



Release Notes 9.3

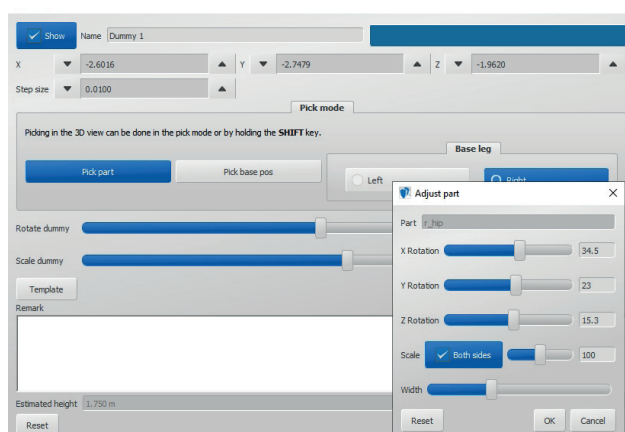
Z+F LaserControl® 9.3

Highlights of this version:



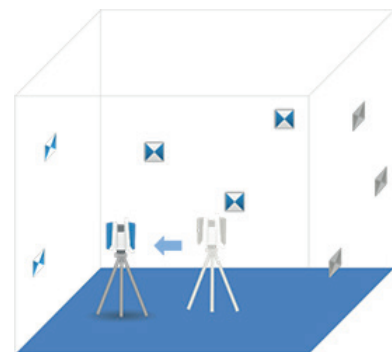
- **New Forensic Module:
Suspect Height Measurement**

The module is designed for forensic experts to estimate a suspect's height based on photo or video footage of a crime event and a scan of the environment. The tool offers a structured workflow, which - starting with photo calibration of the camera in the scan, its verification and 3D modelling of the body posture - allows to reconstruct the upright human body size. The module requires a separate license.



- **AxisInspection**

Major external influences, such as improper transport, can change the calibration of a laser scanner. This can be determined using the SystemCheck. If necessary, AxisInspection allows the user to check and optimize significant angular calibration parameters by means of a double-layer scan. It is based on the analysis of scan data of the Z+F IMAGER® 5010 and 5016 series in a post-processing step. The tool will not modify the scanner's calibration settings, but the result can be used to adjust scans post-capture. This feature requires a separate license.



- **Flexible Window Management**

**only for LaserControl Office version*

The window Overview, Bubble/Flat View and Image Viewer can be rearranged as needed and even detached to be used on multiple displays.



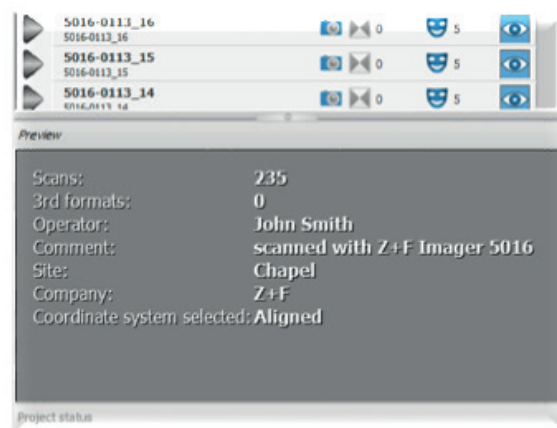
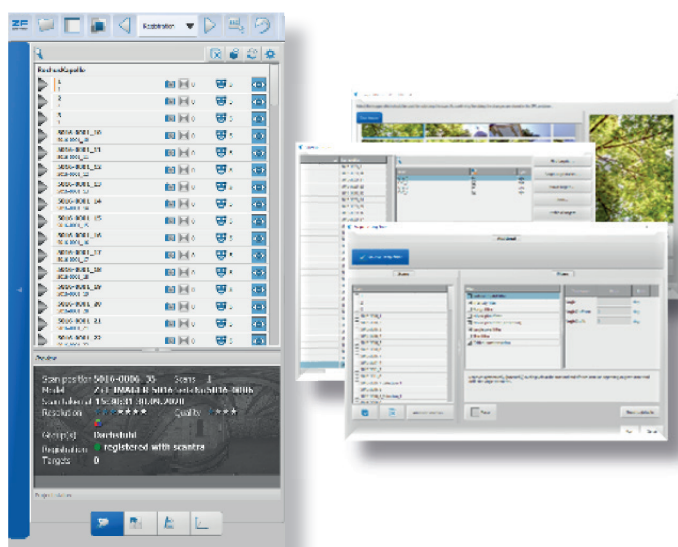


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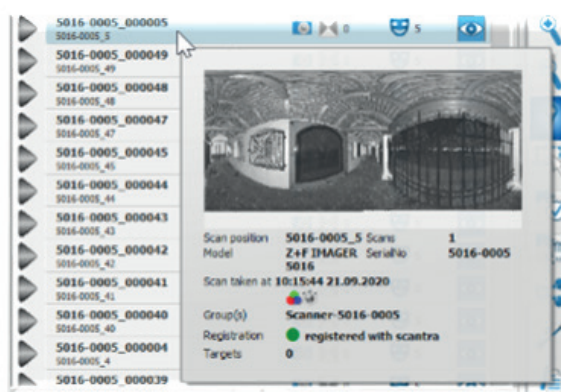
• Renewed Project Browser

The Project Browser has been re-designed and provides a quick overview about the pre-processing status for each scan, such as available/processed colour images, number of targets extracted, and number of filters in the scan. It also provides quick links to the dialogs: Image Selection, Manage Targets and Batch Filter. It also allows to directly hide/show scans in overview.

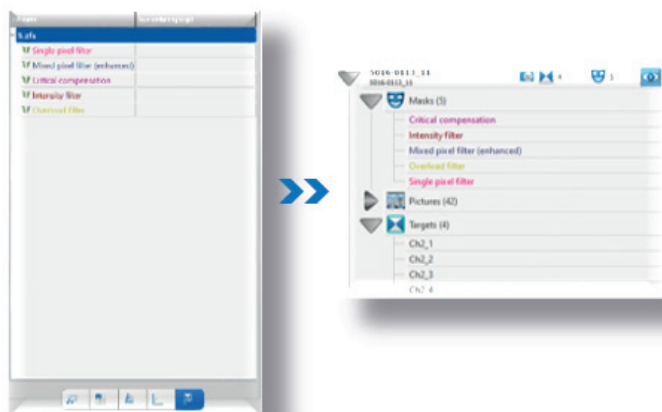
Also a project overview is provided to have all project related metadata easily at hand.



To quickly find the correct scan, a tooltip appears, when the mouse moves over a item.



Further, the former browser tab „Currently Open Scans“ was merged into the new Project Browser. It lists all masks and targets in the scan, as well as pictures linked to it. The information is provided without to open a scan. The loading of this additional information can take a little more time, but it provides many advantages.



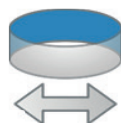
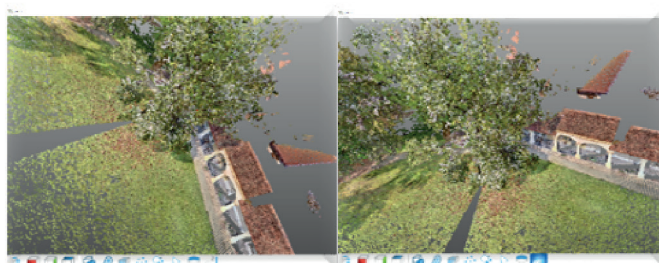


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Vertical Mode

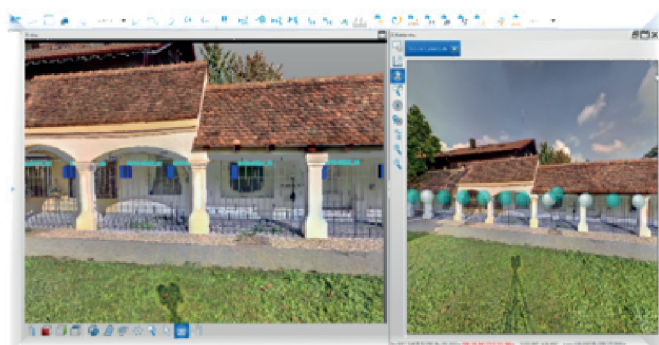


The 3D view now provides a Z-upright mode, which will ensure the verticality of the view when orbiting around an object.



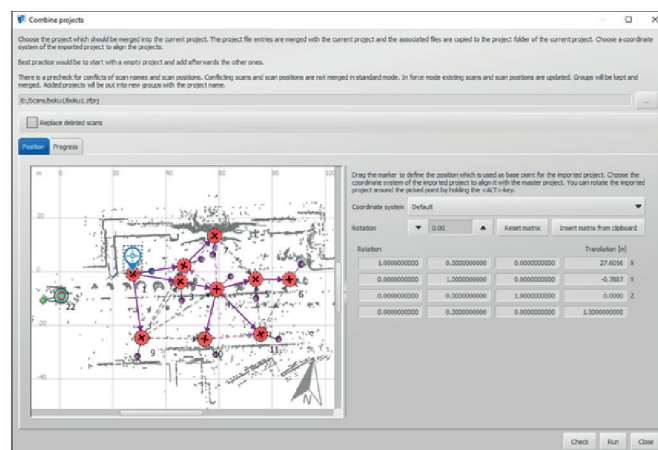
Panorama Mode

With the help of the new Panorama Mode button, the 3D scene can be viewed from any fixed position in a similar style as the Bubble view, but not limited anymore to a certain vantage point.



Combine Project Tool with live preview

The project to be merged can now be placed and pre-viewed directly. This allows to check and correct the result by means of a simulation prior to actually merging the project. In addition, it is now possible to choose the coordinate system to be merged.



Technet Scantra 3.0

LaserControl comes equipped with the Scantra version 3.0, providing a new user-interface and many useful and practical tools to improve the registration process. For more information please refer to the Scantra Release Notes.

Miscellaneous:

- Registration can be exported to the Trimble Realworks RMX format
- Scan data can now be exported into Bentley POD format to be used in e.g. Bentley Pointtools or Microstation
- Invalid filter provides more parameters (clip-out)
- Orthophotos can now be created in any coordinate system
- Links can now be added with a new button directly to the 2D view



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Fixes:

- [5396] – Project integrity check: unnecessary warnings for ZFI-file removed
- [5304] – Sorting by scan position in Manage Groups dialog
- [5377] – Program stability during combined Cloud-To-Cloud and target registration
- [5386] – “Mark Known Targets” correctly displayed
- [5383] – Registration & Optimization: Dialog added about selected scan positions
- [5343] – Updating activation status from Scantra
- [5342] – Normal vector for perpendicular measurements corrected
- [5226] – Hashtags disabled in project names
- [5323] – Links can now be added directly in 2D
- [5310] – Keep Add Link dialog open while syncing
- [5257] – Stability issue during registration with e57 scans with multiple parts fixed
- [5192] – Handling of ZFPRJ projects fixed in Download Manager
- [5173] – Misallocation of planes after closing of Plane Manager fixed
- [5166] – Coordinate system fixed for export via scan details
- 4935] – Systemcheck with survey control moved to Expert mode
- [5042] – Scan renaming only for new names
- [5129] – Fixed an issue with the parameters dialog of single pixel filter
- [5122] – Rotation corrected for registration with prism and target
- [5117] – Import option Feet & Inches units for known targets removed
- [5109] – Update units change for manage coordinate systems improved
- [5114] – North arrow direction after CS change fixed
- [5089] – Fixed las export with umlaut
- [5088] – Fix of grey panorama export (panorama export IR channel)
- [5072] – Coordinate system is written to the file headers before export
- [5067] – Retry to load top-cuts
- [5064] – General stability improvements
- [5054] – Wrong changes on UTM fixed



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Firmware 9.3

Z+F IMAGER 5016A

With this firmware release, the Z+F IMAGER 5016 can be upgraded to a Z+F IMAGER 5016A. Please note that a separate feature license is needed.

Please contact sales@zf-laser.com for further details.

The Z+F IMAGER 5016A offers the following advantages:

- 2MHz-Support
This feature doubles the maximum data rate to 2.187 million points per second and thus enables faster scans in selective resolutions.
- If the dynamic compensator is deactivated, the tilt can be roughly detected by the IMU of the instrument, if the scanner is oriented upright. The feature can be of advantage during pre-registration and for visualization purposes.

General – 5016 and 5016A:

- Blue Workflow: improved IMU tracking for better position estimations
- Various stability improvements and bugfixes

Discontinuation of LRC 9.1 and FW 9.1 and older

With this release, we would like to announce the discontinuation of the support for firmware and Z+F LaserControl® version 9.1 and older. Please contact our sales team for assistance and upgrade options.