<u>The MotionMonitor xGen FAQ:</u> <u>What is The MotionMonitor xGen software directory</u> <u>structure? Where are the files located?</u>

Before using Windows Explorer to browse to *The MotionMonitor*[™] xGen directories, certain actions may need to be performed to view hidden files and folders.

In Windows 7, from Windows Explorer go to *Organize* and select Folder and search options. In Windows 10/Windows 11 you'll find this option under the *View Tab*. Select Options from the right of the icon bar, and select "Show hidden files, folders and drives" for Hidden files and folders. Uncheck "Hide protected operating system files (Recommended)".

Windows 7



Windows 10/Windows 11



MotionMonitor™ xGen directories

The MotionMonitor[™] xGen application runs from the "C:\Program Files\Innsport\TMM_xGen" directory.

Any files created by the software, including activity files, analysis files, workspaces, and exported data are located within the user and shared folders in "C:\ProgramData\Innsport\TMM_xGen\MotionMonitor". These file types will now be discussed.

The MotionMonitor™ xGen File Types

Activities – Activity files contain recorded data and any settings that were saved with the recorded data. Their extension type is *.iac. Other file types that are commonly associated with an Activity are *.mp4 or *.mkv files when video is captured. Previous versions of *The MotionMonitor* xGen may include *.wmv files for video.

Analyses – Analysis files contain analysis settings which can be saved from or loaded into Workspaces and Activities. In general, Analysis files contain all the settings from the Components window Analysis tab as well as the layout and organization of windows. A more detailed description of what is contained in an Analyses file will be described at the end of this guide. Their extension type is *.ian.

Anthropometric Data – Anthropometric data files contain the anthropometric settings for each of the Subject's segments. Their extension type is *.apm. Users can create, modify, and save their own anthropometric settings. The software provides preconfigured buttons for loading Dempster and Zatsiorsky anthropometric settings.

C3D – C3D files can be generated by **The MotionMonitor**[™] xGen or other 3rd party applications. They contain data that can be shared between systems and software from different manufacturers. Their extension type is *.c3d.

Component Sets – Component sets can contain any customized subset of components from a Workspace, Analysis, or Activity. They allow for data to be exported from and loaded into Workspaces and Activities without loading an entire Workspace or Analysis. Their extension type is *.ics.

Export – Exported data are generated through a Report in the Report node in the Analysis tab from within a Workspace or Activity. Their extension type is *.txt and is a tab delimited file. Generating a Report from within a Workspace provides the option for performing a batch export, while generating the Report from within an Activity will only export data from that Activity.

Images – Images are used for icons in toolbars. These files are not generated by **The MotionMonitor**[™] xGen. Their extension type is *.png. Default images used by **The MotionMonitor**[™] xGen are located in the C:\Program Files\Innsport\TMM_xGen\Standard Images directory.

MetalMaps – Metal maps are mappings that correct readings from magnetic trackers that may have been distorted by environmental factors. Their extension type is *.txt.

Models – Models are 3D geometric files that can be displayed in the Animation window. These files are not generated by **The MotionMonitor**[™] xGen. Their file type is *.obj. Another file type that can be commonly associated with Models are *.mtl or *.jpg files. These files are also not generated by **The MotionMonitor**[™] xGen. The Material Library File (.mtl) or *.jpg can be applied to a Model when

enabled in the Musculoskeletal Animation to display color, texture, and reflection properties on the surface of the *.obj file. Default models used by *The MotionMonitor*[™] xGen are located in the C:\Program Files\Innsport\TMM_xGen\Standard Models directory.

Muscle Models – Muscle Model files contain the parameters used in defining a muscle modeling optimization. Their extension types are *.imm. Also supported is the ability to open *.osim files.

Screen Captures – Screen capture files can be images of the desktop or selected areas of **The MotionMonitor** xGen application captured as *.png images or session captures as *.mp4 videos.

Sounds – Sounds are files that contain audio data that can be played through *The MotionMonitor*[™] xGen. These files are not generated by *The MotionMonitor*[™] xGen. Their file types can be *.mp3 or *.wav.

Workspaces – Workspaces contain all the settings from the Live Workspace, including Setup and Analysis Components as well as the layout and organization of windows. Their file type is *.iws.

The MotionMonitor™ xGen Analysis Files

In addition to all the settings from the Components window Analysis tab and layout of windows, the Analysis file also contains the following settings:

- Filter and data repair settings from hardware devices in the Components window Setup tab.

Setup Analysis World Axes Hardware McCDAQ1 Channel0 Channel1 Channel2 Repair: Max interval: 1 Butterworth filter: Freq: 20 Chebyshev filter: Freq: 20 FFT lowpass filter: Freq: 0 Rolloff: 2	2
Channel0 Channel1 Channel2 Repair: Max interval: 1 Butterworth filter: Freq: 20 Chebyshev filter: Freq: 20 FFT lowpass filter: Freq: 20 Rolloff: 2	^
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FFT highpass filter: Freq: 0 Rolloff: 2	
GAdd Notch Filter Apply to All	

- Subject Setup settings for the 'Maximum foot-to-GRF distance" and "Use spline fit to forces and moments" selections.

Components	×
🖌 Setup 🛛 🔤 Analysis	
 > ☆ Hardware ✓ â Subjects > ã Subject1 ☆ Objects 	*
Subject name: Subject1	
Body mass: Use formula v 75	kg
Body height: Use formula 1.75	m
Import from video analysis Settings Neutral stance: Arms down, thumbs forward Aassume neutral stance while supine Aassume nigid bodies: to be aligned with segment axes Longitudinal axis of rigid bodies: Positive Y-axis Anterior axis of rigid bodies: Positive Y-axis Assume nigid bodies: be orientation-only Static fixation joint: L5/S1	
Stylus to use: cnone> Maximum foot-to-GRF distance: 10	cm
Advanced Enable muscle modeling Use spline fit to forces and moments Spline interval: 10	msec
Calibrate	

- Axis selections for Subject Segments (Longitudinal and Anterior axis directions) and Additional Axis Systems (Primary and Secondary axis directions and Longitudinal and Anterior axis directions).

Components	× Components
🖌 Setup 🛛 Analysis	🖌 Setup 🛛 Analysis
 ✓ 2 Subjects ✓ 2 Subject1 ✓ 2 Segments > ✓ 2 Head > ✓ 2 Thorax > ✓ 2 Lumbar > ✓ 2 Sacrum 	✓ ✓ ✓ Sacrum ✓ Landmarks ✓ ✓ Axis Systems ✓ ✓ ▲ Left Scapula ✓ ✓ Left Upper Arm ✓ ✓ Left Upper Arm ✓ ✓ ✓ ✓
Rigid body: Use existing Existing rigid body: Use drop-lists Longitudinal axis: Positive X-axis Anterior axis: Positive Z-axis Origin: Proximal joint F Show Advanced	Axis system name: AxisSystem1 Rigid body: Use existing Existing rigid body: Use drop-lists Primary axis: Positive X-axis Secondary axis: Positive Y-axis Longitudinal axis (for Grood-Suntay only): Positive X-axis Anterior axis (for Grood-Suntay only): Positive Z-axis

- Settings for the Data Reduction Parameters dialog in the Analyze menu.

Analysis file: MotionMor	nitor/User/Sample So	cholastic Files/Analyses/G	ait Walk Data Reduction.ian
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Start event: when	Use formula 🛛 🗸	DataReductionBegin	becomes true for the first ti
Stop event: when	Use formula 🛛 🗸	DataReductionEnd	becomes true for the last ti
Event detection interval	: 10		m
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Number of points to sam	ple: 100		
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- Settings for the Extract Trials Parameters dialog in the Analyze menu.

🗱 Trial Extraction Parameters —		×
Analysis file: Monitor/User/Sample Scholastic Files/Analyses/Gait Walk Data Redu	ction.ian	P
Start event: each time Use drop-lists \checkmark <no selection=""> \checkmark becomes true</no>		
\checkmark Stop event: when Use drop-lists \checkmark <no selection=""> \checkmark becomes true</no>	after star	t event
Event detection interval: 10		msec
Indude video		
OK	Can	cel

- Settings for the Playback Rate dialog in the Play menu within an Activity.



- Settings for the Default Display Time dialog in the Play menu within an Activity.

🕸 Edit Default Display	Time			Х
Default display time:	Default display time: Use formula 🗸 InitialTime		③ Set To Now	
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