- 1) Download sbt tool <http://www.scala-sbt.org/release/docs/Getting-Started/Setup.html>
- 2) set the Project Layout as follows

project – project definition files

project/build/ yourproject .scala – the main project definition file

project/build.properties – project, sbt and scala version definitions

src/main – your app code goes here, in a subdirectory indicating the code's language (e.g. src/main/scala, src/main/java)

src/main/resources – static files you want added to your jar (e.g. logging config)

src/test – like src/main, but for tests

lib_managed – the jar files your project depends on. Populated by sbt update

target – the destination for generated stuff (e.g. generated thrift code, class files, jars)

application properties - yourproject.sbt

- 3) Run the sbt assembly command from the top level directory of this Project Layout.

Eg: > [HadoopUser@01HW508201 spark-application]\$ /home/HadoopUser/Downloads/sbt/bin/sbt assembly

- 4) Final assembly jar for your application can be found in directory target/scala-2.10

Note: Source code placed in src/main should follow the package name

All the required jars should be mentioned in yourproject.sbt file or in placed in lib folder

For reference please check out the twitter application sbt package sbt-build-spark-project.zip