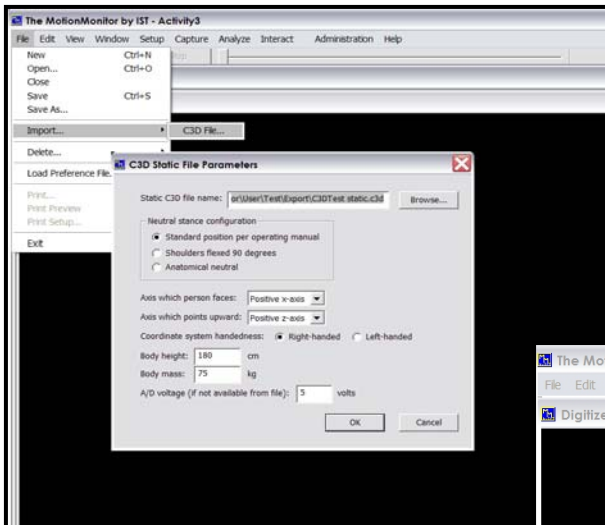


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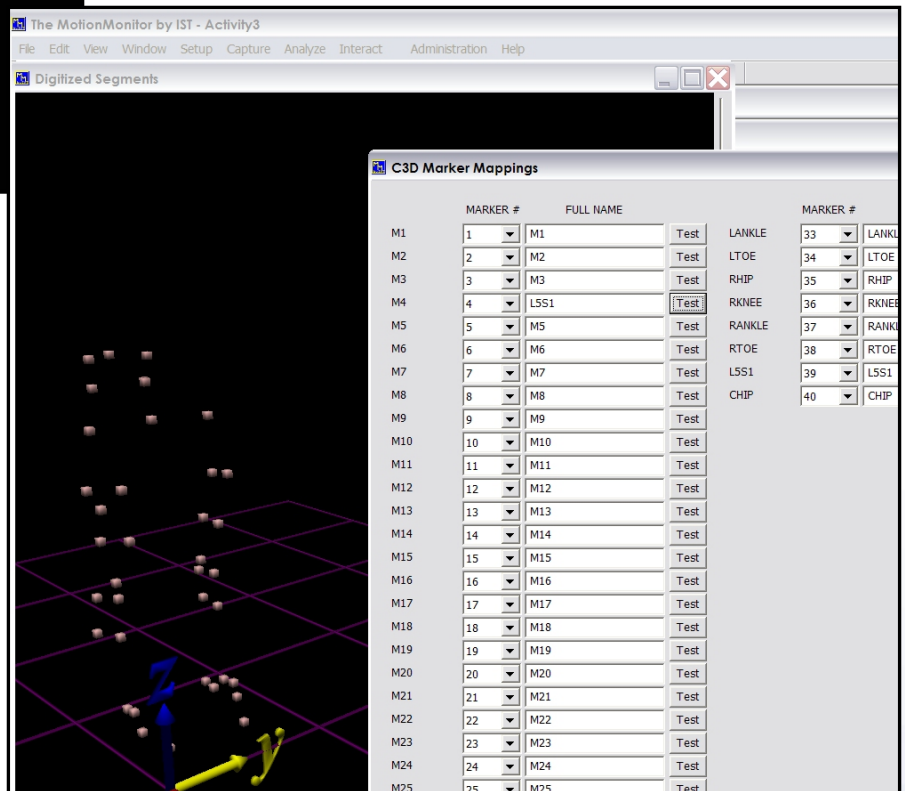
The MotionMonitor™ with Support for C3D File Format

- ❑ Import data captured by other systems including Motion Analysis Corp, Qualysis, Optotrak, Vicon, Phoenix, CodaMotion, Ascension "Flock of Birds" or Polhemus Liberty.
- ❑ Use established marker sets such as Helen Hayes & Cleveland Clinic. Or create unique 6 degree of freedom rigid bodies. Combinations of marker sets and rigid bodies can also be used.
- ❑ Generate proportioned skeletal models from marker data, compute joint centers and define local coordinate systems in 4 easy steps
- ❑ From drop-down menu items, select all standard kinematic data types including joint moments and forces. Use formulas to output any additional user-defined variable.
- ❑ Apply any standard MotionMonitor analysis functions such as smoothing filters and data reduction.



File|Import|C3D begins the process with selection of the subject's static file. This static file is used to define segment endpoints, joint centers and local coordinate systems. The dialog permits specification of parameters such as the neutral posture assumed by the subject during the static trial, basic anthropometric data such as height and weight, as well as the layout of the world coordinate axes.

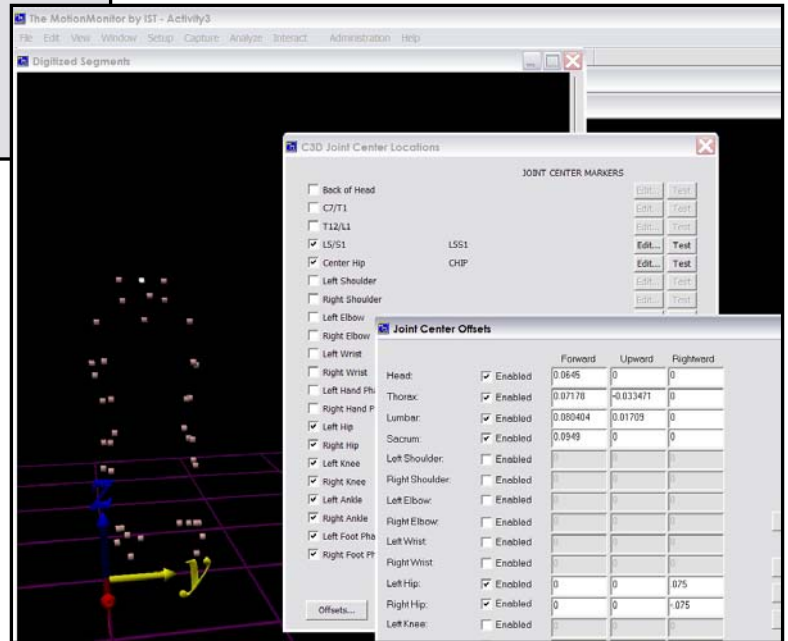
The markers of the static C3D file are then displayed in a digitizing window while a mapping of marker names and numbers are displayed in an editing dialog. Markers can be located in the digitizing window by pressing the "Test" button. Errors in the C3D file can be corrected by editing the file name and/or marker number. If the C3D file is correct simply click OK to proceed to the next step



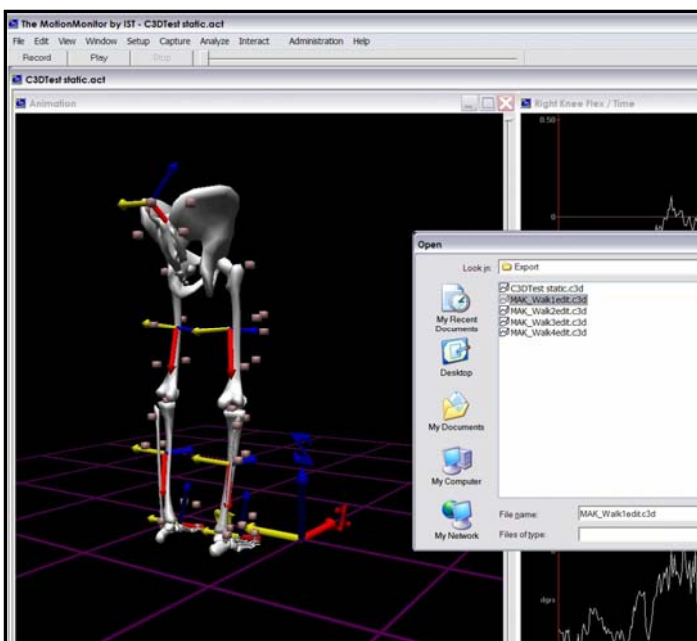
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In this step markers are assigned to each body segment and rigid, 6DOF sensors are defined. The edit button is used to select markers for each body segment. The “Test” button highlights the current selection in the digitizing window. If the C3D file conforms to the current model definition, simply click the OK button to proceed to the next step.



Joint Centers are defined in this step. The “Edit” button is used to select individual or multiple markers that define the location of the joint center. Offsets from the specified markers are defined by clicking the “Offset” button. In this image the “Test” button highlights the L5/S1 marker and the offset table specifies the offset from surface marker to the center of the vertebral body.



Local coordinate systems for each segment are assigned by default. Alternatively, markers can be used to define anatomically based coordinate systems in a manner similar to the preceding steps.

At this step, the subject is well defined and individual trial data can be imported in a “batch” mode. Simply select all of the trials from the file|open dialog that appears at completion of the static trial definition.

The model definition can be saved as a preference file. Once defined in a preference file, multiple subjects can be imported by simply selecting their static file. There is no need to redefine the model for each subject.