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# **MicroSurvey CAD 2021**

## Features and Benefits

2 November 2020

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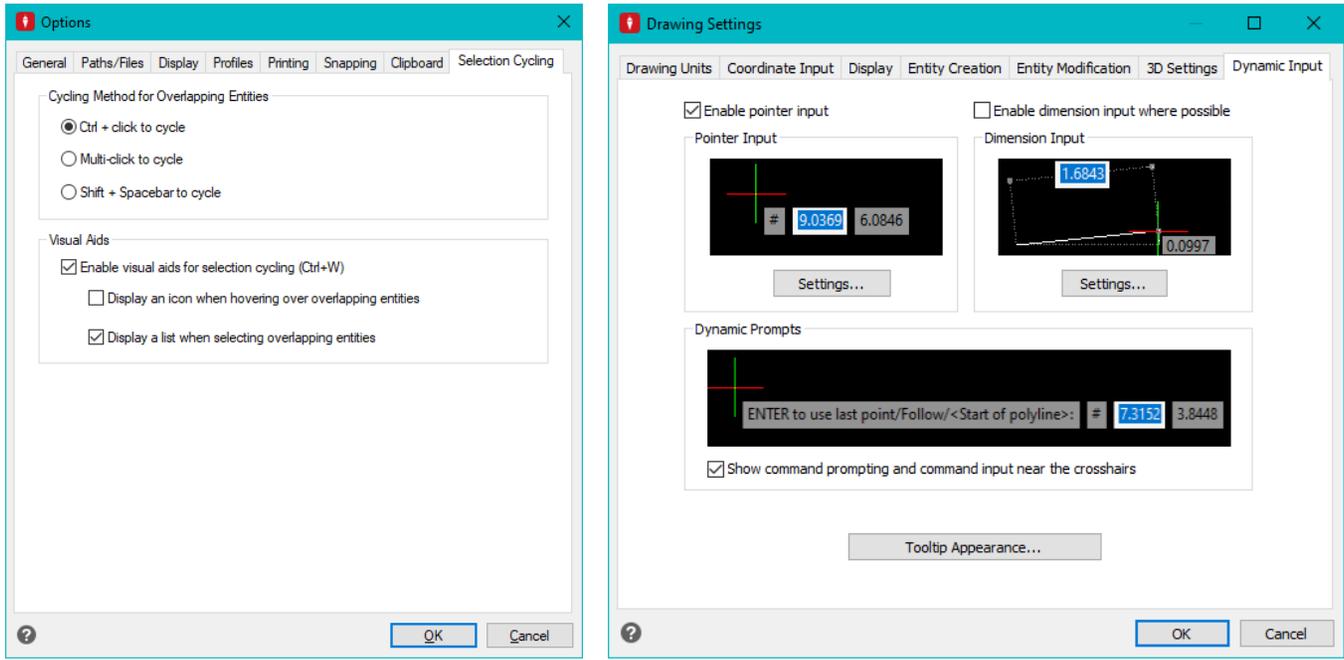
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# MicroSurvey CAD 2021

Release Date: November 10, 2020

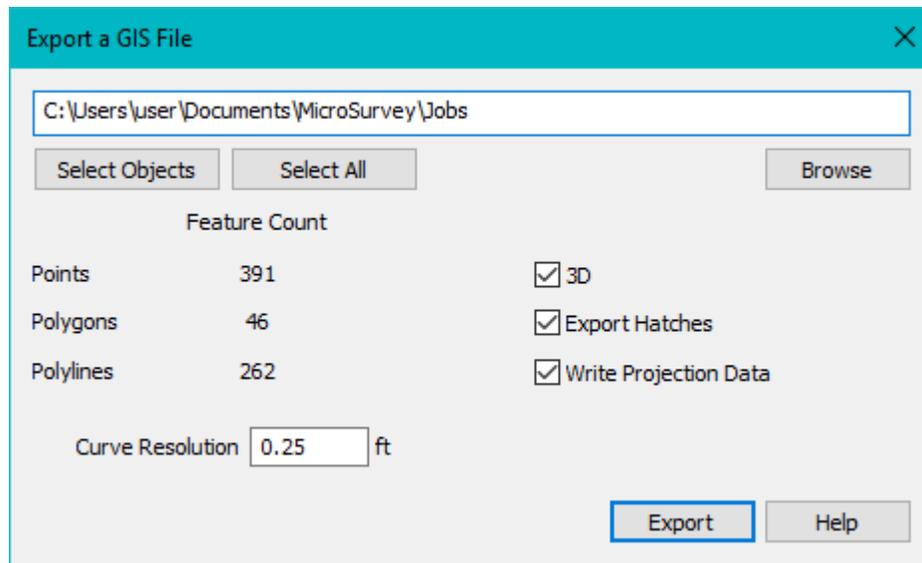
MicroSurvey CAD provides users with unencumbered survey drafting and calculation workflows, including COGO, point tools for gridline-based projects, traverse input and adjustment, misclosure reporting, common data collector support, 3D surface representation and computation, corridor design, point cloud management, and more. MicroSurvey CAD is perpetually licensed and is powered by IntelliCAD<sup>®</sup> which is compatible with AutoCAD<sup>®</sup> drawing files. With five available feature levels – Basic, Standard, Premium, Ultimate and Studio – MicroSurvey CAD gives users the choice between several tiers of features to ensure they are getting precisely the tools and price point they need.

## New: IntelliCAD 10.0



Feature	Benefit
AutoCAD 2018 .dwg files	Open, edit, and save AutoCAD 2018 format .dwg files for maximum compatibility with AutoCAD 2018-2021 products.
Graphics	New graphics device improves quality and compatibility with more graphics cards. New visual styles, materials, and lighting methods. Addition of background images is now possible, and transparencies have been improved.
User Interface	Enhanced selection cycling, new dynamic input, redesigned status bar, and more clean screen options. CUI migration from previous versions and customizations.
Multiline Text	Combine multiple paragraphs into a single paragraph, clear formatting from characters and paragraphs, paste text without formatting.
BIM	New roofs and beams objects, with mitered joints included. BIM explode allows exploding into meshes and polylines with BIM attributes intact. New options for section and elevation lines.
Print and Publish	.pc3 file customization, including margins and .pmp files. Layer state selection for each sheet when publishing.

## New: Shapefile Export



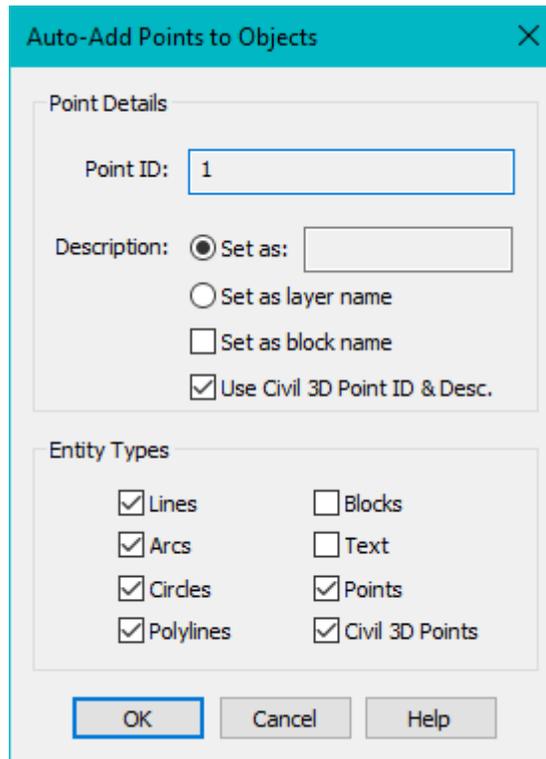
Feature	Benefit
Shapefile Export	When exporting, selected objects are automatically split into appropriate shapefiles in the designated export folder. Curves and circles have a set resolution to transform them to polylines and polygons. Shapefiles may be written as 2D or 3D. Hatches may be exported as polygons. .prj files may be created from the current project's coordinate system.
GIS Object and Attribute Export	GIS objects are exported, with some survey and CAD attributes added to the file, depending on object type.
Leica Captivate (DBX) Object and Attribute Export	Leica Captivate projects may be exported to shapefile, with all attributes collected from the field intact, and some survey and CAD attributes added, depending on object type.
FieldGenius Object and Attribute Export	MicroSurvey FieldGenius projects may be exported to shapefile, with all attributes collected from the field intact, and some survey and CAD attributes added, depending on object type.
CAD Object and Attribute Export	CAD objects may be exported to shapefile, with basic CAD and survey attributes added, depending on object type.

New: Export Attribute Table

	A	B	C	D	E	F	G	H	I	J	K
1	PointID	Northing	Easting	Elevation	Latitude	Longitude	Descriptic	Notes	Height	Canopy	Type
305	328	5250550	546592.6	451.585	47.4067	9.6176	Kerb				
306	329	5250551	546594.1	451.601	47.4067	9.6176	Kerb				
307	330	5250555	546609.5	451.6	47.4068	9.6178	Tree		23.2		kaki
308	331	5250583	546688.8	451.765	47.407	9.6188	Kerb				
309	332	5250583	546688.8	451.767	47.407	9.6188	Kerb				
310	333	5250584	546689.4	451.774	47.407	9.6188	Kerb				
311	334	5250584	546690	451.775	47.407	9.6189	Kerb				
312	335	5250583	546690	451.768	47.407	9.6189	Kerb				
313	336	5250582	546689.5	451.759	47.407	9.6188	Kerb				
314	337	5250583	546688.9	451.775	47.407	9.6188	Kerb				
315	338	5250583	546688.9	451.77	47.407	9.6188	Kerb				
316	339	5250544	546721.2	452.29	47.4067	9.6193	Centre Line				
317	1001	5250582	546691.2	451.778	47.407	9.6189	Benchmark				
318	1002	5250582	546685	451.733	47.407	9.6188	Benchmark				

Feature	Benefit
Attribute Table	Quickly export a selection of points to .csv with all available GIS, DBX, or FieldGenius attributes. Open the file to easily sort and review all attributes.

## Enhanced: Auto Add Points to Objects



Feature	Benefit
Civil 3D COGO Point Support	Quickly add MicroSurvey smart points at the location of Civil 3D COGO points in a project.
Use COGO Point ID and Description	Use the Civil 3D COGO point ID and description to populate these fields on the new MicroSurvey smart point created at this location.

## New: Simple Point Cloud Import



Feature	Benefit
Simple Point Cloud Import	Import .las, .e57, and .pts files directly into MicroSurvey CAD. This feature requires a license for Leica Cyclone Publisher or Leica Jetstream Publisher.
Point Cloud Engine	Updated to Leica EpcA 2020.1.0.836, supporting Leica Cyclone 2020.1, Leica Jetstream 2020.1, and Leica Cyclone REGISTER 360 family 2020.1. Older versions are still supported.

### Fixed: COGO

Feature	Benefit
COGO	Computing a curve containing a point number with 10 or more digits would cause a crash.

### Fixed: SCALEVAL

Feature	Benefit
SCALEVAL	Providing a custom scale with a decimal value would ignore the decimal places and draw incorrect labels.

### Fixed: Lot Closure

Feature	Benefit
Lot Closure	Manual entry in a South Azimuth project in Lot Closure would not work correctly and would treat values as North Azimuth.

### Fixed: Copy/Align Between Projects

Feature	Benefit
MSCOPY	The block inserted into the second drawing was not automatically being exploded on insertion, and would be overwritten if the command was run a second time.
MSALIGN	The block inserted into the second drawing was not automatically being exploded on insertion, and would be overwritten if the command was run a second time.

### Fixed: FieldGenius Export

Feature	Benefit
FieldGenius Export	If an on-curve label was included in the selection for export, the .dxf file would not be created.