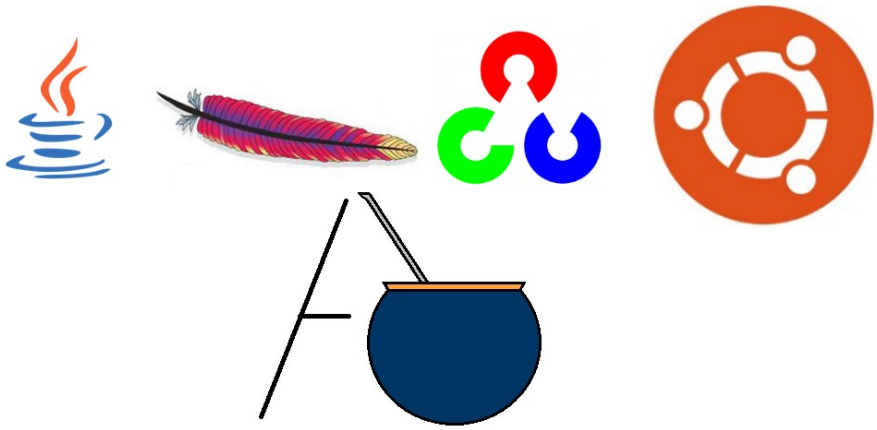
Automate set up guide :



Requirements:

-Linux Ububtu 14.04 preferably.
-JDK 7 or 8.
-Maven.
-OpenCV 3.1 compiled and uploaded to the server maven local repository.
-Download or Checkout from repository Automate source code.
-Install your preferred java IDE (Optional).

1- Installing Java JDK 7 :

3 different options :

First option:

-Download and extract Java 7 from Oracle Oficial Werb Page:
http://www.oracle.com/technetwork/es/java/javase/downloads/jdk7-downloads-1880260.html

-Open ~/.bashrc file on ubuntu, and add export JAVA_HOME= (directory where the jdk files where extracted).

Second option:

-Open a terminal and input the following commands:

```
sudo add-apt-repository ppa:webupd8team/java
sudo apt-get update
sudo apt-get install oracle-java7-installer
sudo apt-get install oracle-java7-set-default
```

Third Option OpenJDK :

```
sudo apt-get update
sudo apt-get install openjdk-7-jdk
```

2- Install maven :

```
sudo apt-get update
sudo apt-get install maven
```

3- OpenCV compilation:

Install OpenCV 3.1.0 in Ubuntu 15.04/14.04

As OpenCV is platform dependant it has to be build on each platform. 15.04 and 14.04 are the ones we have tried this steps. If something goes wrong check TROUBLESHOOTING section at the end of t his file.

a- Install or update Cmake :

```
sudo apt-get install software-properties-common
sudo add-apt-repository ppa:george-edison55/cmake-3.x
sudo apt-get update
```

When cmake is not yet installed:

```
sudo apt-get install cmake
```

When cmake is already installed:

sudo apt-get upgrade

Compilation:

sudo apt-get install build-essential

wget http://www.cmake.org/files/v3.2/cmake-3.2.2.tar.gz

tar xf cmake-3.2.2.tar.gz
cd cmake-3.2.2
./configure
make

Install:

sudo apt-get install checkinstall

sudo checkinstall

b- Install dependencies:

----

sudo apt-get install build-essential cmake git libgtk2.0-dev pkg-config

sudo apt-get install libavcodec-dev libavformat-dev libswscale-dev python-dev

sudo apt-get install python-numpy libtbb2 libtbb-dev libjpeg-dev libpng-dev

sudo apt-get install libtiff-dev libjasper-dev libdc1394-22-dev doxygen

sudo apt-get install checkinstall

note: checkinstall, is used to make it easier for us to uninstall (IF we need)

the application compiled from source

c- Download OpenCV 3.1.0 sources and unzip it

----

url -> http://opencv.org/downloads.html

d- We create a folder for compiling

----

cd /path/to/your/opencv/

mkdir build

cd build/

e- Compile configuration

The command is between [and] just to show where it starts and ends, but

DO NOT paste them

cmake -G "Unix Makefiles" -D CMAKE_BUILD_TYPE=Release -D CMAKE_INSTALL_PREFIX=/usr/local -D WITH_FFMPEG=OFF -D BUILD_SHARED_LIBS=OFF -D BUILD_EXAMPLES=OFF -D BUILD_TESTS=OFF -D BUILD_PERF_TESTS=OFF ..

Troubleshoot warning: T1

f- Compile

----

sudo make

sudo checkinstall

If all goes well in the folder "/usr/local/share/OpenCV/java"

you should see 2 files: libopencv_java310.so and opencv-310.jar

g- Install local .jar into maven

---

mvn install:install-file -Dfile=/usr/local/share/OpenCV/java/opencv-310.jar -DgroupId=org.opencv -DartifactId=opencv-java -Dversion=3.1.0 -Dpackaging=jar

h- Add native library to system variable

---

sudo nano ~/.bashrc

** **at the end of the file add the following line** **

export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/usr/local/share/OpenCV/java

##########

TROUBLESHOOTING

##########

T1 - Ubuntu 14.04 - Error with hashes

Download the following file:

https://raw.githubusercontent.com/Itseez/opencv_3rdparty/81a676001ca8075ada498583e4166079e5744668/ippicv/ippicv_linux_20151201.tgz

Paste at:

/path/to/your/opencv/3rdparty/ippicv/downloads/linux-808b791a6eac9ed78d32a7666804320e

Run cmake again.

4-Download or checkout from repository AutoMate source code.

5-Download or checkout from Stash TJBA Black Box functional tests:

a- Move to the directory where the tests projects will be stored

b- Run the command:

git clone https://(your stash username)%40windriver.com@projects.hondaresearch.com/stash/scm/pat/pfx-hmi-functional-tests.git

5- Open a terminal:

a- move to */QCAFrameworks/QCAFrameworkCorePOM* and run the following command "mvn clean install -DskipTests"

b- move to */QCAFrameworks/QCAFrameworkCore* and run the following command "mvn clean install -DskipTests"

c- move to */QCAFrameworks/QCAAndroidNativeLinux* and run the following command "mvn clean install -DskipTests"

d- move to */pfx-hmi-functional-tests/tjba-hmi-toolkit* and run the following command "mvn clean install -DskipTests"

If all the previous commands ran and compiled successfully **CONGRATULATIONS** your Automate environment is already set up to run test suites!. Next check out the guide "How to run tests suites".