Table of Contents

ASPARC STARTER DEVOPS GUIDE

1. WAY OF WORKING

1.1. Issues handling

Each proper time spent on time saves 10 times more in execution, thus the tasks and aktivities related to this tool are tracked via the issue-tracker tool:
https://github.com/YordanGeorgiev/issue-tracker
and could be found @:
https://docs.google.com/spreadsheets/d/1-oYPtBM8PG_FUogk40RDmcM_Xzq91Tb81Zlyi0cMwYQ/edit#gid=135774576

1.2. Documentation

The purpose of the tool is to "grasp the concept of apache spark", thus a proper documentation set is created as well.

2. NAMING CONVENTIONS

2.1. Dirs naming conventions

The dir structure should be logical and a person navigating to a dir should almost understand what is to be find in thre by its name ..

2.2. Root Dirs naming conventions

The root dirs and named as follows:
bin - contains the produced binaries for th project
cnf - for the configuration
dat - for the data of the app
lib - for any external libraries used
src - for the source code of the actual projects and subprojects

2.3. Bash scripts naming conventions

Do not use capital letters - they are too noisy.

2.4. Scala code naming conventions

3. INSTALLATIONS AND CONFIGURATIONS

3.1. Install Java Development Kit 1.9

Install Java Development Kit 1.9 as follows:

```
# update your Ubuntu repositories
sudo apt-get update
# install the open jdk
sudo apt-get install -y openjdk-8-jdk
```

3.1.1. verify the JDK installation and configuration

```
# and verify
  java --version
openjdk 9-Ubuntu
OpenJDK Runtime Environment (build 9-Ubuntu+0-9b161-1)
OpenJDK 64-Bit Server VM (build 9-Ubuntu+0-9b161-1, mixed mode)
```

3.1.2. configure java_home

```
echo 'export JAVA_HOME=/usr/lib/jvm/java-8-openjdk-amd64' >> ~/.java_opts.host-name
```

3.2. Install Scala

The scala libs will be installed with the sbt build tool.

3.2.1. Install sbt

Install sbt scala build tool by following the instructions in the following url:
http://www.scala-sbt.org/0.13/docs/Installing-sbt-on-Linux.html

```
echo "deb https://dl.bintray.com/sbt/debian /" | sudo tee -a /etc/apt/sources.list.d/sbt.list
sudo apt-key adv --keyserver hkp://keyserver.ubuntu.com:80 --recv 2EE0EA64E40A89B84B2DF73499E82A75642AC823
sudo apt-get update
sudo apt-get install sbt
which sbt
```

3.3. Install apache spark