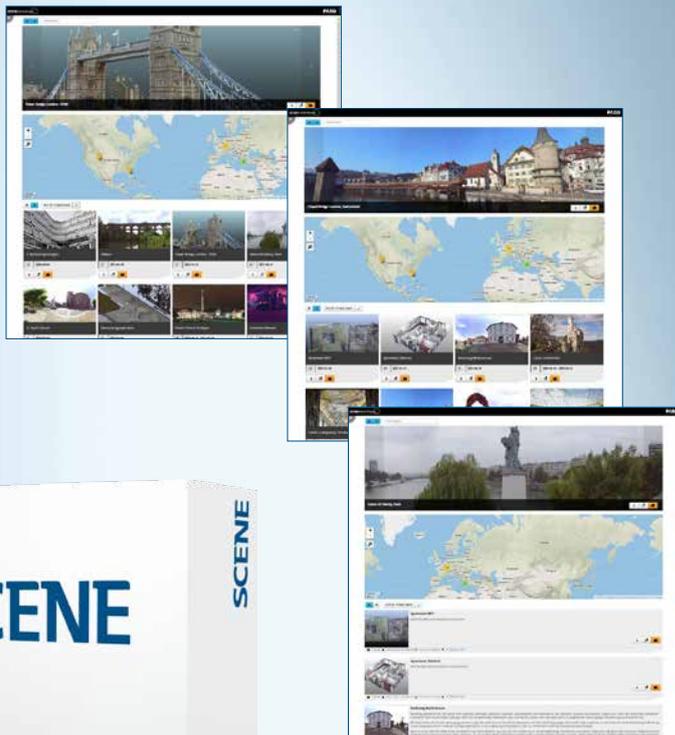# SCENE

Real virtuality software for complete 3D documentation workflows

FARO®

Supports FARO Focus3D X Series Scanners

GPS information is used to arrange scans to each other. The extended range of the X Series scanners are used to document larger volumes-per-scan position.

Targetless registration:
Method 1: TopView-Based Registration

TopView based registration is an efficient, versatile and unique to FARO method allowing for placing scan projects fully automatic.

Targetless registration
Method 2: Cloud-to-Cloud Registration

Cloud-to-Cloud registration utilizes overlapping scan data and additional information incl. GPS, compass and altimeter to accurately align multiple laser scans without the use of reference objects such as targets or spheres.

Correspondence Split View

Split View delivers fast, manual-user interaction to perform scan placements as an alternative to automatic placements.

Easy collaboration and secure sharing of project data

FARO's hosting solution SCENE Webshare Cloud allows project partners for faster workflow due to easy data sharing and worldwide collaboration.

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

Once SCENE has prepared the scan data you can begin the evaluation and processing right away. From simple measuring to 3D visualization to meshing and 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 offers a comprehensive service to provide users with simple access to 3D documentation everytime, everywhere.

Benefits

▸ Supports FARO's X Series scanners

▸ Complete & efficient workflow from the original data acquisition to the finished project

▸ Automated scan processing results in minimal manual post-processing editing

▸ Intuitive interface

▸ New registration features provide even more reliable automatic scan placement results

▸ Interfaces to numerous industry-standard software products

SCENE

FARO

Specifications

Editing Scan Data

- Automatic search for reference spheres and black and white reference targets
- Target-less scan placement by TopView based registration or cloud-to-cloud registration methods. Alternatively, automatic identification of edges, corner points and fast plane detection
- 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. Now even faster through parallelisation
- Automatic colouring of the scans with the high-resolution colour photographs of the FARO colour option
- Colouring of scan points with the aid of imported colour photos
- Editing of mulitple scan at once 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

- Displaying of scan positions for viewpoint selection and changing to other scans by clicking
- 3D navigation supports 3Dconnexion Space Mouse devices
- Predefined views (front view, side view, top view)

Sharing

- Fully integrates with the SCENE WebShare Cloud service
- Automatically creates overview maps & panoramic scan images
- Enables to do simple measurements and to dadd infomation, documents, hyperlinks, categories and tags
- Intuitive web-based adminstration 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, Revit, Microstation, Geomagic, Polyworks, Rapidform, Pointools, Reconstructor, AVEVA, Intergraph, LFM, Pointsense, 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)
- 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 & Quick View
- Stereoscopic visualisation with suitable graphics board and 3D capable 3D device
- Colour scans are shown either in colour or black & white
- CAD object display
- Correspondence view to control scan placement on the screen
- Multi Clipping Boxes to control the visualisation in 3D View

System Requirements

- Microsoft Windows 7, 8, 8.1, 64-Bit
- At least 2 GHz (2.5 GHz Multi-Core-x64-processor recommended)
- At least 4GB RAM, better 8GB RAM or more
- Mouse with 2 buttons and scroll wheel
- Graphics card with 512MB and OpenGL 2.0 (NVIDIA cards recommended, Quadro class necessary for stereoscopic visualisation)
- Internet connection for licensing SCENE
- Solid State Drive for highest performance recommended

Areas of Application

- Process industry and power plant design
- Digital factory / virtual reality
- Architecture
- Civil engineering and plant design
- Surveying
- Archeology and cultural preservation
- Factory planning / automation technology
- Safety engineering and forensics
- Marketing, advertising and computer graphics

ISO 9001
BUREAU VERITAS
Certification

ANAB
ACCREDITED

GSA Contract Holder