

Carlson 2010 Products Are Here

Carlson released their long-awaited 2010 programs early last week. If you are running these programs on top of an AutoCAD-based program or IntelliCAD, you can download a full install of 2010 here. Versions of Carlson 2010 with Embedded AutoCAD will be released at a later date.

This version offers support for 64-bit operating systems, Windows 7, and AutoCAD® 2010. You can view the complete list of updated features here.

For those currently on Carlson's Maintenance program, follow this link to automatically generate your 2010 serial number. You will need your current 2009 serial number for this process.

Follow this link for pricing, upgrades and other information about purchasing Carlson Software.

Carlson 2010 Is Here

The 2010 version of Carlson software running with IntelliCAD is officially available. This version offers support for 64-bit operating systems, Windows 7, and AutoCAD® 2010. This release is available from the Carlson website for download, or contact us for more information on requesting a demo CD. For those of you on the Carlson maintenance program, you may download the latest release from the Software download section of the Carlson website which can be found here.

If you are already using Carlson software and are part of their

maintenance program, the Carlson update page has a new feature that allows you to receive your 2010 serial numbers through an on-line lookup feature. This can be found [here](#). If you want to install your 2010 upgrade immediately, use this tool to look up your serial number, then download and install the software. CD's will be shipped out to maintenance customers automatically, but you don't have to wait, you can get started with all of the new features today!

To view the archived webinars covering several of the new features of this release, please visit the Carlson webinar archive [here](#).

More information on this latest release will be provided as it becomes available.

Update by Jennifer: You can download a PDF with a list of Improvements in 2010 [here](#): Carlson 2010 Improvements

Originally posted on **Carlson Connection** by Felicia Provencal

Why Carlson Civil Suite and Not Civil 3D®

I've worked with DCA®, then SoftDesk®, then Land Desktop® since 1990. Anyone I've worked with, sold software to or trained in that time knows that I've always been a huge fan of these programs. Not that the programs were terribly easy to learn, but mostly because they functioned in a logical, consistent manner. I, and many others, got to a point that, if I didn't get the

result I intended, it's because the software had done exactly what I'd *told* it to do instead of what I'd *meant to tell* it to do. Frustrating? Of course. But manageable.

I worked for an Autodesk® reseller when Civil 3D was introduced to the world. Since then I've attended Civil 3D classes at Autodesk University every year, Autodesk reseller training on Civil 3D and at one time was even certified an "Implementation Certified Expert" (ICE) for Civil 3D. As a consultant I've also worked and collaborated with people I consider to be the PHDs of Civil 3D. In short, I feel like I have performed my due diligence with regard to Civil 3D. More than once I thought Civil 3D had gotten to a point where it would be a good option for some of my clients. But, after careful consideration of all the associated costs, my clients disagreed. They decided to stick with Land Desktop.

Initially, there were several reasons my clients weren't interested in moving to Civil 3D from Land Desktop: lack of stability, lack of survey features, inability to work with pipes, lack of H & H functionality, etc. Most of these have been addressed to some extent.

Now, however, the primary reason people aren't moving to Civil 3D seems to be: It's too complicated. They have come to the conclusion that, "Even if we wanted to, we can't manage it and learn it on our own."

That seems to me a nearly impossible problem for Autodesk to solve.

What makes it so complicated and difficult to implement? Here are a few of the reasons...

Project and data management

Because it doesn't have a single, centralized project structure,

the last recommendation for file and data management that I've seen involves 9 or 10 different drawings using multiple methods of linking such as XREFs and Vault.

Development of styles

This will be an ongoing effort. Most companies will find themselves needing new styles for every project. You'll need an expert on staff or will need to rely on a consultant or reseller to keep up with the technology and demand.

True Cost of Implementation

Unbelievably, the cost of the software, subscription and hardware is typically just the beginning. I've heard that, not including software, hardware or loss of productivity, the cost of implementing Civil 3D in an office ranges from \$6,000-\$10,000 per person.

Civil 3D doesn't play well with Land Desktop

Using Civil 3D on a project means KEEPING it in Civil 3D. You can't bail out and move it to Land Desktop if deadlines loom. And if a project was started in Land Desktop, don't use that data in Civil 3D. Yes, there are converters and importers and exporters of data, but the message boards and discussion groups are full of comments like, "Yes, you can. But don't."

A friend of mine in the industry recently said, "It looks like the programmers became too enamored by what they COULD do, instead of making it do what it NEEDS to do."

I think that's exactly right. It's become a program for programmers, IT personnel and consultants who spend a majority of their time figuring out how to make it work.

What is the evidence of this trend/mindset?

1. Try to purchase and implement Civil 3D through a

reseller without receiving a hard-sell on “consulting” or “implementation” services. This isn’t simply the resellers trying to make a buck. They understand that Civil 3D is impossible to put into production without significant help from experts. And the only experts are those in the reseller or consulting community.

2. Part of the “Implementation Plan” requires that new users try Civil 3D on a “Pilot Project” instead of an active project.
3. Considering blogs, websites, discussion groups, users groups, road-shows and all, I have never seen such a wealth of available support options for any piece of civil design software. And yet for all this, I might be able to point to a couple of dozen people I’d consider to be very knowledgeable or experts who would be able to support the software. And, these people fall into the reseller/consultant category. I have my suspicions whether even they could turn a profit on a project in an office setting with typical project flow and deadline challenges.
4. Everyone thinks everyone else is using it – but they’re not. I had heard for years that a certain very large (national) engineering firm in Raleigh had moved to Civil 3D. I spoke to someone working there a couple of weeks ago and found out that wasn’t the case. Only a couple of people in their Charlotte office are trying it out and it wasn’t getting rave reviews. Everyone else is still using Land Desktop Companion. I know of two and suspect that several other large firms who have implemented or have attempted to implement Civil 3d are in the same boat. My (educated) guess, based on reading

discussion groups, users forums and discussions during sales calls, is that they have now had enough time to study the metrics comparing the money they have spent versus the resulting productivity gain/loss. Unfortunately, so much money has been spent that they must decide whether to continue to throw good money after bad hoping that Autodesk finally comes up with the product they have promised or to start from scratch by re-evaluating the products available.

5. Outside of the reseller/consultant network, I can point to a lot of people who I'd consider experts in Land Desktop and Civil Design. These people might not know everything there is to know about Land and Civil Design, but they are incredibly productive and can design and develop a project with the best of them. Many in this group have tried to perform the same tasks and produce the same work with Civil 3D and have given up out of exasperation because either they can't get it to work the way they need it to or can't get it to look the way they need it to. When it is determined that this vast group of competent people needs to rely on the expertise of a reseller or consultant to produce their work, there is a problem.
6. Someone recently pointed me to a couple of posts on the Autodesk Civil 3D Discussion Group that expresses many of these thoughts: Message to Autodesk I know I'll be tagged a Flammer for this but I don't care at this point

Now, Why Carlson?

1. It's easy to learn The single biggest reason I have become a fan of Carlson Software is that it's so

easy to do the things surveyors and civil engineers need to do. Especially for someone fairly competent with Land Desktop or Civil Design, learning

Carlson doesn't take much time at all. And if you are totally new to civil/survey software, Carlson is intuitive

because they have a high percentage of civil engineers and surveyors helping to design the software. It works the way we work.

2. They stand behind and support their products Carlson provides free technical support to their users. Whether you are using a 30-day trial or have purchased any of their products, you can call or email them with questions. Providing tech support is also a way for Carlson to stay on top of their customers wants and needs. If they receive too many questions about how to use a feature, you can expect to see that feature re-worked in a future release. If someone makes a suggestion during a support call, it'll end up on a feature wish-list for a future release. What happens if you find a bug? You (and any others encountering the same issue) will receive the updated files to fix the problem as soon as the programming team completes the fix. Others receive it when a service pack is released. They also don't retire their products so there are no forced upgrades. Carlson only wants their customers to upgrade when they think it's worth it.
3. I don't have to give up what I know Carlson works on top of AutoCAD, AutoCAD Map, Land Desktop or Civil 3D. As you start moving your projects over to

Carlson, you have the freedom to continue working in Land Desktop but take advantage of some of the tools that Carlson offers. As you learn more of the features of Carlson, you can do more of the project using Carlson. It's a relief to know that you can make the switch by taking baby steps or by leaps and bounds.

4. I have full 3D and dynamic functionalityWho *wasn't* excited the first time we saw that Civil 3D gave us the ability to grip-edit an alignment and have the profile update automatically? Or to see we could lay out and edit subdivision lots and have it automatically label lots for us? But then we tried to do it. It wasn't quite so easy to get it to work the way we needed it to or look the way we needed it to. Most of us ended up going back to Land Desktop. But, we'd seen what was possible with the dynamic features and Land Desktop no longer seemed up to the task. Carlson allows you to design dynamically but gives you more control. You have the ability to set each dynamic action to "Off", "On" or "Prompt". Turning it "Off" requires you to pick a "Process" button to force updates through the design. "On" will process those changes automatically as they happen. "Prompt" will ask you before applying updates.
5. Carlson Civil Suite 2009 meets or beats Land Desktop and Civil 3D in features and functionalityA feature-to-feature comparison of Carlson's Civil Suite to Land Desktop or Civil 3D shows that Carlson can do more for you than either of those products.

These are obviously anecdotal examples and I expect some people to take exception. All I can state is what I've witnessed and attempt to explain the reasons behind my decision. My eyes

aren't closed and I'll continue to do my homework with Civil 3D – if something changes, I won't hesitate to express my opinion.

I've told the folks at Carlson that, as much as I enjoy working with them, the reason I'm selling and supporting their software is because I fully believe it's the right thing for my customers at this time. If that changes and Carlson is no longer the best option, I'll move on.

I encourage anyone to try out Carlson Civil Suite and try out Civil 3D and judge for yourself. Ask your Civil 3D reseller to mimic my 5 Minute RoadNet Video or my 5 Minute LotNet Video in Civil 3D and see how it compares. This isn't a set up... I've never asked anyone to do that before. I'd just be interested to see the results.

Update 9/2/2009: Welcome to those from www.civil3d.com.

Other discussion of this topic can also be found on this thread on the Autodesk Civil 3D discussion group: Carlson Vs 3D.

Continue to watch this space for an update. I'm interested to see what comments will be left at civil3d.com and will post a response here in a week or so.

Update 9/12/2009: I've posted my response to the comments from both www.civil3d.com and the Autodesk Discussion Group here: Carlson VS Civil 3D – Revisited

Carlson 2010 Preview – CAD

Standards

The new CAD Standards feature included in Carlson is one of the most time-saving features to come along in a long time. This feature is a collection of commands allowing you to create, manage and draw standardized Symbols, Linework and Annotation entities that are stored in a Standards Database file.

Carlson includes two Standards Database files (.sdb) with the installation: the Carlson_NCS_SurveyCivil.sdb which is a fully populated database based on the US National CAD Standard and empty.sdb which is a functional, but empty, database with which to start a new Standard Database.

Updates and additions to the .sdb files provided by Carlson Software will be posted to this website: www.carlsonsw.com/cadstandards.html.

You can click this link to view a webinar introducing the new feature.

The CAD Standards interface (loaded with the Carlson_NCS_SurveyCivil database) is shown here:

IMAGE!

That CAD Girl – October 2009 Newsletter

Our October 2009 Newsletter can be downloaded [HERE](#)

Carlson vs AutoCAD Civil 3D

This conversation heated up after I made a post to a thread on an Autodesk Discussion Group. Since then we've started a valuable conversation about the strengths and weaknesses of both programs.

My response and the original discussion group thread can be found here: [Carlson Vs 3D](#)

Now, James Wedding of www.civil3d.com fame has started a thread on his website asking his readers to comment on the validity of my post [Why I Chose Carlson Over Civil 3D](#).

James' post is here: [View from the Other Side: Why I Chose Carlson Over Civil 3D](#)

Keep watching this space for updates. I'm interested to see what James' readers have to say and will respond in a week or so.

Update 9/12/2009: I've posted my response to the comments from both www.civil3d.com and the Autodesk Discussion Group here: [Carlson VS Civil 3D – Revisited](#)

Carlson, Civil 3D and

Shootouts

Update 9/12/2009: Much appreciation to James Wedding at www.civil3d.com for extending the Carlson VS Civil 3D discussion to his website. A lot of commentary and good discussion has taken place on both sites. I've just posted my response to the comments. Also, as noted at the end of my reply, I am working on setting up a very thorough Shootout between Carlson and Civil 3D. Invitations have been sent, so keep looking for updates.

www.civil3d.com Carlson VS Civil 3D Post

Latest Autodesk Discussion Group Post

Update 9/1/2009: Folks at www.civil3d.com have started a post comparing Carlson to Civil 3D. **Link is here.** James has a minor detail wrong about my background. As a sole-proprietor, I was never an Autodesk reseller, but I did work for a couple of them before going out on my own. I've posted that as a comment and thanked James for starting the thread but, as of a couple hours later, it is still telling me that "Your comment is awaiting moderation".

Update: Not that the edits, so far, have changed the original Posts too much, but wanted to make everyone aware that the Moderator is revising some of the posts. Mostly, it makes me look like I don't know grammar and don't proofread very well.

An interesting discussion has been started on the Autodesk Discussion Group here:

<http://discussion.autodesk.com/forums/message.jspa?messageID=6243535#6243535>

Harry Ward discusses the shootout between Carlson, Civil 3d and Bentley and several others discuss their experiences and compare

their use of the products.

Originally posted on **Carlson Connection** by Jennifer Dibona

The Kansas City Carlson User Group

I'm reflecting on my impressions of the inaugural meeting of the Kansas City Carlson User Group meeting held at the corporate office of Griner & Schmitz on August 20, 2009. About a dozen individuals showed up to form new business relationships with one another and draw on the strengths from their common bond.

The meeting started out with the gracious hospitality of Griner & Schmitz who hosted the event at their corporate headquarters in Kansas City. Complimentary food and beverages were aplenty and the guests quickly found themselves forming or renewing friendships with others in attendance.

After a bit of socializing, the guests were treated to a sneak peek of Carlson SurvCE 2.5 from Carlson Software South Central Regional Sales Director Aaron Newman. Aaron demonstrated many of the new and powerful features of SurvCE and showed the attendees how to leverage the power of the Carlson Field-to-Finish routines. Throughout the presentation, one of the key benefits of a User Group is that questions posed by one individual benefits the others and attendees are generally willing to share their observations and experiences with others. After Aaron's presentation, I was given the opportunity to demonstrate some of the new features that will be released with Carlson 2010 with particular focus on surveying and the communication of

information between the field and the office.

It was amazing at how quickly the two-hour meeting flew by but it is my opinion the Kansas City Carlson User Group is off to a great start. If you're in the Kansas City area in mid-October for the expected follow-up meeting, consider dropping in for some informational aspects of the products and services offered by Carlson Software. Otherwise, express your interest in forming a Carlson User Group in your region!

Originally posted on **Carlson Connection** by Ladd Nelson

December Workshops 2009

Our Carlson workshops the past couple of years have drawn great crowds, but we're changing it up a bit for 2009.

Join us on December 8th in Raleigh or December 9th in Statesville for joint presentations on Carlson Software, ESRI and IntelliCAD.

The cost is only \$99 and lunch is included. NC licensed land surveyors and engineers will receive 7.5 hours of PDH credit.

Our special guests this year will be:

- Bruce Carlson, founder & President, and Scott Griffin, National Civil Sales Director, of Carlson Software
- Donny Sosa, Surveying Industry Specialist, of ESRI
- Felicia Provencal of ProCADD Hawaii and Carlson Connection

Join us for a variety of sessions and topics including:

- BIM, GIS and Carlson Software in the land surveying, civil engineering & construction arenas
- Making money with GIS using Carlson Software, ESRI and IntelliCAD
- What's new with Carlson 2010
- Surface Modeling with Carlson Software

Register Online for the Dec 8, 2009 Raleigh event here.

You can download the Raleigh NC announcement here.

Register Online for the Dec 9, 2009 Statesville event here.

You can download the Statesville NC announcement here.

Register by PHONE by calling us at 919.417.8351.

Register by MAIL by downloading and completing this form and mailing a check for \$99 to P0 Box 294, Clayton, NC 27528. Registrations by MAIL must be received 5 days in advance of the event.

Register by FAX by downloading and completing this form, faxing it to 919.573.0351 and mailing a check for \$99 to P0 Box 294, Clayton, NC 27528. Registrations by FAX must be received 5 days in advance of the event.

Our postcard advertising the event can be downloaded [HERE](#).

BIM is not GIS

As someone quite entrenched in both disciplines (Civil and Architectural), I'll add my 2 cents worth on the BIM vs. GIS

subject.

In my opinion, BIM and GIS are both “methodologies” rather than “products”. The acronyms each have their own meaning and refer to designing, building, and managing information in a full life-cycle.

Each discipline has its own standards; from CAD standards to design standards (think of AIA vs. AASHTO), but both BIM and GIS rely on correct As-Built data to provide accurate information about their models.

BIM

The National BIM standard states the definition of BIM as:

“BIM is best thought of as a digital representation of physical and functional characteristics of a facility...and a shared knowledge resource for information about a facility forming a reliable basis for decisions during its life-cycle; defined as existing from earliest conception to demolition.”

Autodesk has taken the BIM acronym that has provided a great deal of success with their Architectural Modelling packages and applied it to their Civil products as well. Their logic appears to be that its a “3D” product, therefore it is a “BIM” product. I believe that it is irresponsible to change terminology to simply advance product sales.

On the Autodesk Web Site, Autodesk lists a number of products as being “BIM” products:

- Revit
- Navisworks
- Design Review
- AutoCAD LT
- + several more

With the acronym meaning *Building Information Modelling* (with *building* being a *verb* **OR** a *noun*), its interesting to see products such as **AutoCAD LT** and **Design Review** being shown on the list.

Revit

Revit is a Design Tool that allows the storage of certain pieces of information as well as the ability to add custom fields (heating capacity, cooling capacity, etc.) to the actual objects.

Navisworks

Navisworks integrates information from multiple data sources to provide a cohesive collection of information (graphics and data) to analyze things such as clash detection (HVAC duct work clashing with structural components, etc.).

AutoCAD LT

AutoCAD LT is Autodesk's low-end design package. Apparently, any DWG file creation tool is now a BIM product as well.

Design Review

Design Review is a light-weight DWF viewer and markup tool. While it has been used as a backbone of products such as FMDesktop, its neither a Design tool, nor a Modelling tool.

FMDesktop

Absent from the list is FMDesktop. FMDesktop was one of Autodesk's tools for managing the Building Information and Autodesk just dropped the product (**Note:** There are dozens of Facilities Managent Products available that provide similar capabilities such as FM:Systems, Archibus, Tririga, Manhattan, Cadapult, Famis, and more).

In the 2006 – 2007 time frame (when Autodesk acquired FMDesktop), Autodesk themselves showed customers Power Point

slides regarding BIM. These slides showed where the “Design”, “Build”, and then “Operate and Manage” processes were performed. FMDesktop was Autodesk’s solution to tell the story of the building lifecycle and where the *information* was to be *managed*. These were broken down into 2 sections: The “Data Collection” piece and the FMDesktop piece.

Data Collection incorporated the Design (several disciplines such as Architects, MEP Systems Engineers, and Structural Engineers) as well as the majority of the Build process. The FMDesktop piece overlapped the Build process and then took over for the “Operate and Manage” process.

In my opinion, building that model of information **AND** managing that information is the true test of a “BIM” solution. There is no 1 product that is a “BIM” product. Its a series of technologies that are incorporated to provide the “information”.

Ultimately, a database component is required to work with the graphical representation of data (which certainly could be referred to as the “Building Model”).

GIS

GIS is BIM’s counterpart whereby Geographic (position on the planet) information is being stored and managed.

Most end users might think of GIS solutions as Google Maps or Google Earth where they can enter an address and out pops a graphic representation of that location or directions on how to get there. The graphic is just the tip of the iceberg. Without the data, the graphic would simply be a pretty picture.

Just as with BIM data, GIS data utilizes design tools to build the graphics and As-Built data and then tools to expand upon the As-Built information.

While there are a number of individual products on the market to assist in the creation, manipulation and distribution of GIS data, a complete GIS system involves more than 1 product or technology.

A couple of the common Design Products are: Autodesk Civil 3D and Carlson Civil Suite

AutoCAD Civil 3D

Civil 3D is an object-oriented design tool for Civil Engineering applications. Because the tool is object oriented, the end product is not easily distributable. The data can be transferred to other links in the GIS solution chain by using technologies such as LandXML, but the graphical interaction is lost in this process (i.e. the objects are lost).

Carlson Civil Suite

Carlson's Civil products work with DWG files in an AutoCAD or IntelliCAD DWG format. Because the data is stored as compatible DWG information with external data files, the data is easily transferred to other products in the GIS solution chain.

Managing the data developed in the design process is the next component of the GIS life-cycle. A number of products provide those solutions: ESRI ArcGIS, Vueworks, and Custom Mapguide Solutions.

ESRI ArcGIS

ESRI's shp (shape) and adn (coverage) files are quite possibly the most prevalent GIS specific data files available and are often integrated in GIS solutions. ArcGIS allows GIS solutions to be deployed similar to FM solutions in the BIM world.

Vueworks

Vueworks is an organization that builds GIS and Work Management solutions using the ESRI base applications.

MapGuide

MapGuide is Autodesk's development environment to build GIS applications. It is often used in concert with ESRI, Microstation and Autodesk data files.

GIS Standard

While there is not yet a consensus on a singular GIS standard, there are independent Spatial Data Standards employed by each digester of GIS data. You can view some of those here:

- Denver Colorado Spatial Data Standard
- Oregon Spatial Data Standard
- Federal Geographic Data Committee

Both GIS and BIM perform very specific functions in accordance with their own disciplines. While the terminology is often mis-used, they refer to unique information systems; BIM in the structural facility world and GIS in the geographic world.

Originally posted on **Carlson Connection** by Jon Luby