

Table of Contents

Table of Contents	1
ASPARC STARTER DEVOPS GUIDE	2
1. WAY OF WORKING	2
1.1. Issues handling	2
1.2. Documentation	2
2. NAMING CONVENTIONS	2
2.1. Dirs naming conventions	2
2.2. Root Dirs naming conventions	2
2.3. Bash scripts naming conventions	2
2.4. Scala code naming conventions	2
3. INSTALLATIONS AND CONFIGURATIONS	2
3.1. Install Java Development Kit 1.9	2
3.1.1. verify the JDK installation and configuration	2
3.1.2. configure java_home	3
3.2. Install Scala	3
3.2.1. Install sbt	3
3.3. Install apache spark	3

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

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-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