



CHECKLIST

CLUSTER – SPARK – MONGODB – POSTGRES

START SEQUENCE

- FIREWALL..... STOP
- SHARDS START
- CONFIG SERVER..... START
- ROUTER SERVER..... START
 - CONFIG SERVER.....STATUS
 - ROUTER SERVER.....STATUS
 - MONGO CONNECTION.....TESTED
- ENVIRONMENT VARIABLES SET
- SPARK START
 - SPARK UI.....TESTED
- POSTGRES..... START
 - POSTGRES..... STATUS
 - POSTGRES CONNECTION.....TESTED

VERIFY DATASET

- DATABASE CONSISTENCY..... TESTED
- CODE SAMPLING..... YES / NO

BUILD

- MAVEN CLEAN..... RUN
- MAVEN ASSEMBLY..... RUN
- RSYNC SCRIPT..... RUN

RUN

- SUBMIT..... RUN
- MONITORING UI..... STATUS

START SEQUENCE

```
systemctl stop firewalld
systemctl start mongoshard
systemctl start mongoconfig
systemctl start mongorouter
systemctl status mongoconfig -l
systemctl status mongorouter -l
mongo -host 192.168.1.5 --port 27017
```

```
export PATH=$PATH:/opt/spark/bin
export SPARK_HOME=/opt/spark
export JAVA_HOME=/usr/lib/jvm/jre-1.8.0-openjdk
export PATH=$PATH:$JAVA_HOME
```

```
$SPARK_HOME/sbin/start-all.sh
```

RUN

```
spark-submit --class Statistics --master spark://192.168.1.5:7077 --deploy-mode cluster
file:/opt/statistics-3.1-jar-with-dependencies.jar 192.168.1.5
```

```
spark-submit --class SparkNoSQL --master spark://192.168.1.5:7077 --deploy-mode cluster
file:/opt/spark_nosql-3.1-jar-with-dependencies.jar 192.168.1.5 /opt/resources/lexicon.txt
/opt/resources/emoticon.txt /opt/resources/slang.txt /opt/resources/modifiers.txt /opt/resources/negate.txt
```

```
spark-submit --driver-class-path /opt/postgresql-42.2.5.jar --class SparkSQL --master
spark://192.168.1.5:7077 --deploy-mode cluster file:/opt/spark_sql-3.1-jar-with-dependencies.jar
/opt/resources/lexicon.txt /opt/resources/emoticon.txt /opt/resources/slang.txt /opt/resources/modifiers.txt
/opt/resources/negate.txt jdbc:postgresql://192.168.1.5:5432/maadb postgres demo
```

```
java -jar relational-2.0-jar-with-dependencies.jar /opt/resources/lexicon.txt /opt/resources/emoticon.txt
/opt/resources/slang.txt /opt/resources/modifiers.txt /opt/resources/negate.txt
jdbc:postgresql://localhost:5432/rmaadb postgres demo
```