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SSI on Android, SS 2015

1. Introduction

SSI - Social Signal Iterpretation Framework has been portet to Linux with an Androidport in the works. Devices like the Raspberry PI, as well as several mobile devices can now be used. This guide shows you how to set up SSI on Android

Task 1: Prepare the setup (note: crosscompile from Linux)

Some requirements have to be met to be able to use SSI on Linux. On any reasonable Distribution you should simply be able to install the dependencies via package manager.

- 1. GCC and G++ 4.8 or later have to be installed, because SSI relies on C++11 standard.
- 2. CMake is needed as build-system.
- 3. Android NDK is needed and has to be setup on the your system

Task 2: Get SSI	

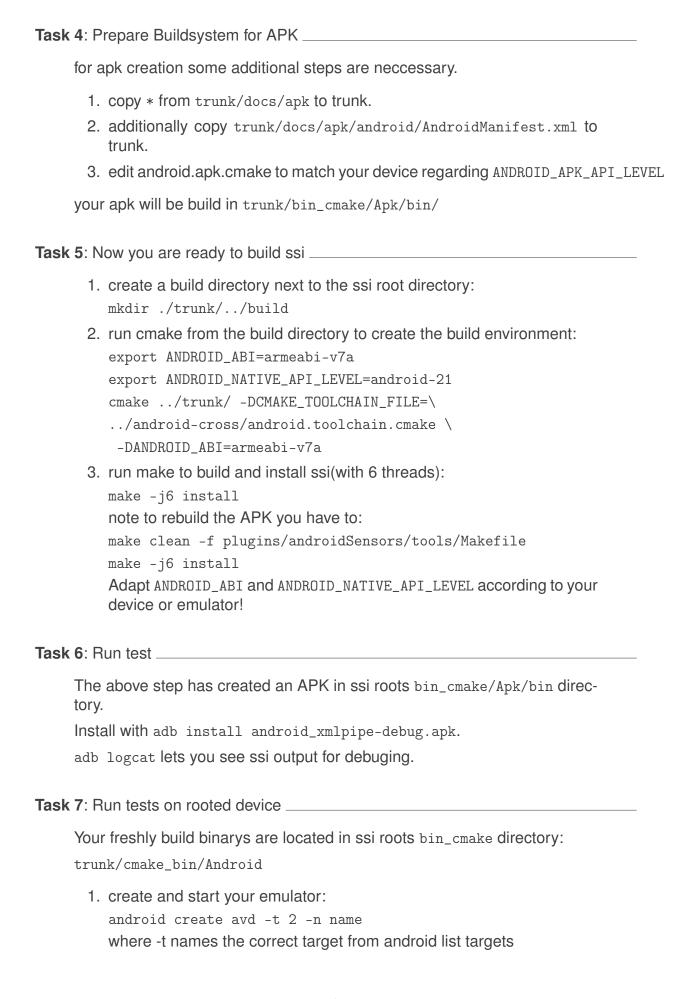
SSI can be found here:

- 1. from git https://hcm-lab.de/git/groups/ssi
- 2. from subersion https://hcm-lab.de/svn/Johannes/openssi/trunk/
- 3. from cleanport.tar.gz archive

Task 3: Prepare Buildsystem _____

- To build SSI for Android a crosscompilation toolchain needs to be setup
 - cd /to/where/android-ndk/build/tools/
 - ./make-standalone-toolchain.sh \
 - --toolchain=arm-linux-androideabi-4.9 --ndk-dir=/opt/android-ndk/ this line will generate an archive containing your stand alone toolchain /android-cmake-7e4cd91276af/toolchain/android.toolchain.cmake file is needed in trunk/../android-cross/

Or simply copy from doc/ssi-port-cmake/intro-android/android.toolchain.cmake



2. copy files to emulator:

```
adb -e push trunk/cmake_bin/Android /data/test
adb -e shell chmod 777 /data/test/*
adb -e shell
```

- 3. To test a simple pipeline: then run ./ssiandroid_test from data/test/. The correct working directory is needed, so the shared plugins can be found.
- 4. Apart from c++ code one can as well run xml pipelines via:

```
./xmlpipe test.pipeline
```

5. The same steps are valid for rooted Android devices. Use adb -d to connect to your device. Do not forget to set the export LD_LIBRARY_PATH=".:/system/lib/" or fixed to the SSI root path, so shared libraries can be found.

Task 8: Choo			
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To further develop SSI on linux QtCreator is recommended. Do not forget to install the GNU debugger GDB.

Setting up remode GDB follows

Have fun.