

FARO SCENE

Redefining productivity for
laser scanning workflows.

FARO®

Tools for automated targetless scan positioning and high-quality data

FARO SCENE software is specifically designed to be used with all FARO laser scanners. SCENE processes and manages scanned data efficiently and easily by using automatic object recognition, scan registration, and positioning. Offering full color images, SCENE provides tools for automated targetless scan positioning and generates high-quality data quickly and efficiently.

Once SCENE has prepared the scan data, you can immediately begin evaluation and processing. From simple measuring, to 3D visualization, to exporting into various point cloud and CAD formats scan projects can now be published on the Internet by the push of a button.

SCENE WebShare Cloud is a cloud-based hosting service from FARO for easy and secure sharing of scan project data and collaborating worldwide via the Internet. With SCENE WebShare Cloud, FARO delivers a comprehensive service to provide users with simple access to 3D scan data anytime and anywhere.

Features

Intuitive user interface

FARO SCENE features an intuitive user interface providing guidance and support for complex tasks. With improved and automated workflows, the project transfer (e.g. from SD Card), scan processing and initial registration can be accomplished in one simple step.

Powerful Solid 3D Surfaces Rendering

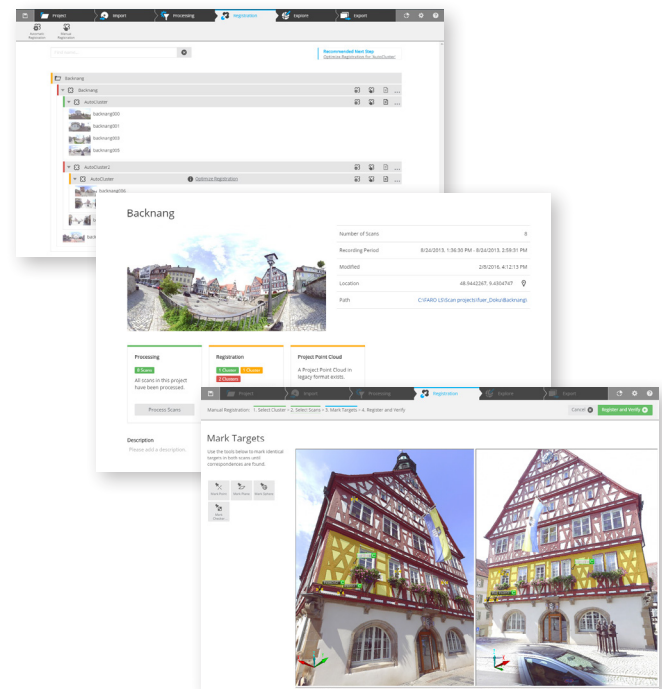
The solid surfaces rendering engine presents point cloud data with unmatched clarity and detail. Intelligent algorithms help minimize gaps in the point clouds. The full color detail functionality provides enhanced color detail even on low resolution scan data.

High Dynamic Range (HDR) Mapping

The fully automatic HDR mapping function preserves realistic image details and color appearance within the scan data captured with a Focus^{3D} HDR Laser Scanner even in challenging lighting environments.

Easy collaboration and secure sharing of project data

FARO's hosting solution, SCENE WebShare Cloud, and SCENE WebShare 2Go 2.0 allow project partners to achieve faster workflow collaboration through easy data sharing and worldwide collaboration.



Benefits

- Minimized data processing cost by using highly automated, standard workflows
- Reproducible project results through modern workflow-driven and supportive user interface
- Reduced 3D modeling effort for visualization purposes through life-like visualization with solid surfaces
- Minimized training effort through intuitive and efficient user guidance
- Future proof and extendable through SCENE's integrated plugin concept



Specifications

Processing Scan Data

- Uses targetless scan placement by topview-based registration or cloud-to-cloud registration methods instead of automatic identification of edges, corner points and fast plane detection
- Improve registration results through intelligent fine registration
- Automatic search feature for reference spheres and black & white reference targets
- Object markers for manual identification of spheres, black & white reference targets, circular reference targets, planes, and slabs
- Online correspondence search for the automatic assignment of reference points. Now even faster through parallelization
- Automatic coloring of the scans with the high-resolution color photographs of the FARO color option
- Editing of multiple scans simultaneously in 3D View
- Generation of new scan files of selected areas
- Filters including “dark points” and “stray points”

Data Management of Extensive Projects

- Project database with multi-user interface and project history
- Hierarchical structure
- Graphical project view to manage all existing scan projects
- Bundling of unlimited number of scans to one project

Navigation

- With a few simple clicks, scan positions can be displayed for viewpoint selection and for changing scans.
- 3D navigation supports 3D connection Space Mouse devices
- Predefined views (front view, side view, top view)

WebShare Cloud

- Fully integrates with the SCENE WebShare Cloud service and SCENE WebShare 2Go 2.0
- Automatically creates overview maps & panoramic scan images
- Enables users to perform simple measurements and add information, documents, hyperlink, categories and tags
- Intuitive web-based administration tools to manage projects, users and sharing of information

Import & Export

- Control points for geo-referencing (.cor, .csv)
- Scan points (FARO Scan, FARO Cloud, ASTM E57, .dxf, VRML, .igs, .txt, .xyz, .xyb, .pts, .ptx, .ptz, .pod)
- CAD objects (.wrl, .igs and .dxf)
- Import digital photos (.jpg, .png, .bmp, .tif)
- Export panoramic images (.jpg), export orthophotos (.tiff)
- Direct data transfer to: AutoCAD®, Autodesk® ReCap™, Revit®, Microstation®, Geomagic®, PolyWorks®, Rapidform, Bentley Pointools™, JRC 3D Reconstructor®, AVEVA®, Intergraph®, LFM™, Point-Sense, PointCab™, Carlson and more than 100 others

Creating Workspaces

- Project Point Cloud for efficient navigation in 3D data
- Object fitting with visual quality indicators for spheres/tubes/planes including automatic border detection
- Take measurements
- Intuitive user interface with structure view
- Documentation objects to add notes and attach external documents via hyperlink technology
- Creation of virtual scans

Analysis

- Distance measurements
- Analysis of evenness
- Additional capabilities using plugins

Views

- Solid 3D surfaces rendering with full color detail
- 3D View, Planar View & Quick View
- Stereoscopic visualization with suitable graphics board and 3D compatible 3D device
- Scans are displayed in either color or black & white
- CAD object display
- Correspondence view to control scan placement on the screen
- Multiple Clipping Boxes to control the visualization in 3D View

Minimal System Requirements

- Intel Core i7, 4 physical cores processor
 - Graphics Card with 2 GB memory and OpenGL 4.1
 - 16 GB of RAM
 - 256 GB Solid State Drive
 - Microsoft Windows 7, 8, 8.1, 10, 64-Bit
 - Display with 1366 x 768 screen resolution
 - Internet connection for licensing SCENE
 - Mouse with 2 buttons and scroll wheel
- * Minimal requirements are good for scan resolutions up to 1/4, project size < 10 scans, no stereo rendering

Areas of Application

- Architecture
- Civil engineering
- Construction
- Surveying
- Forensics and accident reconstruction
- Process industry and power plant design
- Digital factory
- Archeology and cultural preservation
- Factory planning/automation technology
- Safety engineering
- Virtual Effects/Movies/Games

For more information,
call 800.736.0234 or visit www.faro.com

