

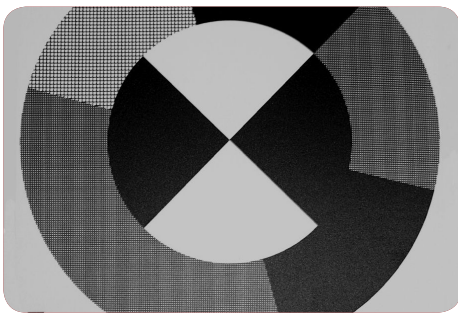
LFM Register 3.95 Released!

26th July 2010



Registration is an important pre-requisite for working with laser scan data. It is vital that this process can be achieved rapidly, reliably and above all accurately. Previous versions of LFM Register have introduced various innovative ways of achieving this via target prediction, inter-cloud registration and by providing visual metrics that immediately indicate quality of registration.

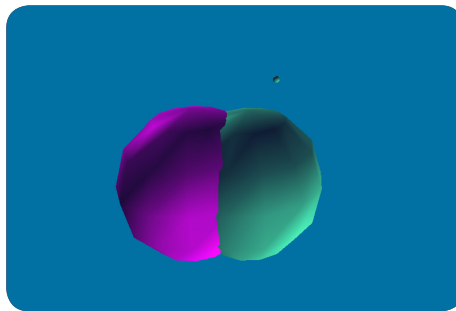
LFM Register 3.95 provides users with additional enhancements in order to, once again, reduce the time spent registering data. These enhancements allow LFM customers to have confidence in the data set and the overall accuracy of the registration process.



Automatic Registration

LFM Register 3.95 builds on the existing target prediction facility. With target prediction the user need only identify the approximate location of two targets manually, LFM Register is then capable of locating the additional targets.

By combining the technology in the new Z+F *AutoTargets*[™] and LFM Register 3.5, target identification becomes a fully automatic process. This can remove the need for an operator and the requirement for manual target selection. In certain circumstances, typically for small projects, the need to conduct a control survey is no longer mandatory.



Bundle Adjustment

Bundle Adjustment is now included in LFM Register. With bundle adjustment the location of a target is considered from every scan position. A mean average of its location is then taken before a scan is re-registered. This process is continually repeated resulting in increased accuracy in the registration process.

Bundle Adjustment leads to higher levels of accuracy that until now have been associated with traditional survey instruments. Trials have shown that as much as 50% less control work may be needed when using bundle adjustment, in some cases, the user has been able to opt out altogether of conducting a control survey. Bundle adjustment allows the user to save time in the field whilst still producing high quality results.



Detailed Registration Reports

Detailed registration reporting and analysis can now be conducted in LFM Register. This report can be downloaded as a deliverable in order to demonstrate that registration meets the clients accuracy requirements.

Numerous incremental improvements

Many incremental improvements have been implemented in LFM Register 3.95. These simplify the work processes and improve productivity for the customer. For example, in previous LFM Modeller packages, customers had to open control survey data in a separate 3D window before copying this information into their workspace. The control survey can now be opened directly in the components browser.