Motive - the basics

13.11.2026 09:19:58

Печать статьи FAQ

Категория:	Polygon::Administrators (EN)	**Голоса:**	0
Состояние:	общедоступное (всем)	**Результат:**	0.00 %
Язык:	en	**Последнее обновление:**	11:21:27, Втр 16 Июл, 2019 г.

Симптомы (общедоступное)

Проблема (общедоступное)

Решение (общедоступное)

Motive is a software used for tracking movement of players on the court.

This section will provide the basic knowledge that you need to run the game for guests.

If you wish, you can visit the official website of the developer (there is only an English version) and get more information there:

[1]optitrack.com - developer website

[2]v110.wiki.optitrack.com - detailed English documentation on all funteam Motive

When you open Motive, you will see one of the modes (depending on which one was last opened before closing the program), either Calibrate Layout or Create Layout.

Calibrate Layout Mode

Will be used by you to calibrate cameras.

Calibration is required to set the exact relative position of the cameras and to set the floor level.

As soon as at least two cameras recognize one marker on the site, a dot appears in the Perspective View window.

By the way:
Passive markers - reflective balls, it looks in Motive in orange color.
Active markers - light source, looks like white balls in Motive.

Thus, if the calibration is poor (the relative position of the cameras is not set correctly), there will be problems: either the marker will not be detected, or several will be detected, or it will be found elsewhere.

Calibration of cameras is extremely sensitive, millimeter shift of the camera, vibration of the platform and even thermal expansion can disturb it.

That is why every working day begins with warming up the cameras and careful calibration.

In the Calibrate Layout mode you will see the following screen:

#1: switch between modes. You are only interested in two:

Calibrate layout

Create layout

#2: Devices. The Tracking list displays the names of all tracking cameras, their settings and ways to display the image. The only thing you need to change here is to switch between the Toggle tracking and Reference Mode modes with the button to the right of the name during calibration. Depending on the mode it is either a target or a camera

#3: Camera Calibration. You will use most of the features in this window to calibrate.

#4: Perspective View. Perspective view. The main manipulations with it are made in the Create Layout mode.
The translucent blue cube is the boundary of the field (Bound).

#5: Camera Preview. The window displays images in one of two modes (toggles in the Devices window:
- Toggle Tracking - Tracking markers. Black image with signed marker points.
- Reference Mode - Reference mode. Physical black and white image from the camera.

Double click on the name of the camera in the Tracking list expands the image from the selected camera to the entire Camera Preview window. Double-clicking on the title of the Tracking list returns the display of all cameras at the same time.

Create Layout Mode
In this mode player skeletons, HMD (virtual reality helmets) and weapons are created. That is, most of the time you will spend here.

The screen looks like this:

#1 switch between modes. The functionality is the same in all modes.

#2 Assets. List of created objects. These include:
- Rigid Body - stable marker configurations . Any markers with the same relative position can be entered into the program as a Rigid Body. The game is HMD and weapons.
- Skeleton - the skeleton of the player. People wearing gear with a specific arrangement of tokens. The program interpreterpath them in the game skeleton.

A check mark next to an object indicates whether it is enabled. If there are checkboxes, the program finds this configuration of markers on the site and displays it as an object.

For example. You create a skeleton of the player (see”Skeletons”). When the tick is put - you see in the Perspective View the model of the person. When there is no check mark - you see a pile of markers.

Data on the off object is not transmitted to the game.

#3 Create and edit objects panel. At the top you can switch between the two tabs you are interested in: Skeleton and Rigid Body.

#4 Perspective View. Perspective view is actively used to create objects: in it you have to select markers. To work with the window:
- Rotation: move the mouse by holding down the right key
- Move: move the mouse by holding the wheel
- Zoom in/out: turn the mouse wheel
- Highlight markers:hold down the left mouse button and circle the desired markers
- Adding markers to the selection: hold down Ctrl and the left mouse button to select new markers
- Deselect all markers: left-click on the free space in the window
- Cancel selection of specific markers: hold down Ctrl and the left mouse button to highlight the unwanted tokens

Version Motive 2.1.1

In Motive version 2.1.1 were made both visual and functional changes which will be described below.

Functional changes that could affect the operation of the site:

Improved Motive profiles - motive profile now has an extension .MOTIVE (*.motive) and automatically binds (associated with) to Motive.

File icons - icons now vary depending on the file type.

Interface

Camera framerate

This speed sets the frame rate that controls all cameras. To change the frame rate just click on the drop-down list and set the desired frequency.

Multiplier setting.

This motive function reduces the amount of recorded and output data.

Device group

By clicking the down arrow button below the camera frame rate, you can open a list of grouped devices. To create new groups, you can select multiple devices listed in this panel, right-click to bring up the context menu, and create a new group. Grouping cameras makes it easier to manage multiple devices in the system.

Tracking

The tracking section lists all motion capture cameras connected to the system. Here you can set up and control the cameras. You can right-click on the camera settings headers to show/hide certain camera settings, and drag them to reorder. If multiple cameras are selected, making changes to the settings will change them for all selected cameras. You can also group cameras to quickly select and change settings. Customizable settings include:

- Framerate multiplier
- Camera video mode
- Exposure length (microseconds)
- IR LED ring on/off
- Real-time reconstruction contribution
- Imager Gain
- IR Filter on/off

[1] http://optitrack.com
[2] http://v110.wiki.optitrack.com