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# SSI on Linux, SS 2015

## 1. Introduction

SSI - Social Signal Iterpretation Framework has been portet to Linux with an Android-port 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 Linux

**Task 1**: Prepare the setup

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. Optionally for graphics output SDL2 development packages are needed as well as cairo development packages.
4. Portaudio development library is needed for audio.

**Task 2**: Get SSI

SSI can be found here:

1. from git `https://hcm-lab.de/git/groups/ssi`
2. from subversion `https://hcm-lab.de/svn/Johannes/openssi/trunk/`

**Task 3**: Now you are ready to build SSI

1. create a build directory next to the ssi root directory:
   `mkdir ./trunk/../build`
2. run cmake from the build directory to create the build environment:
   `cd build cmake ../trunk`

3. run make to build and install ssi(with 6 threads):
   `make -j6 install`

to disable GUI use `SET(SSI_GUI none)` instead of `SET(SSI_GUI SDL)` in `trunk/CMakeLists.txt`

**Task 4**: Run tests

Your freshly build binarys are located in ssi roots `bin_cmake` directory:

`trunk/cmake_bin/Linux`

1. To test an audio pipeline prepare and test your microphone. then run `./ssiemovoice_test` from `trunk/cmake_bin/Linux`. The correct working directory is needed, so the shared plugins can be found.
2. Apart from c++ code one can as well run xml pipelines via:
   `./xmlpipe test.pipeline`

**Task 5**: Choose IDE

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

Have fun.