SCENE 3D Scanning Visualization Software





Processing and managing scanned data both efficiently and easily by using the automatic object recognition, scan registration and positioning, SCENE is specifically designed for use with all of FARO's large-volume laser scanners. Combining ease-of-use, networking, and an enhanced 3D experience to deliver a complete scan processing solution, SCENE has the ability to generate high-quality, colorized data very quickly, while providing the tools for automated target-less scan positioning.

Once SCENE has prepared the scan data, you can commence evaluation and further processing right away. SCENE provides a whole series of easy-touse functions at your disposal – from simple measuring to 3D visualization to meshing and exporting into various point cloud and CAD formats.

Scan projects can now be published on a web server at the push of a button. The new WebShare feature allows you to share your scanning projects over the Internet. Provide intuitive access to customers and partners and provide them with the ability to perform simple measurements or add additional information and hyperlinks to a scan.

Project Point Cloud

Seamlessly merge together multiple scans to form a single, comprehensive point cloud offering simple visualization and navigation with minimal post-processing time.

Automatic Fine Registration

A new cloud-to-cloud enhancement, automatic fine registration reduces or removes the need for the placement of artificial targets in many scanning applications, and significantly reduces post-processing time.

Integrated Project Database

Store project information and a step-by-step history of each scanning project; now users can return to any step in a scanning database, quickly and easily, no matter where they may be in their process.

3D Stereo Viewing

Stereoscopic visualization allows users to view their scans on 3D-enabled monitors. The result is an added level of detail, and a heightened sense of realism found in major motion pictures.

ASTM E57 Industry Standard

Through this manufacturer-independent binary data exchange format, users can import and export scanning data regardless of the specific product used to capture it.

Benefits

- Simple and easy to learn
- Support of 64-Bit systems
- Efficient workflow from the original data acquisition to the finished project
- Minimal manual post-processing editing required thanks to auto scan processing
- New project database enables enhanced levels of networking between users
- Interfaces with numerous industryspecific software products

SCENE





Specifications

Editing Scan Data

- Automatic search for reference spheres and black and white reference targets
- Target-less scan placement by automatic identification of edges and corner points
- Improve the registration results through intelligent fine registration
- Object markers for the manual identification of spheres, black and white reference targets, circular reference targets, planes, and slabs
- Online correspondence search for the automatic assignment of reference points
- Automatic coloring of scans using high-resolution photographs with the FARO color option
- Coloring of scan points with the aid of imported photos
- Deletion of scan areas
- 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

- Displaying of scan positions for viewpoint selection and changing to other scans by clicking
- 3D navigation in flight and inspection mode
- Predefined views (front view, side view, top view)

Sharing

- WebShare presents scanning projects on Windows web server
- Automatically creates overview maps & panoramic scan images
- Enables to do simple measurements and to download
- workspace and scan files
- Protected by user right management of the server

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, .ptc, .ptz, .pod)
- CAD objects (.wrl, .igs and .dxf)
- Import digital photos (.jpg, .png, .bmp)
- Export panoramic images (.jpg)
- Direct binary data transfer to: AutoCAD, Revit, Microstation, Geomagic, Polyworks, Rapidform, Pointools, Reconstructor, AVEVA, Intergraph, Carlson and more than 50 others

Creating Workspaces

- Project Pointcloud for efficient navigation in 3D data
- Object fitting with visual quality indicators for spheres/tubes/ planes (including automatic border detection)
- Create meshed surfaces
- Take measurements
- Intuitive user interface with structure view
- Documentation objects to add notes and attach external documents via hyperlink technology

Analysis

- Distance measurement
- Analysis of evenness

Views

- 3D view, planar view and quick view
- Stereoscopic visualization with suitable graphics board and 3D capable 3D Device
- Color scans are shown either in black & white or color
 CAD object display
- Correspondence view to arrange scan positions on the screen

System Requirements

- Microsoft Windows 7, VISTA or XP (Professional, SP2 or higher)
- 64-Bit version recommended (32-Bit version available)
- At least 1.5 GHz PII (2.5 GHz Multi-Core x64 processor recommended)
- 8GB RAM @ 64-Bit recommended
- Mouse with 2 buttons and wheel
- Graphics card with 512MB and OpenGL 2.0 (3D capability for stereoscopic visualization necessary)
- Network Interface Card
- Solid State Drive for highest performance recommended

Areas of Application

- Process, power, piping
- Digital factory / virtual reality
- Architecture
- Civil engineering and plant design
- Archaeology and cultural preservation
- Factory planning / automation technology
- Forensics
- Accident reconstruction



GSA Contract Holder

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