

Release note for 2.3.0 BETA

Notes

Art-Net inputs now start at 0 instead of 1. sACN remains starting at 1.

The Undo Stack has now been limited to only allow the last 10 steps as selectable at a time. All steps are still viewable, and all steps are still undo/redo-able (in batches of 10).

Apply Options have been removed in this version, but 'Send Tracking Information to WYSIWYG' has been added to System Configuration, BTWYG in case BTWYG is not intended to be used.

Trackable Setting's Orientation toggle has been replaced with a new setting in System Configuration, Beacons called 'Process Classic Beacon Orientation'.

Motive Dongle Date Requirement:

July 26th 2016

Major changes:

- Dynamic Zones
- System Status Widget
- Output Latency Testing Tool

Known issues:

- GUI can crash if a Show Export is performed with missing fixtures
- Redo doesn't always account for Book selection
- Opening a file saved with an Art-Net input results in the DMX universe for the merge channel being offset by 1

Firmware Package Date:

August 2017

Build Numbers:

BlackTrax: 2.3.0.10659

BTWYG: 2.39.58.209

Motive: 1.10.1.3.28991

Server Version Requirement:

July 2016

Compatible with RTTrP Versions:

6

1.8.3

1.8.7

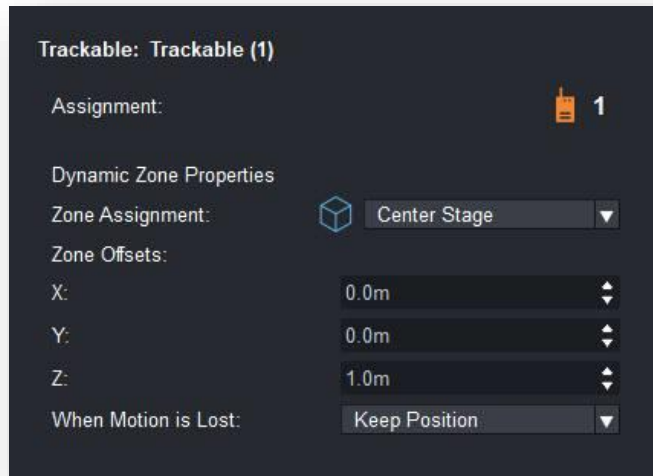
Features and Fixes:

Bug

- *Fixed: Deleting a Soft or Rigid Body then going to Beacon Patch before Applying Changes would crash the Main GUI*
- *Fixed: Main GUI could crash if you try to import a fixture ID that doesn't exist in the file*
- *Fixed: Discarding Changes in combination with Book Mode changes could crash the Main GUI*
- *Fixed: Discarding Changes while using Multi Book Mode could cause unexpected behavior including Books being overwritten by other Books*
- *Fixed: Undo wouldn't account for Book selection, resulting in actions being undone in the incorrect Book*
- *Fixed: Spot and patch updates wouldn't correctly reflect in Follower when an update came over from BTWYG until Follower was rebooted*
- *Fixed: Couldn't assign any Fixtures to a Chapter if one of the Fixtures selected was already assigned to that Trackable*
- *Fixed: Undo Stack could, in rare cases, create Chapters when undoing and redoing steps very quickly*
- *Fixed: Undoing an action wouldn't update apply changes to Changes:Blind*
- *Fixed: Change:Blind wasn't triggered when creating Fixture Groups from Fixture Calibration View*
- *Fixed: Beacon Assignment was being exported/imported with Fixture Calibration .btcal files, thus at import the Assigned Beacon would change to the Beacon the Fixture was assigned to at the time of export*
- *Fixed: When first importing fixtures from BTWYG, Fixture Calibration's centre table wouldn't sort the fixtures by name correctly*
- *Fixed: Resetting All Frames would not reset Rigid Bodies' orientation offsets*
- *Fixed: When deselecting Auto Scroll in Running Chapters/Books, the button would still appear to be moused over*
- *Fixed: BlackTrax would not install on Windows 7 machines*

New Feature

- *Dynamic Zones*



- *Assign an existing Zone (drawn from BTWYG and sent over to BT) to a Trackable to become a Dynamic Zone*
- *In Trackable Settings, select a Zone from the drop-down menu*
 - *The shape of the zone will appear next to the drop-down*
- *Once a Zone becomes Dynamic (determined by the new Dynamic Column in the Zone tab in the Library widget), interactions with that Zone are based on the motion of the Trackable instead of BTWYG's drawn position*
- *If a Rigid Body is patched to a Trackable that has a Dynamic Zone assigned, the Rigid Body's orientation is then passed along to the Zone as well*
- *By default, the Dynamic Zone is centred around the Trackable, but there are X, Y, and Z offsets to move the Dynamic Zone relative to the Trackable's centroid and orientation*
- *There is a parameter that determines what happens to the Zone when motion is lost for that Trackable*
 - *Keep Position: Use the last known position of the Zone and continue interactions based on that position*
 - *Assume Inside: Any Fixtures following that Zone assumes the Trackable has moved inside the Zone and thus react according to their Zone Settings*
 - *Example: Fixture is set to Douse Out Inside Zone, and Assume Inside is selected; when Zone motion is lost, the Fixture would douse out until motion for the Zone is regained*
 - *Assume Outside: Any Fixtures following that Zone assumes the Trackable has moved outside of the Zone and thus react according to their Zone Settings*
 - *Example: Fixture is set to Douse Out Inside Zone and Assume Outside is selected; when Zone motion is lost,*

the Fixture would return to console control until motion for the Zone is regained

- **New System Status Widget**

The screenshot displays a dark-themed GUI widget with four sections:

- Tracker**: A table with 4 columns: Connection, Status, Packets, and Data Sending. It lists Motive, Router, and Tracking Adapter Output, all with a status of 'Connected' and 'Data Sending' set to 'Yes'.
- Follower**: A table with 5 columns: Connection, Status, Packets, Data Sending, and Note. It lists Motion, DMX In, BTWYG, and RTTrPL. Motion is 'Connected' with 30103 packets and 'Data Sending' set to 'Yes'. DMX In, BTWYG, and RTTrPL are 'Connected' with 0 packets and 'Data Sending' set to 'No'. DMX In has a 'Note' of 'sACN'. RTTrPL is 'Disconnected' with 0 packets and 'Data Sending' set to 'No'.
- Tracking Adapter (Media)**: A table with 4 columns: Connection, Status, Packets, and Data Sending. It lists Tracker Input and RTTrPM, both with a status of 'Connected' and 'Data Sending' set to 'Yes'.
- Output Latency**: A table with 2 columns: Name and Latency (ms). It lists Media with a latency of 1.2302.

- *Based on feedback, a new troubleshooting tool has been added to help analyze and determine system performance and network status*
- *Press ALT+S to open the widget at any point in the Main GUI*
- *When the widget opens, a system analysis will take place for 1 minute*
 - *During this time the network connection status of all BTEngine modules are polled, current packet count is recorded (per connection), verification of packets being sent, and a latency test on motion data throughout the system is performed*
- *You may skip the System Analysis pop up without waiting the full 60 seconds, however some information may not be available*
- *Connections for the following are displayed*
 - **Tracker**
 - *Motive (Internal input from Motive for motion data)*
 - *Router (Input from physical Router for battery and button pushes from Beacons)*
 - *Tracking Adapter Output (Internal output to Tracking Adapter(s))*
 - **Follower**
 - *Motion (Internal input from Tracker for motion data)*
 - *DMX In (Input from a lighting console for sACN/Art-Net)*
 - *BTWYG (Internal output to BTWYG for lighting visualization)*
 - *RTTrPL (Output to a DMX Merge node for sending to a physical lighting system)*

- Tracking Adapter
 - Tracker Input (Internal input from Tracker for motion data)
 - RTTrPM (Output to a third party using the RTTrPM protocol)
 - Along with connection status, number of packets sent/received are displayed (as of opening the widget) per connection, and if packets are increasing, 'Data Sending' will say yes
 - **Tip:** By pressing ALT+S again, while the widget is open, and skipping the analysis right away by pressing enter, you can see packets increasing each time you perform these steps
 - Output Latency per RTTrPM output is displayed in this widget (see below)
 - Output Latency for Third Parties
 - You can now view the current latency of the system using the new System Status widget (displayed in ms, per RTTrPM output)
 - To accurately determine system latency, the system needs to be measured over a full minute
 - If you skip the system analysis, this information will not be available
 - Latency is measured starting from Tracker's input of motion data, to Tracking Adapter's output of RTTrPM data
 - **Note:** This does not account for any latency within Motive, from Stringer to Camera, or the network to the Third Party
 - Latency will increase slightly with more active Beacons, so when using this tool, ensure all Beacons you wish to measure are actively tracking before starting the test

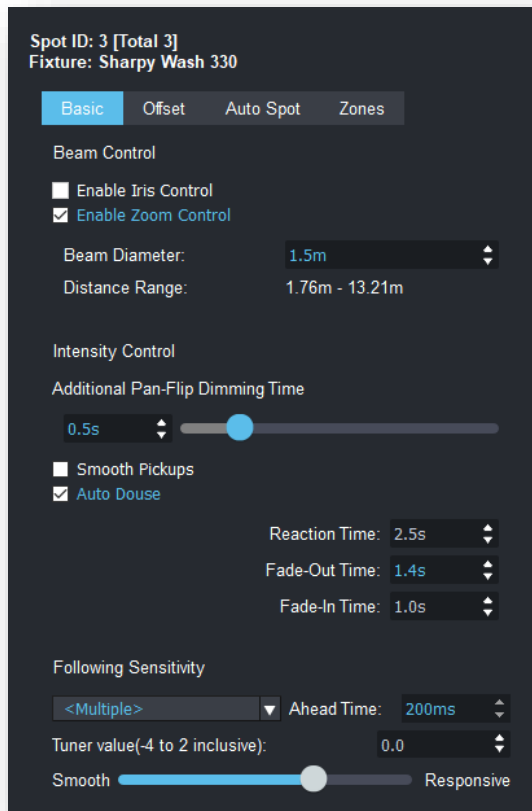
Improvement

- Undo Stack is now limited to only undoing or redoing the ten most recent actions at the same time – this is to improve performance and prevent possible crashes with large Undo Stacks
- Output Configuration now filters out the new 10.x ArtNet networks added to the October 2017 image
- Apply Options has been removed from the status bar due to confusion and lack of use
 - You can still turn off sending information back to BTWYG by unchecking 'Send Tracking Information to WYSIWYG' in System Configuration, BTWYG
- Art-Net universes now start at 0 in the Main GUI for Chapter, Book, and Merging channels
- Searching and sorting of Zones in the Library widget is now supported
- When importing fixture calibration data, more reporting has been added to alert the user if there any fixtures found in the import but not in the BlackTrax project
- Trackable Setting's Orientation field has been removed, and a 'Process Classic Beacon Orientation' setting has been added to System Configuration, Beacons instead
 - This is disabled by default meaning orientation from the IMU chip on the Beacon will not send through the system unless this setting is enabled

- *If a project is opened from an earlier version of BlackTrax with a Trackable setting set to 'Disabled', this will be overwritten and will follow the new configuration setting*

Design Review

- *Conflicting Fixture settings and Beacon settings in Output Configuration now display as blue instead of the grey bars*



- *LED Following Settings have changed from radio buttons to a drop-down*
- *Trackable Details no longer shows a small horizontal scroll bar by default*
- *Output Import Details' checkboxes have been re-ordered to match the table's sort order*
- *System Configuration is slightly wider to accommodate new settings*
- *Assign to Fixture Group dialogue is smaller to remove dead space*
- *Show Report now displays Outputs present in the current project file along with their configuration settings*
- *Show Report now displays the chapter number along the left column of every Fixture*
- *Show Report now displays the BT Trackable name, not the WYG Trackable name when Trackables are displayed*
- *Show Report's Trackable section now says chapter(s) instead of chapters*