**Motion Capture Protocol:**

1. Open up Motive (current version 1.6 beta), make sure all the cameras are online. If not, reconnect the USB cables on the undetected cameras.
2. Calibrate the position of the cameras by wanding or simply load the previous calibration file (\*.CAL). Make sure the cameras are in the right positions in the virtual space.
3. Go to Layout-> Capture to switch to recording mode, you may create a marker set depending on your marker configuration, remember to draw (or take a picture of) the configuration.
4. Make a recording (a “Take”), the content of the take depends on your experiment.
5. Right click on the take and re-do “Trajectorize” (VERY IMPORTANT to v1.6 beta), this is fix the issue where the markers switches places during the recording.
6. If Step 5 yields more traces than the actual number of markers, then we need to merge the traces for the same marker together manually.
7. Label the default markers with the marker labels in the marker set you create in Step 3.
8. If you need to use the recording in MATLAB for postprocessing, right click on the take and select “Export Tracking Data”, export the take into a “\*.csv” file, and use “Read\_Data.m” to get the trajectory information for all markers.