Precision 3D Topo 2017 Lidar and Drone Survey Tool

Carlson Software's Precision 3D Topo 2017 is designed for use by surveyors, civil engineers and contractors. It allows users to import survey data, points, polylines, surfaces, point clouds, traditional Lidar data, aerial drone survey data and more from a wide variety of programs and entities to create usable 3D surfaces.

According to Nathan Crews, lead developer of Precision 3D P3D Topo, the solution enables much faster design and analysis in the 3D environment than the many step processes of the CAD world. Its 3D design tools save time and reduce the chance of errors, making it an obvious tool to improve the business bottom line.

Both easy-to-learn and -use, Carlson P3D Topo provides fast point cloud editing of

- .las
- .laz
- .ply
- .xyz
- .pts
- .e57 and
- .pcd files,

which allows users to reduce the size of the point cloud and still have an accurate surface, view large areas for environmental or overview needs, merge overlapping point clouds and crop to just the area desired, and import other spacial data such as DEM, GeoTiff, Jpeg2000, georeferenced jpg and shape files.

Real-time Surface Editing

Then, 3D surfaces can be created and merged from these imported files. P3D Topo allows for real-time surface editing with dynamic contours, faces, and slope arrows with drag and drop design. Unlimited undo and redo allow users to study their changes and make things perfect as they can view the 3D surface with user-controlled textures to quickly spot errors in the DTM.

Carlson P3D is recommended for contractors to perfect files for use for machine control – they can go in and create a design surface of the TIN and bring the TIN into P3D to get a simplified way to check to make sure that the machine control files are good.
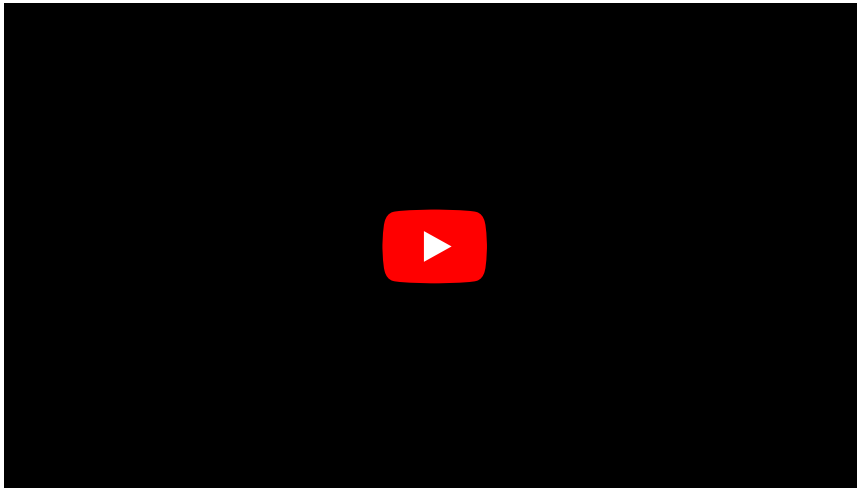
Editing tools include

- surface blending
- spike and dimple removal
- DTM vertex editing and
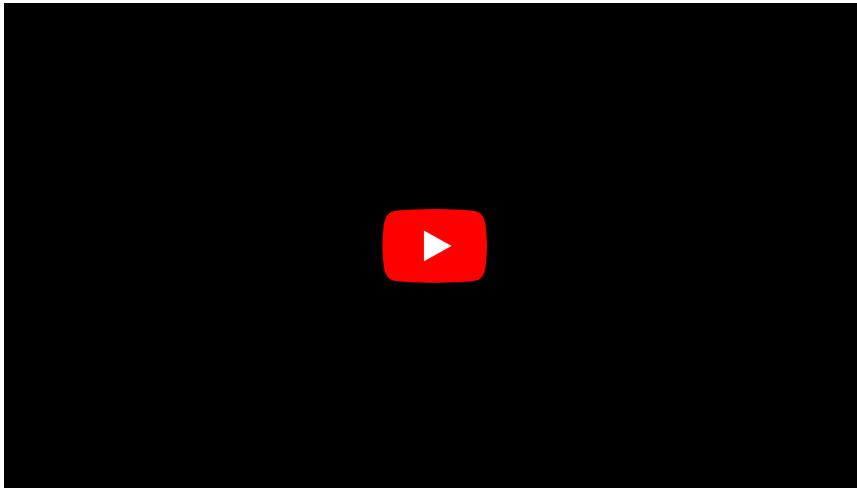- surface pad placement by defined polygon and
- sideslope conditions

Carlson P3D can also create presentations when the audience, such as a town council or a client, might not be able to read or understand construction drawings. The built-in LandXML 2.0 import/export gives users the ability to export the files to

- Civil 3D
- Esri geodatabase
- Trimble
- TTN
- Topcon
- TN3 and
- STL in addition to

Video: Bringing Design, Survey & GIS Data Together

Video: Create Surfaces from Multi-Gigabyte Point Clouds

https://www.gim-international.com/content/news/precision-3d-topo-2017-lidar-and-drone-survey-tool