

Scaling

1. Load a model

As mentioned before, in this workshop we use gait2392 from the OpenSim model library (located in the OpenSim install folder): C:\OpenSim 3.3\Models\Gait2392_Simbody\gait2392_simbody.osim.

For scaling we will use a model including the marker set that you have complete during the previous tutorial. If you have not completed that task, you can find a model ready to be scaled at folder “3_Scaling”. The model is called **gait2392_fullMarkerSet.osim**.

2. Files

The xml setup file for scaling is located in the “3_Scaling” folder and called “**SetupScaling.xml**”. You can load this file in the OpenSim “Scale Model” tool and use this setup or create your own. The .trc file with static marker coordinates used for scaling in this workshop was prepared during the data import step (“1_Import_data\workshop_trc_files” folder) and is called “**transformed_Static.trc**”.

Details about the patient

- Age: 86 years old
- Height: 180 cm
- Weight: 75 kg
- Prosthesis on left side

NOTE: The scaled model used for the workshop with adjusted marker locations is called “**workshopGait2392-scaled.osim**”.

3. Best practices

- Remember that scaling is an iterative process, so you might have to try different settings before finding an optimal one. Please refer to the workshop slides for tips and tricks.
- In the messages window of OpenSim, root mean squared (RMS) marker error should be less than 1cm.
- In the messages window, maximum marker error should be less than 2cm.

4. Useful links

Please consult the official OpenSim documentation about scaling at the website:

<https://simtk-confluence.stanford.edu/display/OpenSim/Scaling>