Submitting Spark Applications

We are going to submit those applications using "client" deploy mode (client mode), since in our laptops we will not have a Apache Spark cluster running.

(Note, you need to have previously installed Apache Spark in your machine. <u>See</u> instructions).

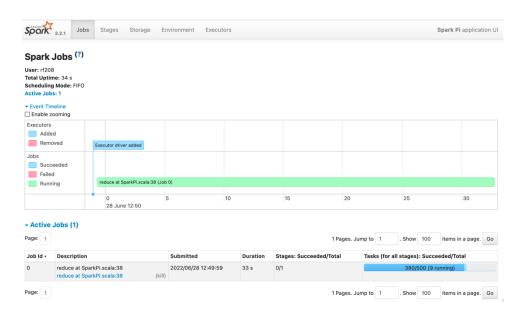
In cluster mode, the Spark driver runs inside an application master process which is managed by cluster-manager on the cluster, and the client can go away after initiating the application. **In client mode**, the driver runs in the client process, and the application master is only used for requesting resources from spark cluster.

Submitting a the SparkPi Application:

 Submit the SparkPi application (which is an example that comes with spark) to your Spark Cluster that you have started by using spark_submit_SparkPi script

./spark_submit_SparkPi.sh > result.txt

- 2. Check the result in result.txt:
 - a. Pi is roughly 3.1403511403511404
- 3. To monitor the spark application run again the step 1 and go to the web browser: http://localhost:4040
 - a. The connection (localhost:4040) will ONLY alive while the application is running



Submitting the WordCount Spark Application:

We can also submit the wordcount.py application stored in *Spark_Applications* folder

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>> ./ spark_submit_wordcount.sh

Important: Currently, the standalone mode does not support cluster mode for Python applications