Tutorial 0:
TASCARpro basics

Summary

What will I learn?

- How to create a scene

What can I use it for?

- Basis for all other tutorials

- The real-time version of TASCARpro is heavily build upon the jack audio connection kit (jack, `http://www.jackaudio.org`). Familiarize yourself with jack and its tools. We recommend to use the `patchage` tool for visualizing the signal graph.
- Open **user manual** (`file:///usr/share/doc/tascar/manual.pdf`). You can use the manual as a help throughout the workshop.
- Open directory with TASCARpro scenes: `/home/medi/tascar_scenes/` – you will find many examples of TASCARpro scenes as well as tons of sound samples there. The examples from the manual can be found in `/usr/share/tascar/examples`.
- Open text editor (e.g., `gedit`) and open the basic example `basic_example.tsc`. You can create your own copy, e.g. `Group1_Task1.tsc`. This can be your own scene-definition xml file.
- Start the sound server `jack` (e.g., via qjackctl).
- Load your scene into TASCARpro. Compare your scene definition file with what you see in the TASCARpro window. Try to identify objects in the scene, see how they are defined, what parameters do they have. You can always change/add/modify things in the scene and see what happens. Press the “reload” button.
- Visualize the audio signal flow chart with `patchage` and have a look at the audio ports. Try to recognize the ports corresponding to sources and receiver in the scene. Try to connect/disconnect ports.
- You can decide about the content of the scene yourself. Use chapter 3-5 from the **user manual** – you will find an introduction to how to create a scene there, look at other `.tsc` files in `tascar_scenes` directory. You can put any of these objects to your scene:
  - point sources (`<src_object ...><sound/></src_object>`) (5.3)
  - diffuse sources (`<diffuse ...>`) (5.4)
  - receiver (`<receiver .../>`) (5.5)

- reflectors (`<face .../>` or `<facegroup .../>`) (5.6)
- absorbing obstacles (`<obstacle .../>`) (5.7)

Your objects can also move or change orientation. You can assign any of the available sound samples to your sources. You can create different rooms and you can try out different receivers. Be creative and have fun!