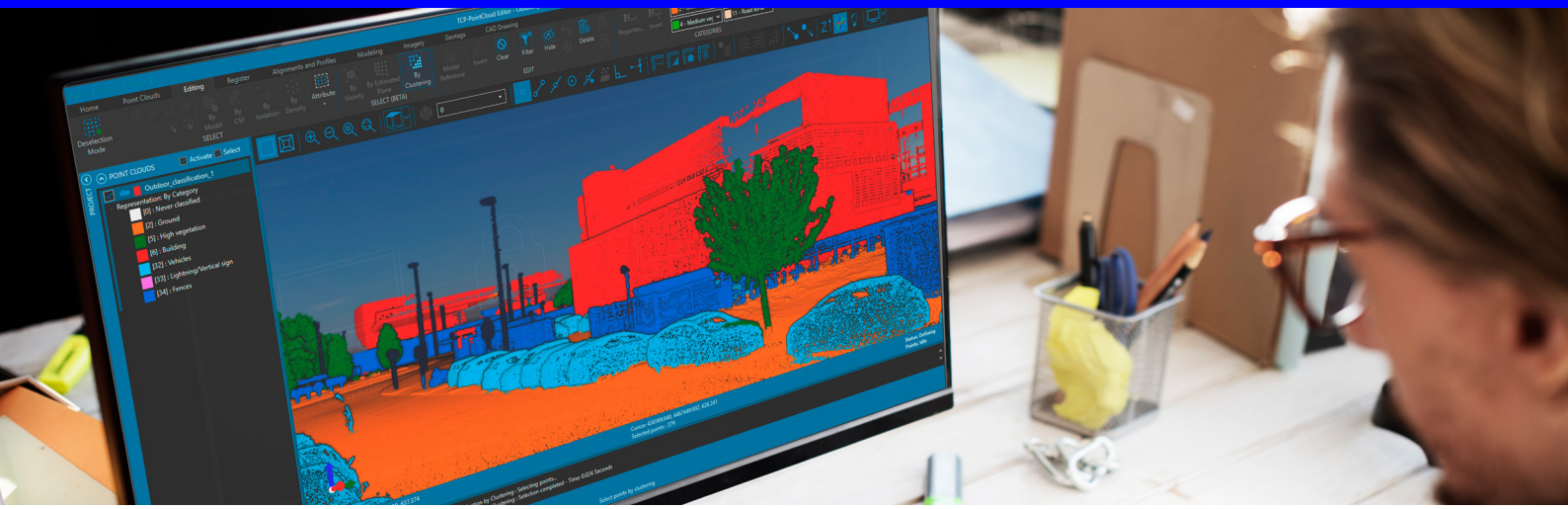
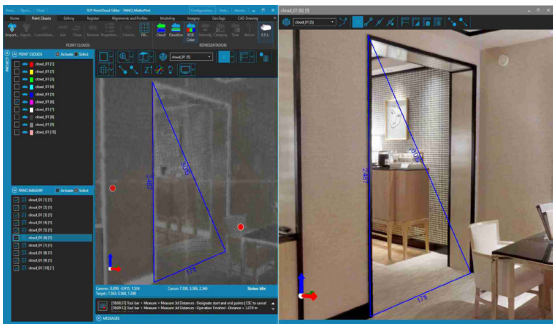
# tcp **PointCloud** Editor

**Advanced Point Cloud Processing Software with AI**

Process, model, and publish point clouds from fixed-scanner or SLAM, LiDAR, and photogrammetry

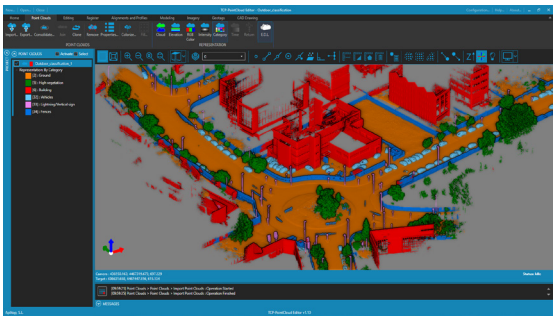


## Management of Points and Images



Point clouds and images in the most common formats on the market can be imported. Attributes such as color, intensity, time, category and returns are also converted. It is possible to measure, vectorize and draw accurately in 3D on the points or images, with its built-in CAD or synchronizing with an external one. It is also allowed to register several clouds through control points and apply coordinate transformations.

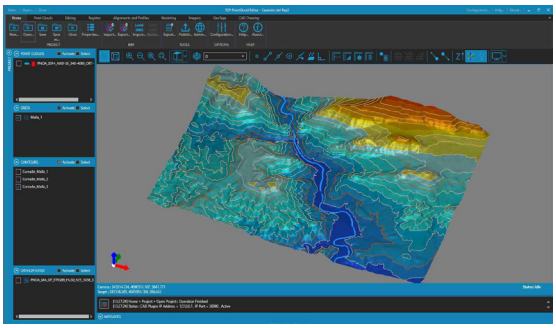
## Classification, Filtering, and Editing



The application includes Artificial Intelligence models trained to classify points in indoor and outdoor scenes, as well as advanced methods for segmentation and selection of planes, objects, terrain, etc.(1)

It also offers filtering tools for noise removal, selection by geometry or attributes, and manual editing.

## Digital Models



With the point cloud you can create a surface or mesh and generate the contour lines. The symbology of models can be based on their elevations, slopes, orientations, shading or orthophotos. Meshes can be edited interactively or apply smoothing, peak removal, etc. You can also import and export surfaces and meshes, as well as 3D models in various formats.

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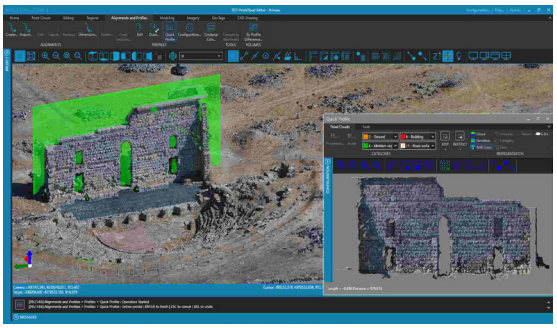
## Profiles and Volumes

The application has tools to calculate a quick profile from the point clouds or the model. It is also possible to obtain a longitudinal profile and cross-sections along an alignment and draw 3D polylines on the profile. Top view sections are especially useful for building projects.

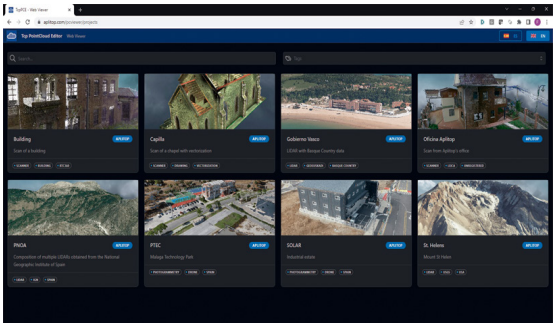
Volumes of stockpiles defined by a polyline or layer can be quickly calculated, as well as surfaces and cut and fill volumes between models.



## Sharing and Publishing

Data can be imported and exported in common industry formats and it is compatible with CAD, BIM, and GIS software.

Projects can be published to the cloud (2) and viewed with a web viewer on any device.



## Requirements (3)

| | |
|---|---|
| Point Clouds | Text (TXT/ XYZ), ARC/INFO (ASC), ASTM E57 (E57), FARO (FLS/FWS), LEICA (LGSx(4)/PTS/PTX/XCF), LIDAR (LAS/LAZ), MDT (MLL/MDE/PUN), Point Cloud Data (PCD), Polygon File Format (PLY), RECAP (RCS/RCP), RIEGL (RDBX) |
| Meshes and Surfaces | IFC, LandXML (XML), GeoTIFF (TIF), TcpMDT (MDE, MLL, SUP), Esri Ascii grid (ASC) |
| 3D Objects | IFC, FilmBox (FBX), Wavefront .OBJ (OBJ) |
| CAD Drawings | DXF, DWG |
| Orthophotos | GeoTIFF (TIF), ECW, JPEG (JPG), JPEG2000(JP2) |
| Operating System | Windows 10, 11 (64-bit) |
| Processor | Intel i5 or higher |
| Memory | Minimum 16Gb. For AI classification, the maximum number of points is proportional to the available memory (5) |
| Hard Disk | Recommended SSD |
| Graphics Card | Minimum resolution: 1280 x 1024 pixels, recommended: 1920 x 1080 pixels<br>Minimum dedicated video memory (VRAM): 2 GB, recommended: 4 GB or more<br>Support for OpenGL 4.0 or higher<br>For AI-based classification: NVIDIA GPU with CUDA 11.3 or higher and VRAM > 6 GB (5) |
| Communications | Internet for registration and license verification |
| Panoramic Views | E57(E57), LEICA(LGSx)(4), Images (JPG) + Images orientation file (TXT, CSV, . . .) |

(1) These features are provided as beta. See the license agreement for conditions.
(2)Only for users with active subscription
(3)This information is for guidance only. More detailed information about Tcp PointCloud Editor requirements on www.aplitop.com.
(4)Under Leica Geosystems license conditions.
(5) More details in https://lc.cx/zVcvhQ

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