Carlson Tip of the Day... Virtually "printing" to PDF, DWF, JPG and PNG files



"I'VE LOST THE PLOT"

If you've recently switched from an AutoCAD-based program to Carlson with IntelliCAD, one thing you may miss is having the ability to virtually "plot" your drawings to PDF, DWF, JPG and PNG files instead of to paper. This functionality is not included in IntelliCAD and, from what I

understand, including it would have significantly increased the price of each license so the developers decided to leave it out and allow users to purchase add-on programs if needed the functionality.

So, if you need to print to one of these formats, how can you do it?

If you primarily need to create PDF files and don't mind spending some kinda-big bucks, you can purchase a program such as **Adobe Acrobat**. Acrobat is a standalone program but it also installs as a virtual printer into Windows-based programs like Carlson, AutoCAD and even Microsoft Windows and Outlook.

If you need to print to PDF, you could save some money and consider other after-market programs such as **CutePDF** or **PDF995** (or many others) that essentially serve the same purpose — installing as a PDF printer into Windows-based programs. Most of these programs have a free version but there's usually a catch such as a watermark on each PDF that says something like, "This

document printed with …". If you purchase one of their other products, the watermark goes away. I currently use **Adobe Acrobat** but used **Win2PDF** for years.

If you need to print to PDF but also to other formats such as PNG, JPG and TIF, you may want to take a look at **PDF Creator** from SourceForge. I know this is the utility recommended by several of the tech support team at Carlson but I haven't used it myself.

I am not sure if the other programs that I listed above (PDF995, CutePDF and Win2PDF) allow you to "print" to formats other than PDF and I can't tell from their websites but, if anyone knows and wouldn't mind passing that information along to me, I'll update this post with the additional information.

As mentioned above, having these PDF-creating programs installed like a printer directly in your Carlson programs makes them very convenient and handy — but there is most likely a cost associated with them all.

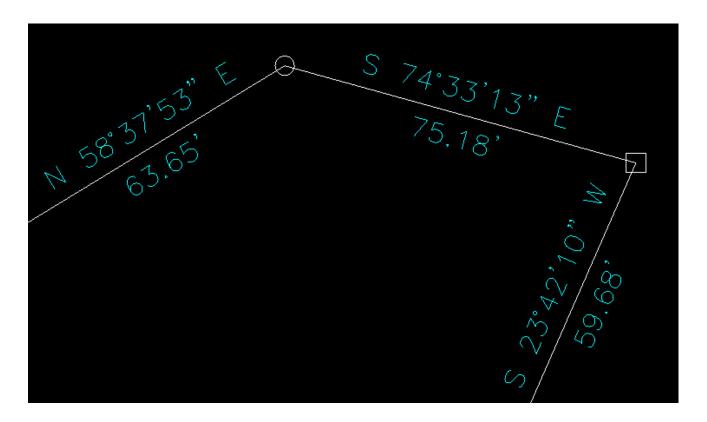
My final recommendation is free, but a little less convenient — it's Autodesk's DWG TrueView (this link changes all the time — apologies in advance). It's free, but it allows you to use all the virtual printers included in AutoCAD such as DWGtoPDF, DWGtoJPG, DWGtoPNG and DWF ePlot. In addition, TrueView also includes the oh-so-cool DWG TrueConvert program that enables you to convert one or more DWG files from any version to pretty much any other version. The downside to using this program is that it's a standalone program so you must save your drawing and then open again in TrueView in order to plot.

Happy Plotting!

Carlson Tip of the Day... Wiped Out Property Corner Symbols

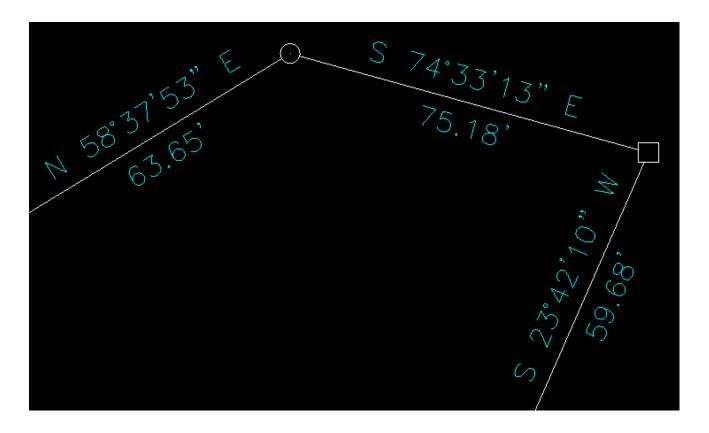
I get this question quite a lot and thought it would be a good topic for Tips of the day...

Problem: Lines or polylines of a boundary show up inside your open property corner symbols. See the image below for an example:



The additional problem is that, if you trim the lines inside the symbols to make it look cleaner, you're actually modifying the length of property lines so the distances from corner-to-corner are no longer accurate.

Here's an alternative: You can download a modified set of Carlson's point symbols that include a "wipeout" entity that hides the lines behind/underneath the open symbols instead of trimming them and changing the length of the lines. Using the new set of symbols, the same property lines and symbols look like those in the image below (notice that the distances of linework are unchanged):



How to do this?

Here is the knowledge base article on Carlson's website that includes a ZIP file with the new symbol DWG files and instructions on where the files must be saved.

Carlson Survey 2015 with Embedded AutoCAD has been released



MAYSVILLE, Ky., U.S.A. (August 13, 2014)— Carlson Survey 2015 OEM is an easy-to-use, intuitive software. Its newest update provides upgrades to the 3D viewer that allows users to apply textures, animation, surface updates, even record movies and import Sketch-Up objects. The software's popular field-to-finish feature has also been enhanced for 2015 to allow surveyors to do coding on pipe networks that then allows them to build a network of pipes.

Together with Carlson Survey 2015 version, which works on AutoCAD® versions 2007 to 2015 and comes with the improved

IntelliCAD® 8.0 built-in, Carlson Survey OEM is the number one office software solution for surveyors in the United States.

Read the rest of the press release

Request a 30-day trial

Request a live demonstration

Request a custom proposal

See these products in our Online Store

Carlson Tip of the Day... List of improvements in Carlson 2015 programs



General

- AutoCAD 2015 Added support for this new version.
- IntelliCAD 8.0 Direct support for 2013 DWG file format. Added 64-bit version. New features including support for dynamic entity reactors, layer states and improved ddvpoint interface.
- Google Earth Added support for exporting 3D Faces.
- Import 3D View Model File New command to create drawing entities from a 3D model file.
- Export 3D View Model File New command to create a 3D model file from selected drawing entities.
- 3D Model Library New command to prepare the 3D models to use in the 3D Viewer commands.
- Toolbar Manager New command to save status of toolbars and allow migrating toolbar settings between versions.
- File Selection Added list of subfolders within current folder and button to move up a folder level. Added option for warning when selecting a data file that is not within the current project folders.
- Textures Added 40 new textures for 3D viewing.

- Settings File Manager Added function to compare two settings files and report differences.
- Leader With Text Added option for horizontal tick and option to create with Mtext.
- Join Nearest Added filters for common colors and linetypes.
- Join Polyline By Trace New command to join linework into a polyline with prompts at intersections

Survey Commands

- Field To Finish Added special pipe feature coding with ability to create pipe network (.sew) file. For tree feature coding, added option for drip as diameter instead of radius, added option for solid circle for trunk and option for relative tree size for the symbols. Added control for separate layers for the point attribute block and point node. Added new AFIT special code for making a curve tangent through a series of three curve points. Added method for dynamic templates with variable horizontal and vertical offsets by using the OH and OV special codes. Added settings file default distinct point layer prefix/suffix. Added separate text size settings for attribute text labels and point block attributes.
- SurvNET Added error report for individiaul observations to track down blunders. Added import for TDS GPS vectors.
- Edit Process Level Data Added support for processing with zero horizontal distances.
- Carlson Cloud New command for communicating with SurvCE for sending messages, data files and crew locations.
- Report Distance Scale Added methods for grid/ground factors on-the-fly in addition to a fixed factor.
- 3D Transformations Added 3D coordinate transformations.

- Point Group Manager Added method to create point group by offset distance from alignment polyline.
- Move Point Attributes With Leader Added controls for attribute order and ability for curved leaders.
- Import Text/ASCII File Added method import from text with fixed widths and method to use inclusion/exclusion perimeters.
- Legal Description Added method to report station/offset using a reference centerline. Added method for reporting with geodetic mean angle and geodetic distances.
- Cut Sheet Added method to get station/offset from the point description coding. Added field for design point description.
- Offset Points By Interval New command to create offset points along an alignment.
- Label Coordinates Added options to include a description, to use Mtext, to draw the labels at an angle and option for mleader.
- Draw Legend Added method to put each symbol or a specific layer.

Civil Commands

■ Draw Profile — For paper space profiles, added method to use an existing layout as a reference template for the new layout. For the horizontal label box, added option for horizontal text in addition to vertical. For pipe profiles, added settings to label inverts by left/right order, added option to draw cutoff style pipe extensions, added option to create labels as MText, added option for flow arrow in middle of pipe, new option for labels above the pipes, added justification settings per label, added setting for separate layer for pipe thickness than pipe

profile and option to connect rims with a polyline for a simple surface profile. For Label Line/Point crossings, added option to label elevations at crossings, added method for labeling GIS attributes, added method to label points of selected descriptions within offset tolerance, added option to label CL deflections and added option to avoid label overlaps. Added special CL stations for break point station/elevation labels plus new prefix/suffix settings. For EOP profiles, added new break point and EOP leader style to the start of the labels, added option to label ground profile on road EOP profiles and added controls to select which profiles are EOP, road and ground. For the manhole name within circle option, added setting to put the name and number on separate lines and added the option to auto shift the labels to avoid overlaps.

- Draw Sections Added option to label cut/fill volumes per station. Added separate settings for pipe crossing layers for decimals on pipe size, offset and elevation.
- Draw Plan View Sheets Added option to set station range to draw.
- Input-Edit Centerline Added Fit Curve method to apply speed table to all PIs in centerline.
- Input-Edit Profile Added method to apply speed table for vertical curve lengths to all PIs in profile.
- Label Station/Offset Added method to use a TIN or grid surface for the elevation reference.
- Draw Lot Setback Added method for separate corner side setback amount.
- Move Spot Elevations New command to move spot labels and update elevation to new position on reference surface.
- Line Of Sight Viewshed New command to calculate line-of-sight from a point and eye height on a surface.
- Draw Spot Elevations Added option for label only and

- option to pick an entity instead of a point.
- Cut/Fill Labels For points method, added more options like separate layers for existing and design. For the TIN method, added options for deep cut/fill labels and option for marker symbol.
- Smooth Polylines Added method to smooth polyline between selected points.
- Triangulation File Utilities Added function to color TIN within inclusion perimeter.
- Road Stripe Library New command to setup named sets of road stripes with offsets, colors and styles.
- Draw Road Stripes New command to draw linework for road stripes.
- Linear 3D Object Polylines New set of commands to manage alignment polylines for 3D Viewer commands for linear 3D features such as fences or guard rails.
- Label Profile On Centerline Added label position by left/right in addition to above/below. Added prefix/suffix and station interval settings.
- Offset 3D Polyline By Grade Table New command to offset a 3D polyline using the distances and slopes from a template grade table.
- Road Network Added settings for station range to process for each road.
- Mass Haul Analysis For borrow pits, added offset from road to account for offset travel time.
- Sections From 3D Polylines New command to create cross sections from 3D polylines.
- Surface 3D Viewer Added option to show contours. Added functions to edit triangulation by swapping edges, adding breaklines, removing points, removing triangles or editing point elevations.
- Surface 3D Flyover Surface model is kept in sync with any edits in CAD so that the 3D view is automatically

updated. Added method to add models to the scene by screen picking plus the ability to pick models in the scene to edit properties (location, rotation, scale). Added function to record a movie. Added method to map textures by color and method to scale textures. Added run view mode for detached from moving vehicle. Added option to show contours. In pick mode, display real-time coordinate and elevation for mouse position on surface.

■ Motion 3D Viewer — New command to assign path polylines with speeds to 3D models and the camera.

Hydrology Commands

- Design Detention Pond New command with all steps for detention pond design plus support for multiple rain events.
- Pipe Culvert Design Added method for tailwater by channel or discharge rating and added overtopping analysis.
- SCS Rainfall Library New command to define an SCS data reference library for rain events.
- Rational Rainfall Library Added import of IDF tables from comma separated text files.
- Collision Conflict Check Added support for checking unlimited pipe networks and using the report formatter.
- Sewer Network Design Added option for junction loss for pipe connections including laterals. Added method for tailwater at each outlet. New method to set symbol rotation by screen pick. Added graphic preview during .sew file selection.
- Lateral Design Allow for multiple lateral connections at manholes.
- Identify Pipe Polylines New command to ID or list pipe

- data assigned to 3D polylines.
- Import Network From 3D Polylines Added method to control order of names by design order, elevation or polyline direction. Added method to set rim elevation by depth.

GIS Commands

■ Label GIS Point Data — New command to create text labels or block with attributes for selected GIS attributes.

Field Commands

■ Drivers: Upgraded many drivers from the SurvCE updates.

Geology Commands

- Define Mining Model Added Mine Model collection of surfaces for modeling only mineable strata already adjusted for recovery, roof/floor gain/loss and minimum parting. Renamed "Pre-Calc Model" to "Geologic Model".
- Geologic To Mining Model New command to adjust a Geologic Model to make a Mining Model.
- Drillhole Database Added support for MS Access .accdb format.
- DHDB Added drillhole database import/export to DHDB format.
- Import From Coal Section New command to create pit/channel samples from coal sections.
- Configure Section Info Added method to set folder for section drawing to allow storing the section info on a server.

- Import/Export Coal Sections From Text File New commands to import/export coal sections from/to text files.
- Grid Files Added option to store .grd files as binary to improve read/write speed.
- Grid File Utilities Added method to call other GFU macros and pass parameters from another macro. Added sin() and cos() functions for grid math. New dialog interface including dialog for creating IF statements. Added 3D window to show grid while modified.
- Draw Geologic Column Added method to draw in 3D with strata sections sized based on grade parameters. Also added 3D draw method as 3D lines. Added method to label grade names and added separate layer settings for attribute labels. For labels in 3D, added options for rotate labels vertical and draw label leaders. 3D Viewer Window now shows 3D text generated by Geologic Column.
- Drillhole Report Added method to report grades for each strata.
- Drillhole Core Images Added method to draw the report to the drawing and added option for labeling depth or elevation.
- Draw eLog New command to draw graph of selected attributes from an eLog LAS file.
- Create Drillhole from eLog New command to create drillholes with strata classification using the eLog paramters.
- Trim Isopach Within Fault Zone New command to isopach elevations and break contours at fault zones.
- Draw Fault Labels New command to label fault deltas.
- Draw Fault Symbols New command to draw +/- symbols for faults.
- Apply Faults To Grid Added method to handle thrust faults. Added method for processing multiple grids at a time.

- Surface Mine Reserves Added Adjust Pits Manager for adjusting pit perimeters with real-time quantity updates.
- Draw Grade Boundary New command to draw boundary polylines around area with specified grade.
- Block Model Statistics Added min/max/average elevation and depth to the report. Added level # to report name.

Surface/Underground Mining Commands

- Ribbon Added a mining ribbon for running with AutoCAD 2012 and higher.
- Import Pit Points Added method for user-defined input file formats.
- Import Polyline File Added method to draw 3D polylines from sequence of top/bottom points for blast holes.
- Label Property Lines Added option to label owner or id labels and added setting for label layer.
- Surface Equipment Timing Improved calculation speed by 25%. Added method to use table of production targets with variable equipment usage to adjust to meet the targets.
- Underground Timing Added option for transparent hatching and for buffer hatching.
- Dozer Push Added support for push cut area by closed polyline. Added method for reporting single, average push. Added option to keep existing polylines, to draw centroid symbol and to label total push distance. Added settings for label text size, layer, style, decimals and prefixes.
- Regrade Backfill Added bench option to cross section regrade design.
- Range Diagram Added dimensions for all angles and distances. Added options to output final profile and to output parameters to sequence file.
- Design Ramp Profile New command to create a ramp profile between two surfaces.
- Ramp Bench Polyline Generator New command to design

- bench pits using polylines.
- Edit Dragline Sequence New command to edit the steps for pit cuts.
- Make Solid From Points New command to create a solid model from a cloud of points.
- View Solid New command to view a solid model in the 3D viewer.
- Draw 3D Mine Model Added method to make model from coal sections and pillar/perimeter polylines.
- View 3D Surface History Added support for displaying TINs.

Construction Commands

- Define Layer Target/Material/Subgrade Added support for up to 7 subgrades.
- Color TIN By Layer New command to color the surface TIN using the color assignments in Define Layer Target.
- 3D Drive Simulation Added method to apply textures to design layers in addition to colors for viewing in 3D.
- Tag Segments To Skip Linear New command to tag polyline segments to skip for material linear quantities.

CADNet Commands

- Merge Raster Files Added method to automatically select control points.
- Import SketchUp File To Drawing New command to create drawing entities from a SketchUp file.
- Import PDF File New import engine with ability to use layers for PDFs with layers.
- Drawing to 3D PDF New command to create a 3D PDF from

- selected drawing entities.
- 3D Viewer to 3D PDF New command to create a 3D PDF from a 3DX file from the 3D Viewers.

Point Cloud Commands

- Faro Added direct import method uses Faro toolkit.
- E57 Added support for importing industry standard e57 format.
- PLY Added import for PLY format.
- LAS Added method to use LAS classification for coloring and selection.

Data Conversions

- 12D Added import and export for pipe networks plus support for some more entity types.
- Canada Added support for NTv2-NAD27-83
- Geoids Added support for Canada CGG2010 and CGG2013n83, Sweden 08_rh2000, Sweden 08_rh70, Poland 2011 and Georgia 2012
- Iowa Added projections for Iowa Regional Coordinate System
- Ireland Added national grid projection.
- KOF Added function to draw linework from KOF files.
- MDL Added support for binary data within FSC file.
- Norway Added support for N2000 format.
- SketchUp Added import for SketchUp models in Surface 3D FlyOver
- SurvCE Added import for points with photos in Google KML format as created by SurvCE

Carlson 2015 Has Been Released!

Carlson posted the 2015 versions of their for CAD (IntelliCAD or AutoCAD 2004-2015) on Tuesday afternoon... you can **Download Carlson 2015 products with IntelliCAD here**. The 2015 versions of embedded AutoCAD products (Survey and Takeoff OEM) will be released later this summer.

If your maintenance contract is current or you have purchased 2014 products within the past 90 days, you're automatically eligible for an upgrade to 2015. **Click here** to look up your 2015 serial number using your 2014 serial number.

Click here to review the list of all improvements

Click here to read about updates in Carlson Survey 2015

Click here to read about updates in Carlson Civil and Carlson Hydrology 2015

Click here to read about updates in Carlson Takeoff Suite 2015 — including Construction, CADNet, Trench and GeoTech

There are price increases with 2015 products. Click one of these links if you would like to **Request a Demonstration** or **Request a Custom Proposal** to upgrade to 2015 or purchase new software.

Please follow this link to see if you're eligible for our monthly webinars including CAD and Carlson Tips & Tricks, Intro

to Survey and GIS and What's New in Carlson 2015.

New Update for Carlson Survey 2014 with Embedded AutoCAD (OEM) is available

Carlson Software posted a new build with updates to Survey 2014 with embedded AutoCAD on 7/14/2014. The latest build can be downloaded here: **Carlson Software Downloads Page**.

To find your current "build", open your Carlson desktop software and go to the Help menu and click About Carlson. The current build is listed on the top line in the text window and corresponds to the date it was posted. For instance, the build shown below — 140211 — was released on Feb 11, 2014.

Carlson 2014, build 140211
Copyright (c) 1989-2013 Carlson Software.
All Rights Reserved.
Installation and update history:

Robert Green's "An Open Letter to CAD Software Companies" and a Response from IntelliCAD

If you're one of the many folks out there who don't believe that the developers of your CAD software are listening to you... you're not alone and you should take the time to read Robert Green's "An Open Letter to CAD Software Companies" in Cadalyst. And, as to the part about feeling like you're all alone, here is Robert's follow up describing the overwhelming response to his open letter.

I receive email versions of **Robert's bi-weekly CAD Manager newsletters** but had fallen behind and didn't see the original post until yesterday. If I'd read it when it was first released, my response would have been, "Amen brother!".

Just yesterday morning I had a conversation with a colleague whose company does Landscape Architecture, Civil Design and Land Planning. They are fully invested in Civil 3d (including much blood, sweat and tears in addition to money, money, money) but they're as productive as any company I know of with the program. Their main complaint? They feel like Autodesk is pushing them toward Revit and they have no need for the software.

In my own experience, I see the push toward NavisWorks and 3ds Max. I had two seats of Civil 3d until I downgraded one of them to Map last year — only to be "rewarded" with an upgrade to Infrastructure Design Suite (and more money for Subscription) this year. This was supposedly something that owners of a Civil 3d and a Map license were able to opt-in to. I didn't opt-in. So, it took me several days to get them to un-opt-me-in and revert my licenses back to what I'd purchased. Is it any wonder

I'm suspicious of any "bonuses" that come my way **because of** this?

I don't know how much Robert intended to point the finger at Autodesk in the original column but, with my experiences described above, the references to BIM (which we've long argued was a way for Autodesk to avoid talking about Esri and GIS) and Cloud and other buzzwords, that's certainly the connection I made in my mind.

Because the Carlson Software I sell now includes IntelliCAD, an alternative to AutoCAD, I passed links to the open letter and the responses to a few folks to get their reaction. Dave Lorenzo, the Development Director for the ITC (IntelliCAD Technology Consortium) took the feedback to heart and, considering the interest in the future of IntelliCAD the past few years, I asked his permission to post his response. I very much appreciate his willingness to let me do so...

I agree that the features mentioned are focused on AutoCAD, but the article is not so much about features as it's really about the user's perception if someone is listening. While Autodesk is moving too fast providing features that users don't want or need, we are not moving fast enough to provide the basic productivity features users are requesting, so it appears we both are not listening to our users. That is the perception we need to fix too.

Our next release has several user requested productivity features and I hope our users will see we are listening. Actually we have always been listening but our rewrite of IntelliCAD 7 took so many resources that there was little time for new features — that situation is finally changing. I believe that there are a lot of unhappy AutoCAD users who want IntelliCAD to be successful, we just need to listen and add

those remaining productivity features that are keeping them from making the switch.

Carlson Software Training — New and Improved in 2014

With the new year upon us I'm announcing some exciting new changes to my training policy and offerings...

First, the bad news: My hourly rates for custom online training will be going up on January 1. If you've already scheduled training at the old rate, this doesn't apply to you. Email me to request new rates.

Second, the good news: Anyone who purchases software from me will receive discounted training rates. Like I said, **email me to request the new rates**.

Third, the great news: Starting January 15th I will be conducting a series of monthly webinars that you'll be eligible to attend if you purchased software from me in the preceding 12 months. These 1-2 hour sessions are something new I'm trying for 2014 as a way to provide my customers between 18 and 24 hours of training over 12 months.

In January, March and other odd-numbered months, we will spend approximately 2-hours introducing you to Carlson Software. These will be repeat sessions meant to accommodate new users coming on through the year. These sessions will cover settings & setup (using the IntelliCAD/for AutoCAD version), importing points,

overview of Field to Finish, surface creation, deed entry and annotation, centerline definition and stationing and creating profiles. There will be time for questions at the end.

In February, April and other even-numbered months, we will hold 1-2 hour training sessions on other, specific features in Carlson Software. Some topics we have planned are for survey traverse adjustment, surface modeling and drafting of pipes and structures in hydrology. These sessions will also be interactive and you'll have an opportunity to ask questions.

The fine print: There will be a limited number of "seats" available for the sessions (limits of the technology). If we start bumping up against the limit of attendees, only one person per company will be able to attend each session. If we have plenty of seats available, that won't be an issue.

You can pre-register for the January, February and March 2014 events here

The topics, date and time for future sessions will be posted later. After pre-registering, we will confirm your recent purchase and, if you are eligible to attend, I will send you the meeting login information.

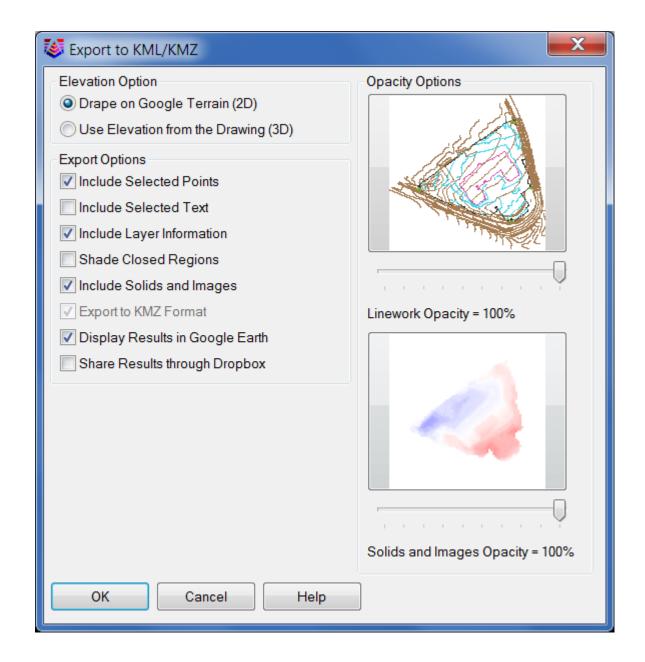
Did You Know... About Carlson's

Export to KMZ (Google Earth) Command?

Carlson Software gives you the ability to export drawing entities directly to the Google Earth application or, alternatively, to a .kml or .kmz file that can be opened in Google Earth. At this time Carlson supports the export of points, polylines, text, solids, images, lines and arcs to Google Earth or .kml/.kmz files.

In Carlson 2014 they have also included the option of sending the Google Earth file directly to a Dropbox account for sharing with clients or other project team members.

The Export to Google Earth command is found in the File menu in all Carlson desktop programs.



End of Year Workshops — New format for 2013

After several years of the same format for our end of year workshops, we've changed it up a bit this year.

For the first time, we will have one full day in both Statesville and Raleigh NC dedicated to Surveying and GIS topics and an additional day focusing on Civil and Hydrology topics. Each day will also include a unique presentation of the popular CAD Tips & Tricks session that, hopefully, sends everyone home with something they can use the next day.

In addition, we're conducting 1/2-day events in Wilmington and Hendersonville (Asheville area) covering a variety of topics.

Each full-day class will give NC licensed surveyors and engineers 8 PDH credits and the 1/2 day events are eligible for 4 PDH credits. All events include lunch, software pricing specials and giveaways.

November 11th, Hendersonville NC — \$49 for 4 PDH credits **Download Hendersonville (Asheville) Announcement Here Register for Hendersonville (Asheville) Workshop Here**

November 12th, Survey & GIS Workshop, Statesville NC — \$99 for 8 PDH credits

Download Statesville Survey/GIS Announcement Here Register for Statesville Survey/GIS Workshop Here

November 13th, Civil & Hydrology Workshop, Statesville NC — \$99 for 8 PDH credits

Download Statesville Civil/Hydro Announcement Here Register for Statesville Civil/Hydro Workshop Here

December 9th, Wilmington NC — \$49 for 4 PDH credits

Download Wilmington Announcement Here

Register for Wilmington Workshop Here

December 11th, Survey & GIS Workshop, Raleigh NC — \$99 for 8 PDH credits

(\$89 registration thru 10/31/2013)

Download Raleigh Survey/GIS Announcement Here Register for Raleigh Survey/GIS Workshop Here

December 12th, Civil & Hydrology Workshop, Raleigh NC - \$99 for 8 PDH credits

(\$89 registration thru 10/31/2013)

Download Raleigh Civil/Hydro Announcement Here Register for Raleigh Civil/Hydro Workshop Here