Workflow to create OpenSim .trc and .mot files using MOtoNMS GUI

Hans Kainz

1. Folder organization, location of c3d files

   MyData\InputData\Subject_name\Session_name

   - Static.c3d
   - Walk_1.c3d
   - Walk_2.c3d
   - …

2. Create laboratory set up file (if not yet available) in notepad++
   - 1st axis: direction of motion
   - 2nd axis: vertical axis
   - 3rd axis: right hand rule
   + define type and orientation of force plates

3. Create markerset set up file (if not available) in notepad++

4. Create EMG protocol set up file (if not available) in notepad++

5. Create acquisistion.xml file
   - Set MATLAB path to src\AcquisitionInterface folder → Run mainAcquisitionInterface.m
   - Select folder which contains c3d files

6. Create mat files
   - Set MATLAB path to src\C3D2MAT_btk folder → Run C3D2MAT.m
   - Select folder which contains c3d files

7. Create EMG label file using notepad++
   (SetupFiles\DataProcessing\EMGsLabels)

8. Create OpenSim files
   Dynamic Files
   - Set MATLAB path to src\DataProcessing folder → Run ElaborationInterface.m
   - Select folder which contains c3d files

   Static Files
   - Set MATLAB path to src\StaticElaboration folder → Run StaticInterface.m
   - Select static c3d file