Carlson Software End of Year Specials

November 4, 2012
Last week Carlson announced their end-of-year specials for 2012. This year's offerings include steep discounts on Carlson Civil Suite, Survey with embedded AutoCAD, Takeoff and Survey.

All discounts will end at noon on 12/31/2012.

As with all of my pricing, I'm prohibited from advertising my actual lowest prices **so call or email for Coupon Codes** for further discounts.

$2,795 for Carlson Civil Suite (includes one year of maintenance) – Retail price is $3,954.50

$2,295 for Carlson Survey 2013 with embedded AutoCAD – Retail price is $2,995

$5,000 for Carlson Takeoff 2013 with IntelliCAD – Retail

price is $9,000

$6,500 for Carlson Takeoff T6 (2013) with embedded AutoCAD – Retail price is $9,000

$875 for Carlson Survey 2013 with IntelliCAD and one-year Maintenance for anyone who already owns SurvCE, Fast Survey or Triton. A valid serial number is required prior to purchase. Retail price is $1,754.50.

Carlson Software Self-Study Manuals

November 4, 2012
In order to reduce the amount of time I've been spending in online training, I'd been considering putting together

Carlson Software training manuals. But, in order to truly offset the majority of the training I do, the first book had to be more than a standard software training manual that covers a broad range of topics.

So, I've just completed and started shipping the first 2 books that I'm calling **Self-Study Manuals**. They will be a great substitute for training for beginning users of Carlson Software and also as "fill-in-the-blanks" training for more experienced users. The lessons are very detailed, down to every pick and click. You do not even need to know AutoCAD or IntelliCAD to complete them. I think you will find them very beneficial if you're new to Carlson or even to help bring your field crew up to speed as office help.

At this time, there are 3 lessons available: **Carlson Configuration and CAD Settings** (about 0.5 hours of instruction), **Getting Started with Points for Survey or Civil** (about 4.5 hours of instruction) and **Field to Finish** (about 6.5 hours of instruction). I've combined the **Carlson Configuration and CAD Settings** **and** **Getting Started with Points for Survey or Civil** into the first book and the **Field to Finish** is a separate book. Additional books are on the

way… some will be detailed, self-study manuals and others won't. I will be focusing on the ones that most closely follow the demand for training.

The books can be purchased separately or as a **bundle from my online store**. Introductory pricing is available through the end of 2012.

View a sample of the Getting Started with Point Self-Study Manual here

View a sample of the Field to Finish Self-Study Manual here

Carlson Configuration and Settings

Approximately 0.5 hours of instruction

When first launching Carlson Software, you can make changes to the configuration and options that will apply to the current and future drawing sessions. Some of the settings and options are specific to Carlson Software and some are

specific to AutoCAD® or IntelliCAD®.

Part 1 of this lesson contains Carlson Software-specific settings and is applicable to anyone using Carlson with either an AutoCAD or IntelliCAD platform.

Part 2 contains AutoCAD-specific settings.

Part 3 contains IntelliCAD-specific settings.

Appendix A explains how to use the Project Folder method of Project/Data File Setup as an alternative to the Drawing Folder method.

Appendix B explains the use of Carlson Quick Keys and how they interact with AutoCAD and IntelliCAD command Aliases.

Carlson Survey Getting Started with Points

Approximately 4.5 hours of instruction

This lesson starts by loading a configuration file with recommended settings and options for the program. We will also open a few toolbars that may be needed for the

exercises.

We will then start a new project and new drawing from a text/ascii file and will draw the points with the Draw-Locate Points command. Various point editing and reporting commands and features will be used. Some of these features include: Point Groups, Tag Non-Surface Points, Translate Points and Rotate Points. In wrapping up Part 1, we will export points to a new text/ascii file and also export the point data to a LandXML (.xml) file. Please note that Carlson's Field to Finish is covered in a separate lesson.

Appendix A covers, as a separate exercise, the new Esri-powered command Search Published Control that allows you to search published control data that is freely available on the National Geodetic Survey (NGS) website and then store the retrieved information to the active Coordinate File.

Appendix B provides a separate, in-depth, explanation of the Carlson Point Block entity and how its Symbols and Point Attributes (Point Number, Elevation and Description) are controlled with respect to Layers.

Carlson Field to Finish

Approximately 6.5 hours of instruction

This lesson starts by loading a configuration file that contains recommended settings and options for the program. We will also open a few toolbars that may be needed for the exercises.

Part 1 provides an overview of the Field to Finish feature of Carlson® Survey. We will start a new project and new drawing from a text/ascii file. The text file is very similar to the one used in Lesson 2a – Getting Started with Points except that it has been slightly modified to include special linework coding. We will use Field to Finish so that the points, symbols and linework are automatically generated and drawn on their proper Layers. Field to Finish will also create Point Groups and tag some points as Non-Surface so they can be easily excluded when we build a surface model.

In Part 2 we will create a new Field to Finish Code Table

that includes a variety of Codes that can be used to create Symbols, 3d and 2d Linework.

In Part 3 we will simulate collecting more than 70 survey points in the field and then processing them with the Field to Finish Code Table created in Part 2. With this Code Table, we will collect points for features such as roadways, buildings, trees and property corners. We will also demonstrate the use of Special Codes for labeling descriptive information such as ½" Iron Pipe
and 12" Oak Tree.

In Part 4 we will use the Separate Attribute Layers functionality within Field to Finish so that Symbols and Descriptions for points we process can be used to label features on printed plans.

In Part 5 we will go through the steps required take some of your existing point files to make a new Field to Finish Code Table for your company.

Did you know… about the new rainfall libraries in Carlson Hydrology 2013?

November 4, 2012

With the 2013 release of Carlson Hydrology, Carlson is shipping complete rainfall libraries for the following cities in North Carolina:

- Asheville
- Cary
- Chapel Hill
- Charlotte
- Concord
- Durham
- Fayetteville

- Gastonia
- Greensboro
- Greenville
- High Point
- Jacksonville
- Raleigh
- Rocky Mount
- Wilmington

The rainfall information has been compiled from the precipitation intensity charts available from The National Weather Service.

To load and access these files:

- Switch to your Carlson Hydrology menu
- Go to Network > Sewer Network Libraries > Rainfall Library
- Pick the Load button
- Browse to C:Carlson ProjectsSettingsNorth Carolina

Carlson 2013 Has Been Released

November 4, 2012
Carlson released the 2013 version of their desktop products today. This includes: Civil Suite, Civil, Survey, Hydrology, GIS, Takeoff, Construction, Point Cloud, Geology, Surface/Underground Mining and Natural Regrade.

The 2013 embedded-AutoCAD versions of Takeoff and Survey have not yet been released.

Unlike previous versions of Carlson that support running on top of IntelliCAD or AutoCAD products 2000-2012, **Carlson 2013 can only be run on IntelliCAD or AutoCAD products 2004-2013**. This includes AutoCAD, Map, Land Desktop and Civil 3d. Also, anyone using the FREE IntelliCAD that comes with Carlson is eligible for a FREE GIS Starter Kit from Esri which includes ArcMap.

You can download Carlson 2013 here.

If you are using 2012 and are current on your annual maintenance contract, you can click here to look up your new 2013 serial number online. You will need to enter your contact information and your 2012 serial number in order to generate the 2013 serial number. You can find your serial number by opening Carlson Software and going to Help > About Carlson Software > Change Registration.

If you have trouble finding your serial number or would like to know the cost to upgrade to 2013, please email me with your request.

Click here for the full list of improvements to Carlson 2013

Click here for improvements to the General commands in 2013

Click here for the additional data file & conversion support in Carlson 2013

Click here for improvements to Survey commands in 2013

Click here for improvements to Civil commands in 2013

Click here for improvements to Hydrology commands in 2013

Click here for improvements to GIS commands in 2013

Click here for improvements to Takeoff commands in 2013

Click here for improvements to Point Cloud commands in 2013

Click here for improvements to Geology commands in 2013

Click here for improvements to Surface/Underground Mining commands in 2013

Click here for improvements to Natural Regrade commands in 2013

New Carlson Build – 120219

November 4, 2012

Carlson released a new build of their desktop software earlier this week. This includes updates to the

IntelliCAD/for AutoCAD versions of Survey, Civil, Hydrology, GIS, Basic Mining, Geology, Underground Mining, Surface Mining, Natural Regrade, Field, Takeoff, Construction and Point Clouds.

To confirm your current build number, go to Help > About Carlson. You'll see the build number on the top line of the text box.

You can download the latest full version or updates to your current installation here.

If you would like to try out any of the Carlson Software products for 30-days, email me here.

For those anxious to try out the very latest and greatest updates in the testing versions of IntelliCAD 7.1, you can also send me an email to gain access to a new blog, "The Little CAD Engine That Could", administered by Leonid Entov of Carlson Software.

Participation in the testing and access to the blog is by invitation only, so email me and I'll pass along your request.

Another Happy Carlson Customer

November 4, 2012

Here is a great story about another customer of mine, John Prevette with Gooden & Associates out of Hope Mills, NC, and his successful transition from Civil 3d to Carlson Civil Suite.

http://info.carlsonsw.com/blog-1/bid/121528/Moving-to-Carlson-from-Civil-3D

And, I know what you're thinking but the answer is "No." Carlson did not pay him to say this – I asked just to make sure! In all seriousness, it's great he was willing to be interviewed and confirm just how great a design tool Carlson is and just how quickly you're able to get up to speed.

Feedback from Aaron Hahn, Hahn Engineering & Consulting

November 4, 2012

I've been a little slack in requesting feedback from my customers over the past year so I was very pleased to receive the following unsolicited feedback from Aaron Hahn this week:

> *I purchased the Civil Suite last month and I wanted to thank you for all your pdf tutorials you posted on your site. They have been extremely helpful and they have made the switch from Civil 3D to Carlson quick and easy.*
>
> *I can confidently say, that I prefer this software over Civil 3D already (used Civil 3D for years)! It's faster, has more control, and is generally cleaner than Civil 3D. Clean and simple.*

That CAD Girl

Thanks for all your help! Looking forward to getting up to speed on more of your tutorials and webinars

Aaron Hahn
Hahn Engineering & Consulting
British Columbia, Canada
Software Purchase – December 2011

See other testimonials here

Carlson 2012 Updates

November 4, 2012
You can download the most recent updates to Carlson's 2012 desktop software HERE

End of Year Workshops – Statesville, Asheville, Wilmington and Raleigh NC

November 4, 2012

We are finally able to announce our end of year workshops for 2011. With the weather problems we encountered last year we decided to hold the events in the western end of North Carolina in November and toward the coast in December.

The cost to attend each event is $99 and lunch is included. See below for early bird registration details for each event. NC Licensed Surveyors and Engineers will receive 8 PDH credits and all attendees will receive a certificate confirming their attendance. We will have door prizes, software giveaways and **special software or hardware pricing that is available the day of the show only**.

We will be in Statesville on Tuesday, November 15th and Asheville on Thursday November 17th. Early bird registration

is $89 through September 30th.

We will be in Wilmington on Tuesday, December 13th and Raleigh on Thursday December 15th. Early bird registration is $89 through October 31st.

You will be able to choose the sessions you wish to attend. This year's sessions include:

- **GIS from A to Z** and **Responding to GIS-related RFPs**
  presented by Janet Jackson (GIS Janet) of Intersect
- **Overview of Carlson Takeoff & Preparing Machine Control Data**
  presented by Todd Carlson of Carlson Software
- **Intro to SurvNet & Least Squares**
  presented by Donnie Stallings, the original developer of the product
- **CAD Standards Roundtable & Discussion**
  presented by Jennifer DiBona, That CAD Girl
- **CAD Tips & Tricks** and hints for sharing data with others
  presented by Jennifer DiBona, That CAD Girl

- **Overview of Carlson Software 2012** (Survey, Civil, Hydro, GIS, Point Clouds)
  presented by Scott Griffin of Carlson Software
- **Field to Finish with Carlson Survey & SurvCE and the Surveyor+ GPS System**
  presented by Butch Herter of Carlson Software and Jeremy Taylor
- **Preview of future Carlson hardware**
  presented by Butch Herter of Carlson Software and Jeremy Taylor
- **Road Design and Site Design with Carlson Civil & Hydrology**
  presented by Scott Griffin of Carlson Software

Note that all classes are not scheduled at all events and locations. See each workshop announcement for specifics. Seats are limited so register online, call 919.417.8351 or email us to register.

What is LandXML?

November 4, 2012

This article originally appeared in the April 2011 issue of Professional Surveyor magazine.

The ability to import and export LandXML data has been around for quite a while, but I still get a lot of curious looks when I mention it in my training classes. So, what is it, and why should you be using it?

What Is LandXML?

LandXML refers to a file format (.xml) containing data that has been generated from a civil engineering or land surveying software program.

If you're hearing about it for the first time and want to learn more about the uses and acceptance of the LandXML initiative, visit www.landxml.org. According to their page LandXML.org in a Nutshell, "… LandXML.org is committed to providing a non-proprietary data standard (LandXML), driven by an industry consortium of partners."

Simply put, the easiest way to convert, transfer, and archive data between Civil 3D, Carlson Software, Land Desktop, Eagle Point, TerraModel, and many other programs is to use the Import from LandXML and Export to LandXML functions available in these programs. Additionally, many machine control systems allow you to import LandXML files. I am most familiar with the Carlson and Autodesk families of civil/survey programs, so most examples in this article refer to them.

This may not be current by the time you read this article, but the list of members and participating organizations is at www.landxml.org/org.htm.

Why You Should Use It To Transfer Data

The two key words in the mission statement above are “non-proprietary.” Just as we have multiple proprietary drawing file formats such as .dwg (from Autodesk’s AutoCAD-based programs) and .dgn (from Bentley’s Microstation), the files that store survey and civil data such as points, surfaces, centerlines, and profiles are unique and proprietary to their manufacturer.

For instance, Civil 3D is the survey/civil product for

Autodesk. Points and surfaces created in that program are stored inside the .dwg file. If you have Civil 3D and need to share a surface with a consultant or other team member who owns the same version of Civil 3D, you can just send them the .dwg file and they will have full access to the point and surface data. However, if you have Civil 3D and your consultant uses an earlier version of Civil 3D, Land Desktop, or Carlson Software or needs the surface data for machine control, it will not be as simple as just sharing the .dwg file.

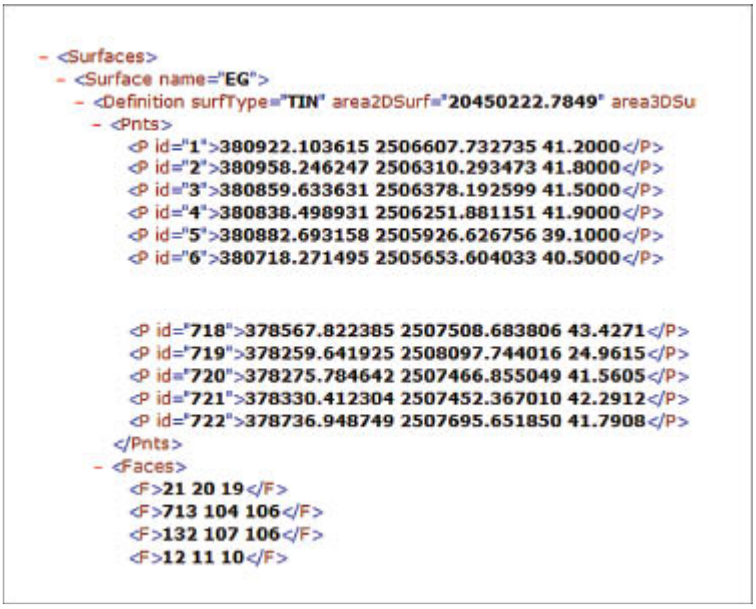
Similarly, surfaces created in Carlson Software are saved in a .tin file and points are stored in a .crd (coordinate) file. Anyone using Carlson Software or SurvCE data collectors can load these files in their native format. But, Civil 3D or other survey/civil programs can’t access them directly.

As you probably already know, when you have to pass this data onto someone using a different program, it’s a nightmare! This is where LandXML is a lifesaver.

I like to explain that you use Land-XML files in the same way you used to rely on .dxf files. It’s mostly outdated now, but a .dxf file is a generic drawing file (DXF = Drawing

Interchange File) that can be exported from and imported into various CAD programs. Back in the day, AutoCAD wasn't able to read or import Microstation's .dgn files and Microstation wasn't able to read or import AutoCAD .dwg files, but both could export and read .dxf files. To get a Microstation file into AutoCAD, we had to export a .dxf file from Microstation and import it into AutoCAD and vice versa.

When you export your civil/survey data to an .xml file, it can be opened and read like a text file. Specifically, an .xml file is an .html file that is best viewed through a web browser such as Internet Explorer or Firefox. For instance, when a surface model (TIN) is exported to an .xml file, the X, Y, Z values of each point on the TIN are assigned a number, and then each "face" (triangle) of the TIN is defined by specifying the three corners (**Figure 1**).



Another benefit of using LandXML to transfer project data is that you can be selective in choosing what project data to include in your .xml file. For instance, in the course of a design project, you may create an existing ground surface, a proposed ground surface for phase one of your project, and a proposed ground surface for phase two. You may have a consultant who needs only your proposed ground surfaces. When you export the .xml file, you have the ability to select only those surfaces that you'd like to add to the file; it's not necessary to export them all.

For Project Archiving

We've all become accustomed to saving archive copies of our drawing files for various purposes, but saving the corresponding project data such as points, point groups, surfaces, centerlines, and profiles is often overlooked. Retrieving the drawing file (.dwg or .dgn) may allow you to recover the linework that represents contours or a profile, but the underlying "surface" is lost unless the project data was also archived.

When archiving your projects at completion or even at submittal time, it is not enough to simply save a copy of the

drawing file(s) for the project; you must also save a copy of the project data. At a minimum, the archive should contain the project data in its native format. In the case of Civil 3D, saving your project data in its native format means saving a copy of all .dwg files that store points, surfaces, or other data relating to your project. Saving this project data in its native format is sometimes the easiest method, but it can also create a problem with file storage because the files can become enormous.

This won't be a surprise, but even if you archive your project data in its native format, I recommend that you consider additional archiving in .xml format. This is the case whether you need to save a progress, submittal, or final archive of your data. No one knows what kind of data files we'll be using 10 or 20 years down the road, so saving your data in such a generic, text-based format such as .xml files allows for easier retrieval regardless of when you need it.

Note that, like archiving in native format, archiving to an .xml file can also produce very large files. I still believe using the .xml format is advantageous because of the generic nature of the data and having the ability to pick and choose

the data you need to archive.

I hope you've gotten some clarification on this fantastic tool we've all had for years but many of us have not taken advantage of. If you have questions, please don't hesitate to follow up.

This article originally appeared in the April 2011 issue of Professional Surveyor magazine.