

General information on rental of GeoSLAM's ZEB-REVO

In the following, you will get a brief overview how rental of a ZEB-REVO scanner takes place at Laserscanning Europe GmbH. You will get to know how to process captured data. Furthermore, we provide sample data.

GeoSLAM Uploader

In conjunction with the rental of a ZEB-REVO laser scanner, Laserscanning Europe GmbH creates a GeoSLAM user account for you. You need this account to upload the previously captured data to the GeoSLAM server and to process a 3D point cloud using GeoSLAM's SLAM algorithm.

As soon as we have created your user account, Zeb1 sends you a mail with your user name and password. Moreover, the mail contains a link allowing you to download and install GeoSLAM Uploader software.

It is also required to purchase Credits in the scope of rental. You need these Credits to pay the processing of 3D point clouds on the GeoSLAM server. After payment, the download of the result data is enabled.

Overview of prices:

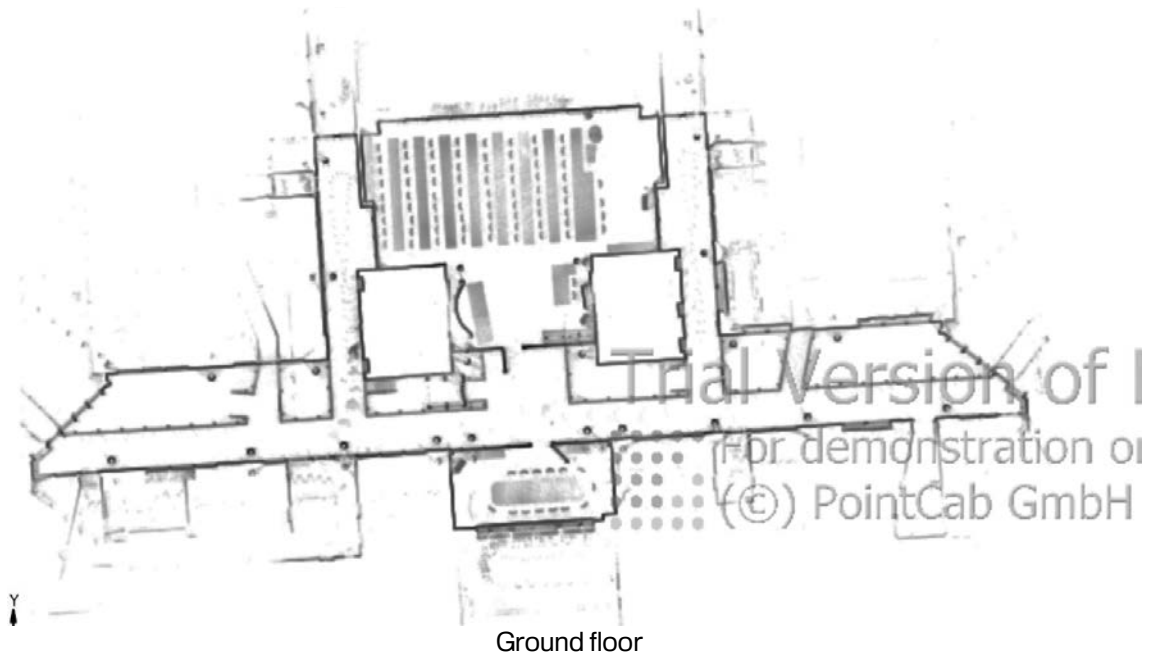
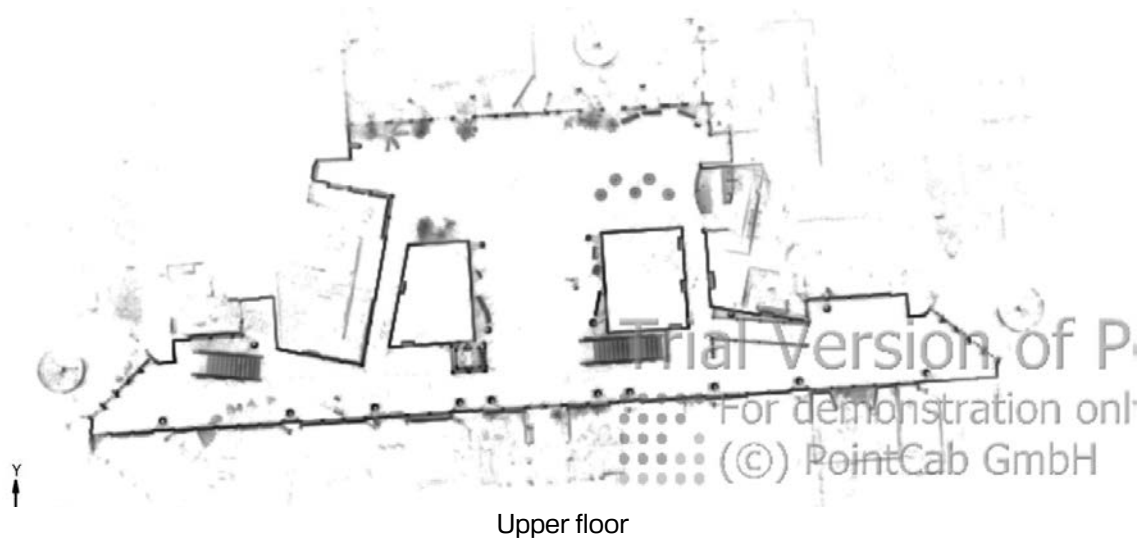
Number of Credits	Price in €
500	232.00
1,000	441.00
2,000	835.00
10,000	3,712.00
20,000	6,960.00
50,000	13,920.00

The purchased Credits are applied to your user account and are ready to being used. If you have bought more Credits than necessary for your project, don't worry. The Credits will be still available on your user account and can be used for your next project.

1 Sample data

We have scanned an example object allowing you to make a calculation and to get a realistic impression.

1.1 Foyer



Size of the object: approx. 950m (37400 in)

Capture time: 15 minutes

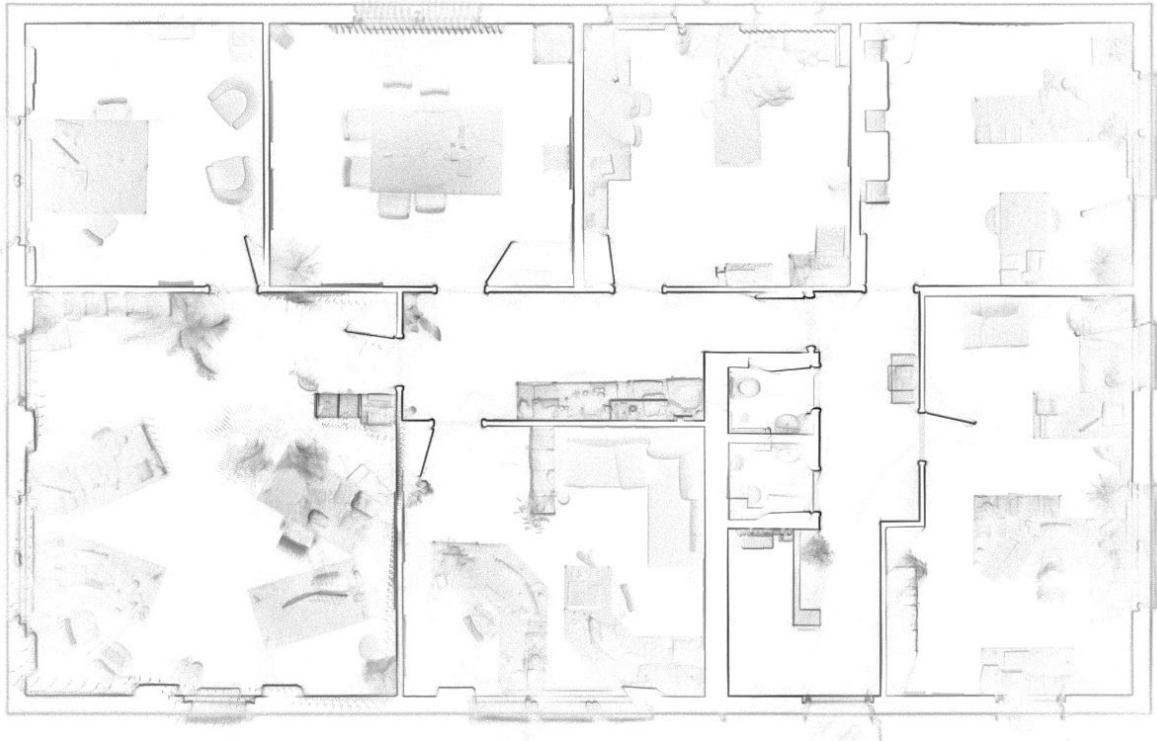
Processing time on GeoSLAM server: 30 minutes

Upload size: 97.214 KB

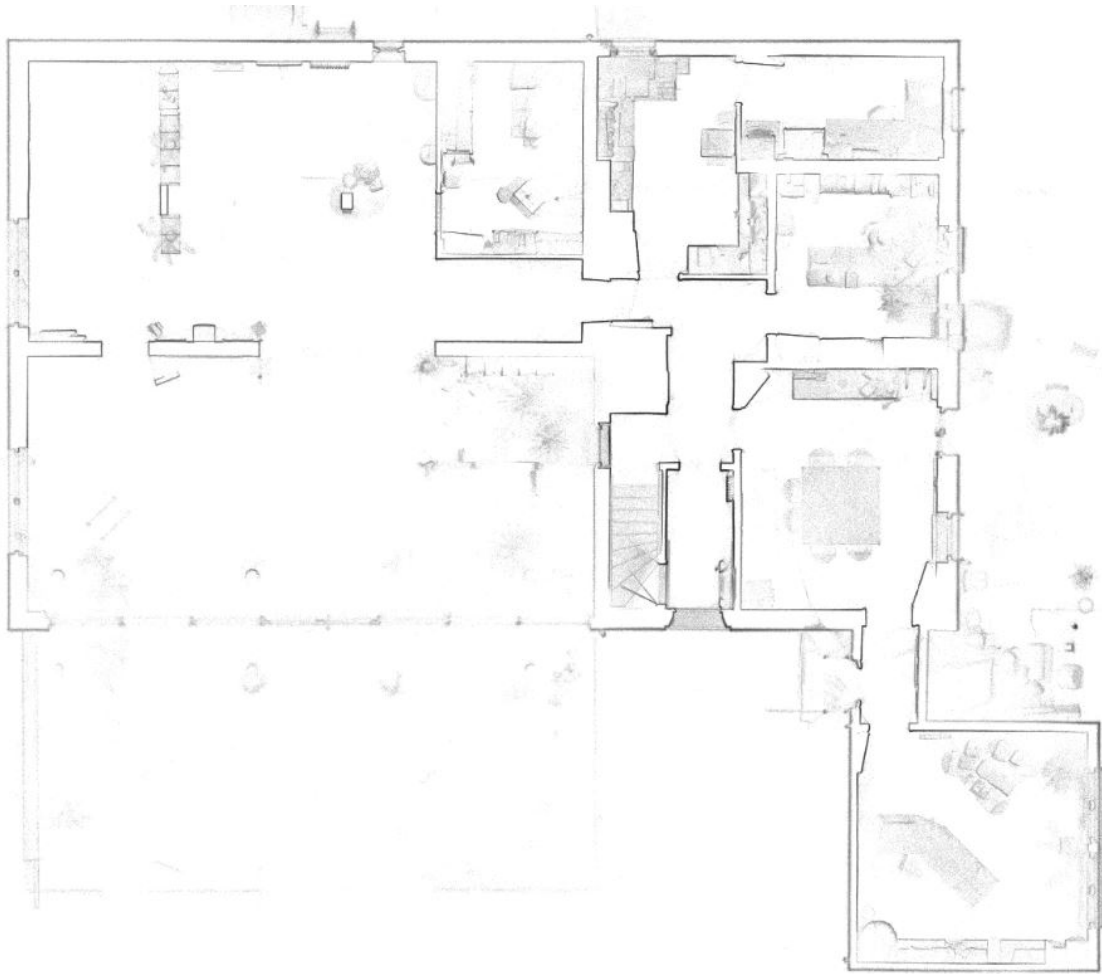
Download size: 190.758 KB

Costs: 116 Credits

1.2 Office



Upper floor - office



Ground floor - office

Size of the object: approx. 460m (18.110 in)

Capture time: 40 minutes

Processing time on GeoSLAM server: 90 minutes

Upload size: 200 MB

Download size: 550 MB

Costs: 92 credits

2 Data files

filename.laz	All data points
filename_9pct_cond.ply	Every 11 th point, colored by condition of point cloud registration Blue = good condition/matching of points Red = poor condition/matching of points
filename_9pct_shaded.ply	Every 11 th point, grey scale shaded
filename_9pct_timecolored.ply	Every 11 th point, colored by time of capture This is useful for assessing closed loop accuracy.
filename_traj_cond.ply	Trajectory of the scan, colored by condition of point cloud registration Blue = good condition/matching of points Red = poor condition/matching of points
filename_traj2.ply	Trajectory of the scan

The *.ply files can be displayed in following free point cloud viewers:

MeshLab <http://meshlab.sourceforge.net/>

CloudCompare <http://www.cloudcompare.org/>

CloudCompare opens *.laz files, too.

MeshLab allows export to:

*.ply, *.stl, *.obj, *.off, *.wrl, *.dxf, *.dae, *.ctm, *.xyz, *.gts, *.json, *.m, *.u3d, *.idtf and *.x3d.

CloudCompare v2.8.beta allows export to:

*.bin, *.txt, *.asc, *.neu, *.xyz, *.pts, *.csv, *.las, *.laz, *.e57, *.ply, *.vtk, *.shp, *.pn, *.pv, *.pov, *.dp and *.pcd

The *.laz file can also be loaded in PointCab software which allows export to *.dxf and *.dwg.