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# 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 activities 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](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 there by its name ..

### 2.2. Root Dirs naming conventions

The root dirs are named as follows:

bin - contains the produced binaries for the 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 openjdk
sudo apt-get install -y openjdk-9-jdk
```

#### 3.1.1. verify the java installation

```
# 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-9-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