FARO Cloud 6.0 – What's new?

The new version 6.0 of the FARO Cloud software for the evaluation of laser scanner data in AutoCAD is available since May 2010.
The most important innovations are:

- compatibility to AutoCAD 2011
- support of AutoCAD's new native point cloud format (PCG) and therefore extremely improved performance regarding the display speed and point cloud size
- new permanently open section manager for Autodesk point clouds
- new command for the definition of a slice around a planar AutoCAD object
- new commands for the modeling:
    - automatic fitting of polygons to point cloud slices
    - drawing of circles and arcs with three points independent from the UCS
- improvement of the work with images:
    - image orientation with less control points
    - new comfort commands for the dual image evaluation
- new PlanarView 3 – now with the option to send command macros into AutoCAD.

Compatibility to AutoCAD 2011

The current version of FARO Cloud is compatible to the new AutoCAD 2011, as well as to all Autodesk products basing on AutoCAD 2011 (e.g. Architecture, Map 3D, Civil 3D, Plant 3D). The new version may also be embedded into older AutoCAD versions (starting with AutoCAD 2007) though. The 64 bit versions starting with AutoCAD 2008 are also supported. If you would like to use FARO Cloud with even older AutoCAD versions we will provide a former version of FARO Cloud.

Support of AutoCAD new native point cloud format (PCG)

AutoCAD 2011 provides **two own point cloud formats**:

- Autodesk point clouds (file extension: PCG)
- Ambercore point clouds (file extension: ISD)

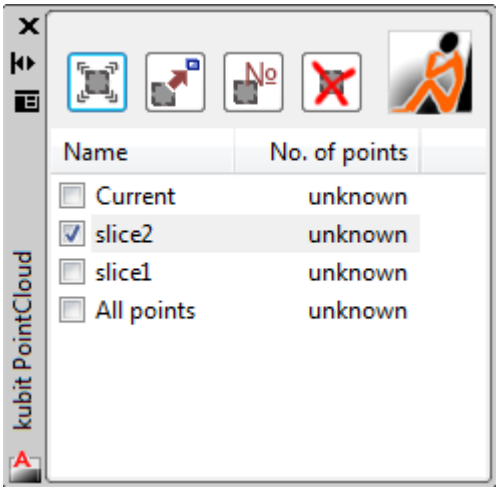
Because of the considerably higher capability FARO Cloud supports only the PCG format next to the kubit point clouds (PTC format). The users of FARO Cloud benefit from an enormously improved capability regarding the display speed and the point cloud size.

Additionally to the AutoCAD import options for FARO scanner data and LAS files, FARO Cloud 6.0 provides further imports, so scanner data of different providers as well as any ASCII files can be converted into the new AutoCAD format. Of course kubit's older point cloud format (PTC) can be converted into the new PCG format.

The established functions of FARO Cloud, as for example the splitting of point clouds into slices and sections or the modeling tools can be used for point clouds in AutoCAD format (PCG). Since AutoCAD 2011 does not offer the functionality to mask point clouds, users of FARO Cloud have essential advantages when evaluating scanner data within AutoCAD.

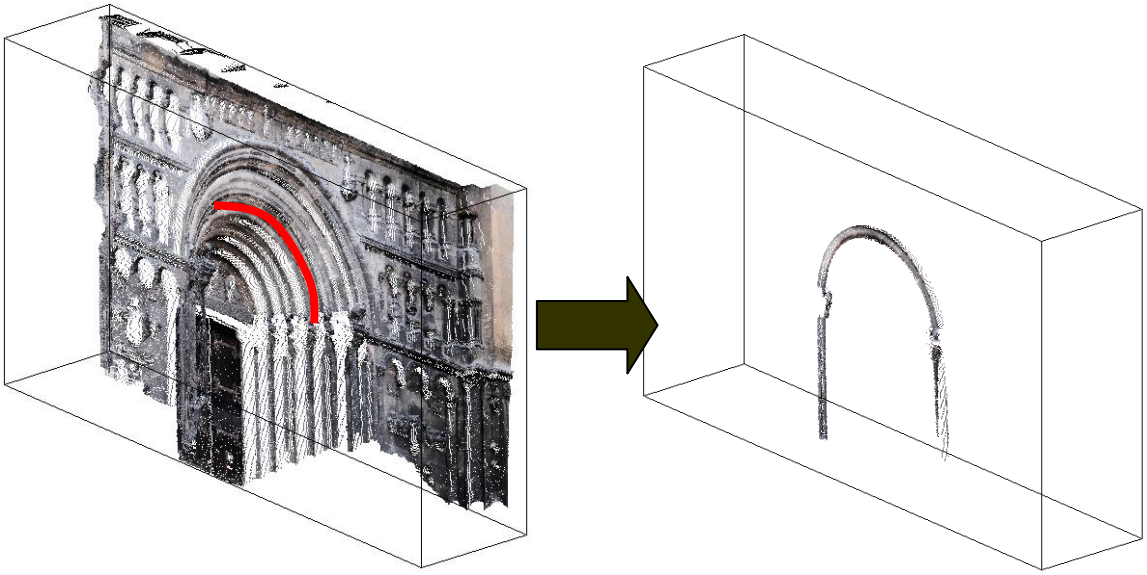
New section manager for Autodesk point clouds

The new manager for the sections of point clouds is permanently shown as lineup. It may be shifted over the screen or docked to the margin.



New command for the definition of a slice around a planar AutoCAD object

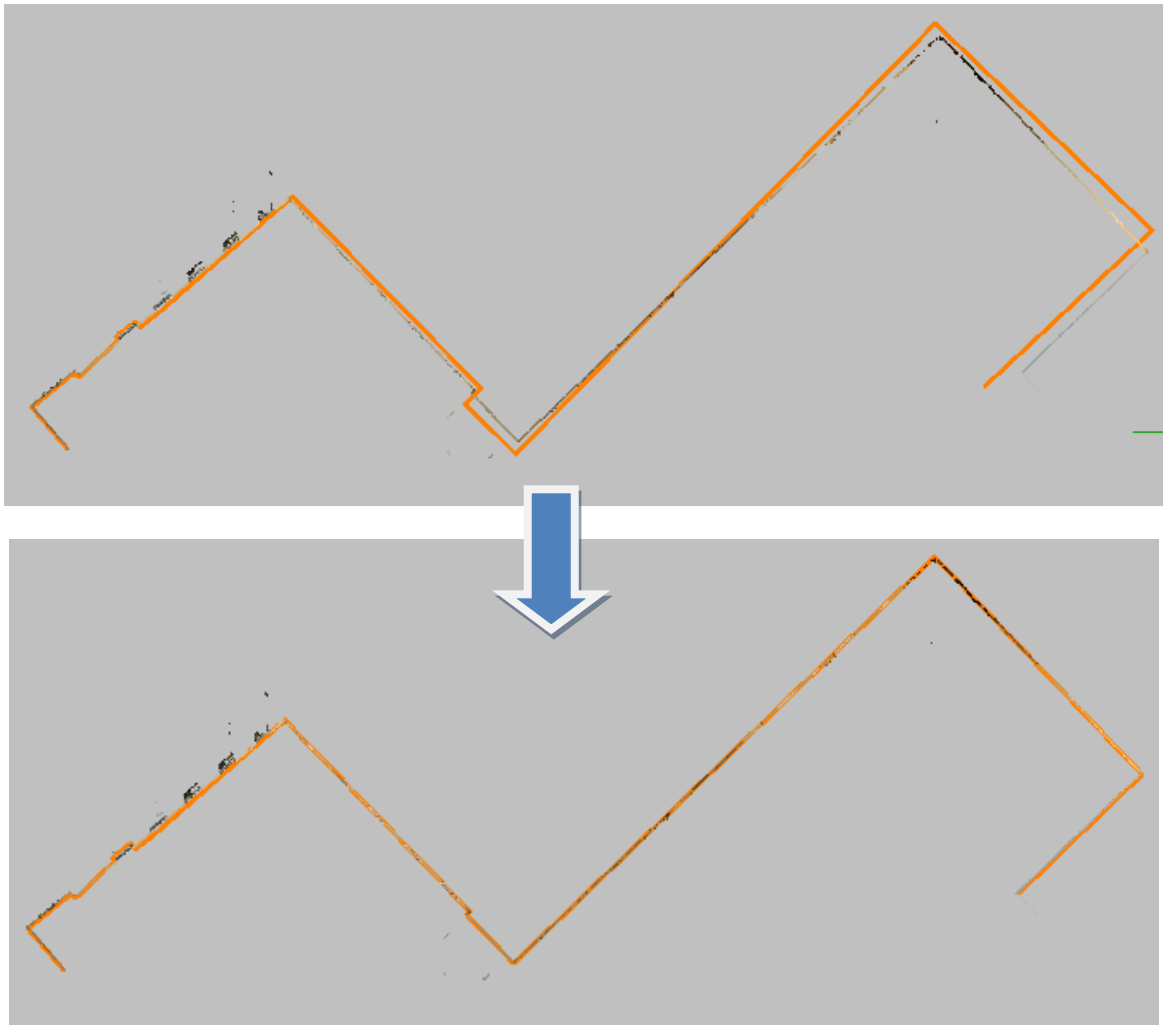
With this command you may define a slice of points, which surround a planar AutoCAD object, e.g. a circle or a 2D polyline. The AutoCAD object is then in the center of the layer. This is another fast option to generate the popular FARO Cloud layers within point clouds for the evaluation.



Simply select an existing AutoCAD object and enter a layer thickness.

New command for the modeling

FARO Cloud has been extended with further useful commands for the modeling. Therefore it is now possible to **fit** several **polygons automatically** to the contours of point cloud slices at the same time. All you have to do is define a slice and enter a rough approximation per polygon. 

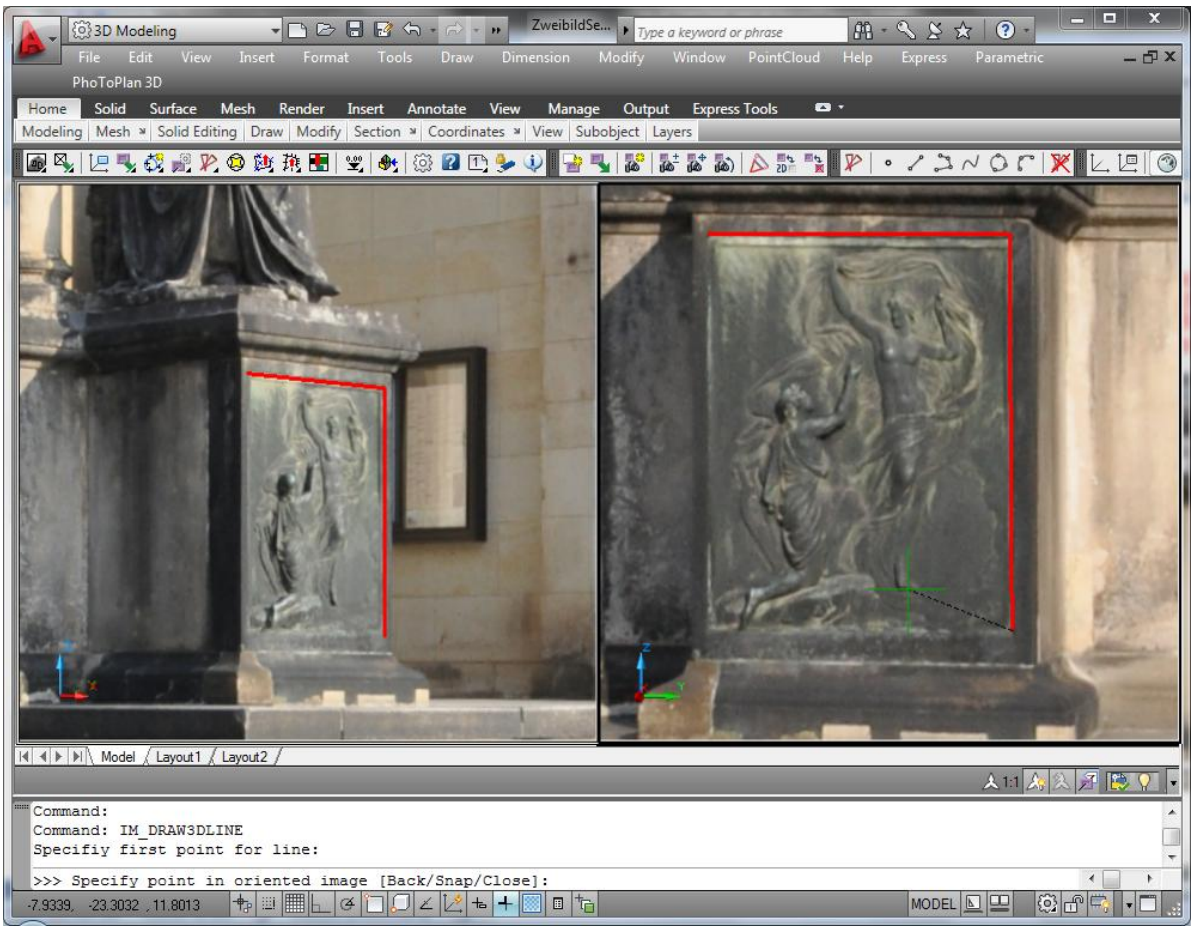


There are two additional commands to draw a circle or an arc through any three points independently from the user coordinate system. That way it is easy to generate this basic geometry easily and fast by snappimg points from the cloud.

Improvement of the work with images

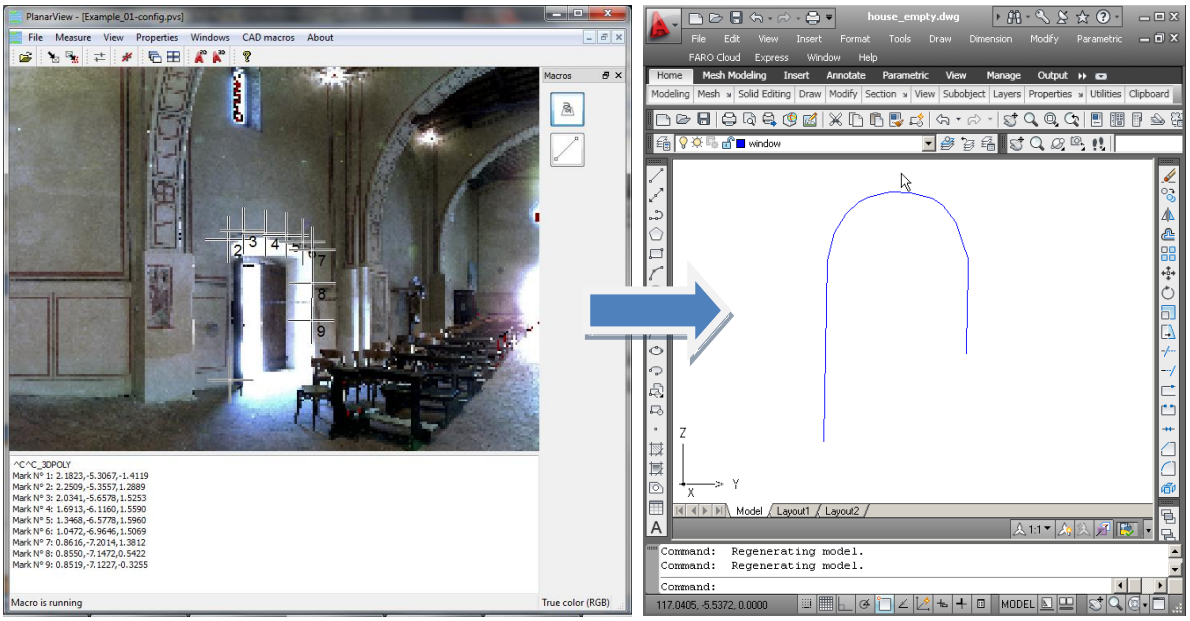
More and more users use the high resolution of photos in order to use FARO Cloud 3D to derive coordinates from photos or to support the evaluation of a point cloud. Therefore we have improved the functionality for the work with images fundamentally. Photos, of which the parameter for the orientation (camera position, camera alignment, focal length, sensor size, etc.) are not know yet, may now, under certain conditions, be oriented with far less control points. Often four control points per photo are sufficient!

You may even get precise 3D coordinates without a point cloud. All you need are two photos which were oriented in advance. The photogrammetric procedure of the **dual image evaluation** (spatial intersection) has been extended in a way so three dimensional objects, like points, lines, polylines, splines, circles and arcs, can be generated much more comfortable than before. This way you may draw and model three dimensional completely without a point cloud. There is a comfort command, which automatically prepares the screen for the dual image evaluation. The generation of viewports, switching into the camera navigation mode and the correct setting of the relative photo size can therefore be done with just one click. When assigning corresponding points, FARO Cloud automatically activates the viewport, over which the cursor is places.



New PlanarView 3 now with command macros

The new PlanarView 3.0 is delivered together with FARO Cloud 6.0. PlanarView is a free AutoCAD-independent viewer for point clouds of different scanner formats. The individual scans are viewed like photos. Next to converting and measuring tools, PlanarView provides the possibility to export 3D or 2D coordinates directly to AutoCAD. For all that is necessary that FARO Cloud or TachyCAD (software for online tachymetry) has been embedded into AutoCAD. With this function it is possible to get AutoCAD geometry from scan data without having to load point clouds into AutoCAD.



PlanarView 3.0 **AutoCAD with FARO Cloud**

The option to send complete commands not only single coordintates to AutoCAD is new in PlanarView. You may revert to predefined commands but you may also prepare your own command macros with complete command sequences. By doing so the use gets more flexible and you do not have to switch to AutoCAD after every single line in order to call up a new command.

How to try FARO Cloud 6.0?

Users of any former version may install FARO Cloud 6.0 and try it without obligation if they want to. We will be happy to send you an offer for the update of your version. Users with a maintenance contract will get the new version free of charge.

Contact

kubit GmbH
www.kubit.de

Fiedlerstr. 36

01307 Dresden
Germany
Phone +49 351 41767-0
Fax +49 351 41767-29