

syncAXIS control 1.6.0 is the new software release after version 1.5.2, which includes customer facing features and changes.

1. Bug Fixes of syncAXIS control 1.6.0

- Fixed: After a failed attempt to switch from simulation mode to hardware mode via API command, the application sometimes crashes when the instance is deleted.
- Fixed: Binary simulation files generated by 64-bit syncAXIS 1.5 cannot be loaded by the viewer.
- Fixed: Calling `slsc_list_set_jump_speed` directly after a jump command affects that previous jump command.
- Fixed: Missing laser switches in some cases during subcycle switching.
- Fixed: Output of "Laser Active" signals right before job start for a duration of up to 50 microseconds.
- Fixed: If in the xml Laser Configuration, the Laser Control Flag "PulseSwitchSetting" is set to true, Laser Standby pulses are suppressed.
- Fixed: In the xml Laser Configuration the parameters `QSwitchDelay` and `FirstPulseKillerLength` have no effect, i.e. they are always effectively 0.
- Fixed: Problem where a job with 0 length would hang indefinitely.
- Fixed: Jump that was inserted before a module would not have heuristic applied.

2. New Features syncAXIS control 1.6.0

- Added xml tags for calculation dynamics for the scan device, split into jump and mark dynamics to provide more granular configuration options
- Added commands to retrieve and set scan device calculation dynamics to enable programmatic changes for these parameters
- Added list commands for jumps with a minimum jump duration.
- Added `slsc_list_set_laser_on_move` command which allows the user to define a spatial offset for each following mark command after which the laser is to be turned on. This feature allows to repeatedly mark a pattern with small special offsets in each iteration to better distribute the energy input into the material.

3. Changes within syncAXIS control 1.6.0

- Significant performance improvement for very short segments addressing challenges with buffer underruns
- Optimized handling of collinear lines in trajectory planning.

4. Known issues

- In the xml Laser Configuration the Laser Modes 1, 2 and 3 are all identical to Laser Mode 5, i.e. `QSwitchDelay` and `FirstPulseKillerLength` always have to be explicitly specified.

5. Bug Fixes of syncAXIS Viewer 1.6.0

- Fixed: Dialog will now display in the center of the screen instead of a sometimes off the screen.

- Fixed: Zooming by using a bounding box now works correctly for all sized boxes.

6. New Functions syncAXIS Viewer 1.6.0

- Added Redraw progress indicator with cancel button.
- Added new data reduction option with improved algorithm for more accurate representation of the simulation replacing nth line reduction. Nth line options will still be available for command line arguments.
- Removed accurate limits and accurate position load options.
- Added legend entry for guide lines.
- Added limit to the amount of memory a file can safely load. If a file's data will use up 95% of the usable memory, the file will only partially load. Loaded time will be displayed to the user.
- Added the ability to load multiple files that have different number of scanheads at the same time.

7. Changes within syncAXIS Viewer 1.6.0

- Refactored the default data options selected when changing the display options to reduce number of user inputs.

8. Bug Fixes of syncAXIS Viewer 1.6.0

- Fixed: All hidable/closable sections will maintain their status when using the undo feature.
- Fixed: Zooming by using a bounding box now works correctly for all sized boxes.

9. New Functions syncAXIS Configurator 1.6.0

- Added Calculated Dynamics to stage configuration.
- Added context menu on tabs for 1) Opening containing folder, 2) Copy full path name, 3) Closing this tab, 4) Close all but this tab, 5) Reload file.

10. Changes within syncAXIS Configurator 1.6.0

- Updated controls to support 1.6 configuration schema
- Changed min laser off time to be 1/64 us.

11. Bug Fixes of syncAXIS Configurator 1.6.0

- Fixed: All hidable/closable sections will maintain their status when using the undo feature.