Getting Started

Motion Version 2.2

www.motionnode.com
www.motionshadow.com

1   System Requirements

- PC with Wi-Fi or USB port

- Microsoft Windows 8, 7, Vista, XP, Mac OS 10.6+, or Linux

- Web browser with Javascript enabled (Internet Explorer, Firefox, Chrome, Opera)

- CD-ROM drive

- Internet connection recommended for set up

2   Quick Start

Step 1: Install the Software

Insert the Motion CD-ROM into your computer and install the Motion software. Run the installer named "Motion.msi" and follow the step-by-step instructions. The installer adds all of the necessary drivers and software to your system.

Mac Users: Mount the "Motion.dmg" disk image from the Mac folder on the Motion CD-ROM. Open the "Install.pdf" manual for complete instructions.

Linux Users: Extract the "Motion_x86.tar.gz" archive from the Linux folder to your local disk. Refer to the "INSTALL.txt" file on the Motion CD-ROM for more details.

32-bit Users: The Windows and Linux installers have separate packages for 32-bit operating systems. The Mac installer is Universal.

Step 2: Connect the MotionNode

Connect the MotionNode USB device to your computer using the included cable. The first time you plug in the MotionNode, Windows automatically installs drivers for the device. A small "Found New Hardware" box may pop up indicating that Windows is installing the device.

If you are using the MotionNode Bus wireless device simply plug in its battery. The first time you connect to the MotionNode Bus you will need to manually join its network named `Bus` with the network key `2062012708`. Refer to the **Wireless Network** manual for more details.

Step 3: Run the Motion User Interface

At the heart of the Motion software system is a Windows service. The service starts every time you boot your Windows PC and runs in the background. The Motion Service is responsible for reading data streams from MotionNode devices, filtering the data, and logging the data to disk. One way to control the Motion Service is through the web browser based user interface.

To start the Motion user interface open the Windows Start Menu, go to the Motion program group, and click on the Motion User Interface shortcut. This opens a browser window with the web address of the Motion Service, **http://127.0.0.1:32080/**. You can also manually open this URL in any web browser with Javascript support.

The first time you run the Motion user interface it may prompt you for some preferences. Double-click on the preference field to edit it. Hit enter, tab, or click outside of the field to validate the value. After all fields have valid values, save the current preferences to continue. Choose the **File** > **Save** command to save the preferences to a file.

Mac Users: The Motion Service is configured to run as a daemon. Double click the Motion application bundle to launch the service and launch the **User Interface**.

Linux Users: The Motion Service is configured to run as a Linux daemon. Double click the application, launch it from a console, or add it to your startup scripts to run the service.

Step 4: Configure the MotionNode

The Motion Service operates on a set of devices called the configuration. To record data from a MotionNode device it must first be a member of the current configuration set. The current configuration is displayed as the main table in the user interface.

The MotionNode may already be in the current configuration. If not, you will need to add it manually. Run the **Node** > **Scan** command to insert all available devices into the configuration set. You are now ready to record data from your MotionNode.

Step 5: Record a Take

The Motion Service organizes a session of recorded data into an entity called a take. A take consists of the take definition file, the associated configuration,

and the binary data stream files from each configured MotionNode. Takes are stored in the user data folder.

To record a take run the **Node > Start Take** command. This command may take a few seconds because it does not return until all configured MotionNode devices are streaming data to disk. When the Motion Service is recording data the message "Take in progress..." will appear in the take status section of the user interface.

After recording enough data run the **Node > Stop Take** command. This will stop recording data and save the take definition file. At this point the take is finished and is no longer writable by the Motion Service. The current take is available for export to external file formats.

The current take is linked to from the take status section of the user interface. Data export operates on the current take, whether it was just recorded or loaded from a take definition file.

Step 6: Export a Take

The Motion Service provides export to the industry standard file formats Autodesk FBX and COLLADA. This allows for integration with external Digital Content Creation (DCC) applications such as Autodesk Maya, 3ds Max, MotionBuilder, and Softimage.

Run the **File > Export** command to export the current take. A dialog box will prompt you to enter the name of the output file. The output file type is determined by the file extension. For example, "take.fbx" is an FBX file and "take.dae" is a COLLADA file. The output file is saved in the user data folder. The MotionNode system does not allow you to write files that are not in the user data folder.

The Motion Service user data folder contains all of your take and exported data. The default location of this folder varies by platform.

- **Windows Vista, 7, 8** C:\Users*username*\Documents\Motion

- **Windows XP**
  C:\Documents and Settings*username*\My Documents\Motion

- **Mac** /Users/*username*/Motion

- **Linux** /home/*username*/Motion

- **MotionNode Bus** \\Bus\data (Network Share)