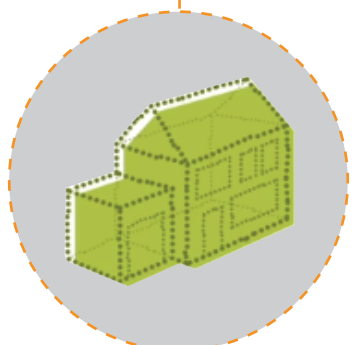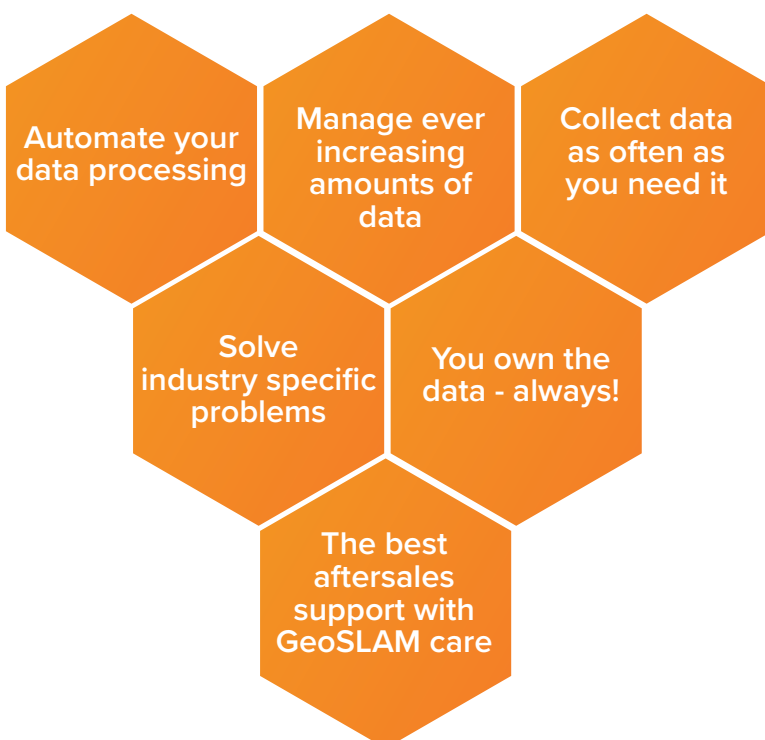# GeoSLAM Connect

Connect Overview

GeoSLAM Connect is a powerful 3D Process Automation solution for processing and managing data generated by the ZEB-series of handheld laser scanners. GeoSLAM Connect is a flexible software platform that can be configured to perform end-to-end analysis of ZEB scan data.

Connect uses GeoSLAM's world-leading SLAM algorithm at its heart and also includes visualisation, additional processing, filtering, workflow automation functionality, as well as integration to 3rd party applications.

What are the Benefits?

- Automate your data processing
- Manage ever increasing amounts of data
- Collect data as often as you need it
- Solve industry specific problems
- You own the data - always!
- The best aftersales support with GeoSLAM care

3D Viewer Application

The Connect 3D viewer enables the user to create and manage projects, select the default processing workflow, create reports and visualise data. SLAM results generated from automated workflows are viewable in the 3D viewer for easy visualisation and interpretation.

Pointclouds can be coloured by time, elevation, RGB or a user defined single colour. Data captured using the GeoSLAM smartphone app (images and notes) can also be displayed in the 3D viewer as a series of 'hotspots' that the user can select to see the app data captured at the hotspot location.

The 3D viewer also allows the user to navigate and crop datasets and save specific views of the data that can be automatically written to a PDF report.

Workflow Automation

GeoSLAM Connect supports full workflow automation. The user only needs to select the raw .geoslam data and additional datasets such as GeoSLAM phone app data or a control points file in the 3D viewer software and results will be automatically calculated.

The user can select one of our pre-defined workflows or advanced users can use their own custom workflows. In addition to the 3D viewer, GeoSLAM Connect workflows can be configured to automatically run when new data arrives in a watcher folder. The watcher folder and workflow can be defined by the user. The workflow will run on any new data arriving in the watcher folder without any user interaction with the GeoSLAM Connect software.

Folder watchers are useful for applications such as remote field-to-office data transfer where data arrives over a network connection and is automatically processed and stored on a server.

SLAM

GeoSLAM Connect provides full automation of SLAM data processing from all ZEB scanners. Commonly used data export options are stored as default workflows to simplify creating pointclouds from .geoslam files. The user can also import multiple .geoslam files that are processed sequentially.

Pointcloud Filtering

As part of an automated workflow, pointcloud filtering options can be defined. Options include point decimation as a percentage of points, distance between points and every nth point. Data can also be range filtered between a minimum and maximum distance from the scanner trajectory.

Smartphone Imagery and Notes

GeoSLAM Connect platform includes a new smartphone app (for Android) that enables the user to capture photos, add written and voice notes and select from a list of custom tags while they are capturing ZEB scanner data. The smartphone data is then processed and located inside the pointcloud data to provide an additional set of data to help interpret pointclouds.

Feature list	Connect Platform	Floorplans	Construction Progress
SOFTWARE			
3D viewer	✓	✓	✓
Workflow developer	✓	✓	✓
PROCESSING			
SLAM	✓	✓	✓
Point cloud filtering	✓	✓	✓
2D Floor plan		✓	
Phone app	✓	✓	✓
Scan registration			✓
Progress Monitoring			✓
Folder watcher	✓	✓	✓
DATA CAPTURE			
ZEB Go	✓	✓	✓
ZEB Revo/Revo RT	✓	✓	✓
ZEB Horizon	✓	✓	✓
Phone app	✓	✓	✓
OUTPUT			
Pointcloud	✓	✓	✓
2D Floorplan		✓	