

## The Most Complete Software Solution for Laser Scanning Applications



### Clipping Boxes in 3D

Intuitive new clipping boxes allow for detailed control about the visualization of Point Clouds in the 3D view. This provides an easy tool to focus on the area of interest.

### Automatic Fine Registration

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

### Integrated Project Database

This new addition seamlessly stores project information and a step-by-step history of each scanning project. Users may now return to any step in a scanning database, quickly and easily, no matter where they may be in their process.

### 3D Stereo Viewing

The 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.

### Orthophoto creation

This new feature supports the creation of scaled two dimensional orthophotos which can be used in almost every 2D and 3D CAD system.

## FARO® SCENE

FARO SCENE software is a comprehensive 3D point cloud processing and managing software tool for the professional user. It is specially designed to allow viewing, administration, and working with extensive 3D scan data obtained from high resolution 3D laser scanners like the FARO Laser Scanner Focus<sup>3D</sup>.

SCENE processes and manages scanned data easily and highly efficiently through a wide range of functions and tools, such as filtering, automatic object recognition, scan registration and positioning, as well as automatic scan colorization.

Once SCENE has prepared the scan data, you can commence evaluation and further processing right away. For this, it offers functions from simple measuring to 3D visualization, through to meshing and exporting your scan data into various point cloud and CAD formats. With SCENE WebShare, your scan projects can now be published on the Internet, and viewed with a standard Internet browser.

## Main Features

- ▶ Native 64-Bit software with multithreading
- ▶ Efficient workflow from the original data acquisition to the finished Project
- ▶ Minimal manual post-processing editing required thanks to automatic scan processing
- ▶ Simple and easy to learn
- ▶ New registration features provide even more reliable automatic scan placement results
- ▶ Interfaces to numerous industry-specific software products



## Specifications

### Editing Scan Data

- Automatic search for reference spheres and black and white reference targets
- Target-less scan placement by 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
- 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 supports 3Dconnexion Space Mouse devices
- 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 & scan files
- Protected by user right management of the server

### Areas of Application

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

### 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), export orthophotos (TIFF)
- Direct data transfer to: AutoCAD, Revit, Microstation, Geomagic, Polyworks, Rapidform, Pointools, Reconstructor, AVEVA, Intergraph, LFM, PointCab, Carlson and more than 100 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

### Views

- 3D view, planar view & quick view
- Stereoscopic visualisation with suitable graphics card and 3D capable 3D device
- Colour scans are shown either in black & white or colour
- CAD object display
- Correspondence view to arrange scan positions on the screen
- Clipping boxes to control the visualisation in 3D view

### Analysis

- Distance measurement
- Analysis of evenness

### System Requirements

- Microsoft Windows 7, VISTA or XP (Professional, SP2 or higher), 64-Bit with at least 2 Gigahertz
- Memory - 8GB
- Mouse - 2 buttons and a scroll wheel
- Graphics card with 512MB and OpenGL 2.0 (NVIDIA cards recommended, Quadro class necessary for stereoscopic visualisation)
- Internet connection for some features required
- Hard disk - Solid State

