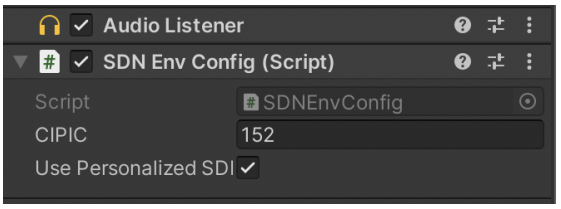
Scattering Delay Network Library

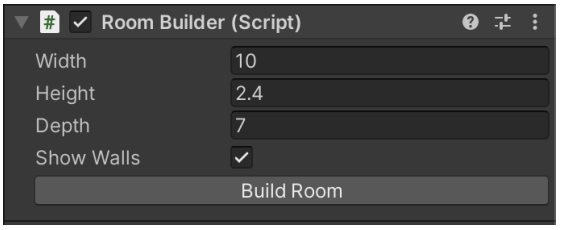
SampleScene, inside "Scenes" Folder, contains a working example of the library.

SDN Lib is composed of three main files:

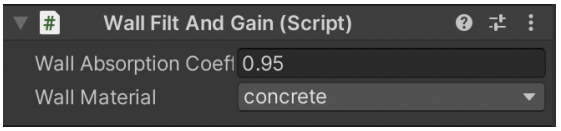
1.SDN EnvConfig: (inside MainCamera, next to *AudioListener*). It contains the startup code for the SDN library. In CIPIC you can specify the preferred HRTF function (more info in the following weeks). At runtime, it creates “bounds_DO_NOT_REMOVE” GameObjects that contains the complete mesh of the room.



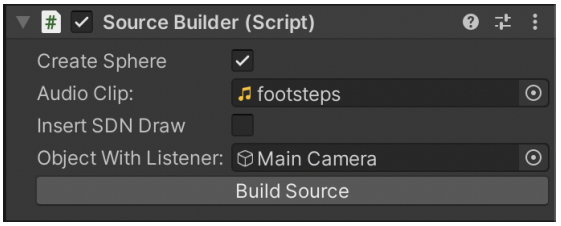
2.RoomBuilder: creates the Room space (width, height and depth of the room can be specified). Click build to DESTROY the former room and RECREATE it with the new dimensions. With "Show Wall" you can decide to show or hide wall meshes.



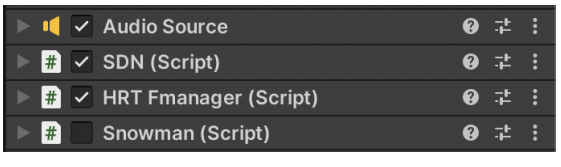
Inside each wall, “**WallFiltAndGain**” script permits to specify *Wall Absorption* coefficient and *Wall Material.*



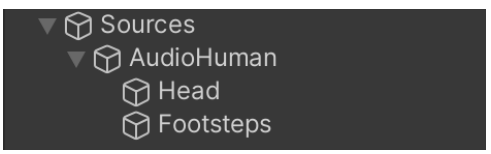
3.SourceBuilder (Inside Sources) can be used to create Audio Objects. You must specify the AudioClip (can be changed later), and the Object containing the AudioListener (Main Camera). Click “Build Source” to create the GameObject.



You can freely move the created object inside the scene and add/remove/change meshes. Audio Sources will be rendered based on their position inside the 3D space.
At Runtime, a source MUST be inside the room boundaries, not colliding with walls, floor or ceiling.



SampleScene also contains AudioHuman GameObject, which contains two other GameObject with samples for testing (can be removed):
-human voice/sphere: height 1.70m with a female voice sample



-footstep/cube: height 5cm with a footstep sample

Warning: This is a preliminary version. Properties not mentioned in the description, could be removed from following versions.

Warning(2): In this preliminary version, when the scene starts, you will hear the standard Unity audio. In order to correctly listen to spatialized audio rendering, you should move audio sources or listeners a little bit after starting the scene.