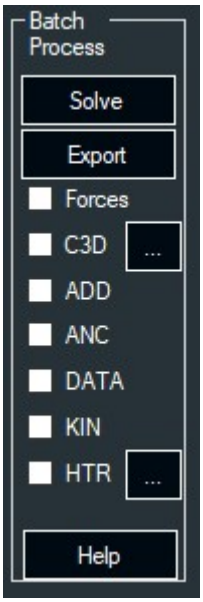
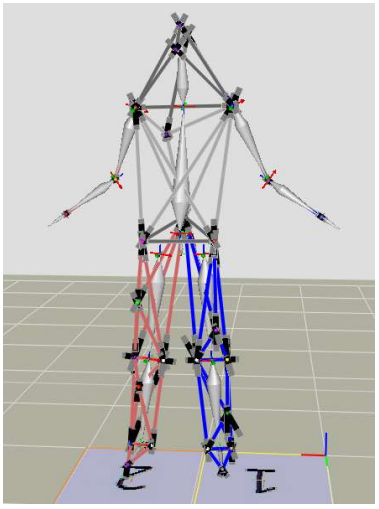
**Cortex 10: Key Features and Updates**

## Batch Solve and Export Based on Capture Status




Recent versions of Cortex included new and improved ways of labeling capture status using the Quick Files interface to make large datasets more manageable and easier to track post process progress. Cortex 10 has taken this one step further by implementing a selectable solve and export option based on assigned capture status. Mark a capture as “Batch Process” and choose Solve to batch solve the skeleton information. Follow the same process choosing Export and the file type you wish to create to rapidly export a subset of data. If you prefer a different status or file types not listed in the Quick Files interface, Cortex 10 also includes an example batch script for exporting only captures of a certain status. Modify this script to export the file type of your choosing with the status you prefer.

## Golden Template Markersets and Generation Tools

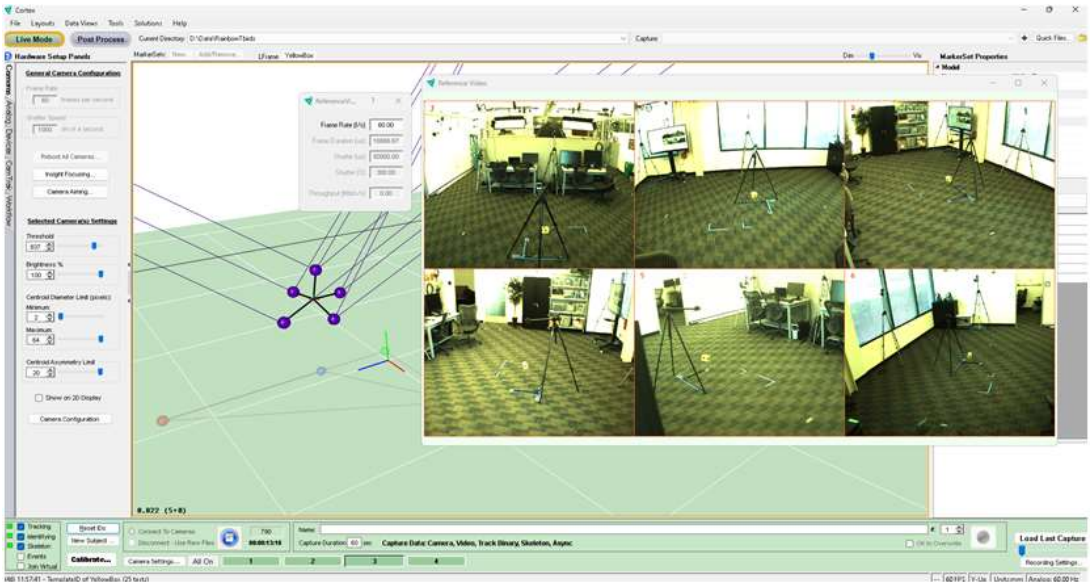


Custom markerset template building for robust identification has been a tedious, error prone process in Cortex, until now. With the Cortex 10’s automated template generation tools, we have eliminated the manual process of iteratively scaling and extending templates on multiple datasets. The template generation tool’s smart features help you easily create a template of your own to use for real-time identification. Use our built-in temples or generate your own to vastly reduce time spent manually post processing data. The automated process is built into a Global Sky Script which uses pre-identified data to build and improve upon your existing markerset, making it smarter with each iteration. All you need is a set of data, markers, and links – the script will do the rest.

In addition to building a robust template in just one step, we have generating robust, “golden” templates for four commonly used markersets, available in the System Objects folder. Out-of-the-box these markersets can be scaled to subjects in Live Mode for real-time identification.  A setup guide and sample data is available on our Customer Support SharePoint, access to which can be obtained by contacting support.

## Rainbow Cameras

Cortex 10 includes compatibility with our latest camera hardware, the Rainbow camera. The Rainbow is a color reference video camera which can record full HD at over 80 FPS or 1.1 Mpxls above 100 FPS all while being precision synchronized to motion capture data.  Record with up to eight Rainbow cameras simultaneously for a reference view from all angles of the volume.  In addition, any or all Rainbow cameras can be calibrated to the mocap environment for 3D animation overlay.

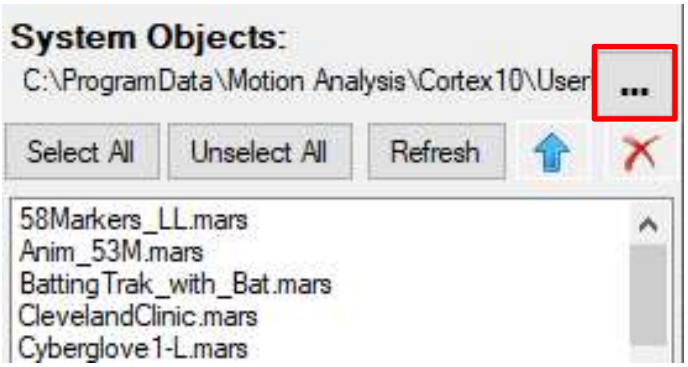


## Trimming Captures by Markerset

Previous releases of Cortex involved options for trimming captures while removing or including certain markerset files. To make this process even easier, Cortex 10 includes a script in the Global Sky Scripts for trimming out captures – one for each markerset and prop associate with a capture. This can help simplify post processing when trials contain several markersets, convoluting marker trajectories and identities.

## Editable System Objects for Markerset Management

The Cortex System Objects folder has long been a location for ready to use markersets available to any directory. However, historically this location is local to the Cortex machine and cannot be edited. To improve the capabilities for cross collaboration of Cortex users at a given site, Cortex 10 features an option for editing the System Objects location. This allows users to choose a shared location for markerset storage making them accessible to others. In addition, streamline organization of markersets between projects by swapping out the System Objects location depending on the project of focus.




## Manus Glove Hand Tracking Integration

Manus Meta gloves have been seamlessly integrated into Cortex 10 to enhance detailed finger tracking capabilities. This integration combines the robust marker-based motion capture supplied by Cortex with high fidelity finger mocap offered by Manus. Data is entirely combined within Cortex to supply just one channel for collection and transfer of data to any of our animation or game engine plugins. Connection and setup are easily arranged, with glove segment mapping stored in the markerset file for grab-and-go access on future collections. Contact the Support Team for a full setup guide for the Manus Glove digital integration with Cortex 10.

## Encoder – LDC7

Cortex 10 introduces LDC7 encoder compatibility for broadcast users. This brings our compatible encoder options into the present with real-time encoder settings, compatibility with the SDK data stream, and all features previously offered with CamTrak.

| | |
|---|---|
| Name | COMEncoder 1 |
| ComPort | COM3 |
| Baud | 38400 |
| StopBits | 1 |
| Parity | Odd |
| Protocol | LDC7 |
| ZoomsPe | 1 |
| PollBoth | 0 |
| FramesTc | 1 |

## Additional Updates and Features

- Store system time using System Clock timecode.
- Fusion loader compatibility in Post Process
- PitchTrak report output bug resolved on left vs. right-handed pitching graphs and added GRF and Foot Orientation plots to export.
- Added ADD data support to C3D export
- Improvements to Workflows search menu and Virtual Join function
- Dark Mode readability improvements
- Mass Model gender setting is now accessible in New Subject
- Resolved issue with applying offsets using the WAV offset tool
- Resolved Custom Calibration Settings analog rate adjustment after calibration