ESRI Offer for Carlson IntelliCAD Users

June 8, 2009
Those currently using Carlson with IntelliCAD are eligible for a new "GIS Starter Kit" from **ESRI**. The Kit includes:

- ArcGIS ArcView desktop software
- A copy of the book *A to Z GIS: An Illustrated Dictionary of Geographic Information Systems*
- A copy of *GIS Tutorial: Workbook for ArcView 9*, Third Edition
- A 10% discount for the ESRI Survey & Engineering GIS Summit ($325 – standard registration price)

To take advantage of the offer, call 1-800-GIS-XPRT (1-800-447-9778) and request the **Carlson-IntelliCAD GIS Starter Kit** and **please have your Carlson Serial Number available**.

You can read more about **ESRI's** commitment to survey and engineering services by visiting

http://www.ESRI.com/engineering

More About IntelliCAD®

June 8, 2009
IntelliCAD – An Introduction

The development of IntelliCAD is overseen by the IntelliCAD Technology Consortium, "an organization of CAD software developers, who develop applications for IntelliCAD, a Computer-aided design engine. The IntelliCAD engine, which is based on the DWGdirect library from the Open Design Alliance reads and writes the '.dwg' data format – a widely used file format for storing both graphic and textual information of CAD-related software applications."

The primary goals of the IntelliCAD Technology Consortium are to "research and develop CAD technology, the IntelliCAD platform, and to deliver CAD solutions to customers worldwide." In other words, to provide the personal and

commercial CAD markets with a cost-effective solution that is capable of reading and writing the common drawing (DWG) file.

The ITC is a non-profit, independent organization of commercial software developers (members). The ITC has an elected, volunteer, member based Board of Directors which guide its strategic vision. An independent (non-member) President manages the tactical business operations. Members pay annual dues that fund the ITC. Today the ITC has over 50 members who support 13 languages and ship product in more than 35 countries.

IntelliCAD – A Trip through Time

Except where noted, each of the following items were obtained from An Outside Look in at IntelliCAD (used by permission) which requires the free Adobe Reader.

> *"Where did the name come from? The name of the software 'IntelliCAD' comes from a programming company that was formed in the early 1990s in San Diego, CA, USA. Their main claim to fame was ADE (AutoCAD Data Extension), which they sold to Autodesk, and which eventually became part of Autodesk Map."*

"IntelliCAD the software has a complex and fascinating history that winds its way through Softdesk, Autodesk, Boomerang, Visio, just missing Microsoft, then onto the IntelliCAD Technology Consortium, and now [includes] a variety of brand names, such as CADopia, Bricscad, and DWGEditor."

- *1994, August: "IntelliCAD is purchased by Softdesk of Henniker, NH."*
- *1996, December: "Autodesk acquires Softdesk… Softdesk apparently did not tell Autodesk about its AutoCAD clone."*
- *1997, March: "Autodesk investigated by the FTC (Federal Trade Commission) over the alleged monopoly status of AutoCAD… The FTC allowed Autodesk to purchase Softdesk after Autodesk agreed to: (1) spin off IntelliCAD; (2) not attempt re-acquire the technology; (3) not attempt to acquire any company that owns or controls IntelliCAD; and (4) not interfere with employees who leave Autodesk to work with IntelliCAD… IntelliCAD was spun off as Boomerang Technology in San Jose, CA."*
- *1997, March: "Visio bought Boomerang."*

- *1998, March: "IntelliCAD 98 ships. The price was originally pegged at US$495; upon release, the price dropped to $349 as a 'special introductory price'; the price drops further to $149 at computer superstores, such as CompUSA. Through to the end of June, the first three months of sales for IntelliCAD were nearly 12,000 licenses, producing $3 million in gross revenue – an average of $250 per license."*
- *1998, May: "IntelliCAD is suddenly incompatible with AutoCAD! Autodesk releases a maintenance release for AutoCAD R14.01 that makes a change to the .dwg format, and preventing IntelliCAD from reading drawing files… Visio updated IntelliCAD 98 to work with 14.01 files."*
- *1999, July 27: "Visio cuts IntelliCAD loose by granting the IntelliCAD Technology Consortium a royalty-free, perpetual license for the source code of the IntelliCAD 2000 technology. The ITC was set up by Visio, but run by an independent board of directors.*
- *1999, September: "IntelliCAD Technical Consortium opens its Web site at http://www.intellicad.org/."*

Subsequent releases of IntelliCAD through the ITC occur every year since its initial release (see the IntelliCAD version history link under the Press section of the IntelliCAD Technology Consortium web site).

IntelliCAD Release History

- *IntelliCAD 6.4 July 27, 2007*
- *IntelliCAD 6.3 February 28, 2007*
- *IntelliCAD 6.2 May 27, 2006*
- *IntelliCAD 6.1 September 5, 2005*
- *IntelliCAD 6.0 May 3, 2005*
- *IntelliCAD 5.1 January 12, 2005*
- *IntelliCAD 5.0 October 24, 2004*
- *IntelliCAD 4.0 March 14, 2003*
- *IntelliCAD 2001 version 3.3 July 19, 2002*
- *IntelliCAD 2001 May 22, 2001*
- *IntelliCAD 2000 March 6, 2000*
- *IntelliCAD 98 May 1, 1998*

Carlson Support for IntelliCAD

The Carlson 2009 installation comes with IntelliCAD 6.4

built-in. When you choose IntelliCAD as the CAD platform during installation, the IntelliCAD engine is installed along with the Carlson program files. Carlson 2009 only works with this built-in version of IntelliCAD and not on any other version of IntelliCAD or other IntelliCAD based products like Bricscad.

Running Carlson 2009 on IntelliCAD is largely the same as running on AutoCAD. IntelliCAD supports a development environment with a similar interface as AutoCAD which allows Carlson Software to use the same code base on both CAD platforms. Of the over 1700 Carlson commands across the Carlson 2009 products, there are 11 commands that are not supported with IntelliCAD for the Carlson 2009 release. These are:

- Editor Reactors (ie Link Points To Coordinate File)
- Point Object Snap (node snap does work)
- Text Explode To Polylines
- Edit Centerline On-Screen
- Extract Centroid Data
- Label Object Data Areas
- Drape Image On Surface

- Retaining Wall Placement
- Pillar Cut
- Calculate Variogram
- Production By Block Model

IntelliCAD – AutoCAD Comparison

IntelliCAD has a very similar user interface as AutoCAD, supports the core AutoCAD commands and uses the DWG drawing formats 2009 to R14. For some Carlson commands, creating entities in AutoCAD is twice as fast as IntelliCAD which makes a significant difference in routines that create lots of entities.

The upcoming IntelliCAD 7 will be built on DWGdirect from the Open Design Alliance and will add a "DRX development environment" similar to ObjectARX with AutoCAD. Using DRX should greatly improve the speed of entity creation within IntelliCAD.

While most of the AutoCAD commands Carlson clients use in AutoCAD can also be found in IntelliCAD 6.4, there are many features in AutoCAD that are not in IntelliCAD. Among these features are ones for architectural and mechanical

applications that don’t apply to Carlson customers. For this initial release of Carlson 2009 on IntelliCAD 6.4, here are AutoCAD commands that Carlson customers might miss:

- Spell Check
- DGN import/export
- Orbit command
- Find command
- Express Tools
- Tool Palettes
- Annotative Text
- Sheet Set Manager
- Page Setup Manager
- Import .PC3 Files
- Irregular viewports
- Clipboard commands for copybase and paste to original
- VBA not supported for custom applications; VB with COM is supported
- Object Enablers for LDT points and contours
- User-interface for menu customizaiton (no CUI, old MNU method)
- Ctrl-pick cycle for object selection
- Dialog user interface for WBlock

- Dialog user interface for Purge command
- Dialog user interface for Filter command
- Right-Click menus
- Entity Properties as docked-dialog
- Grip snapping to other grips
- Highlighting of entities when dragging cursor over them
- Mudst hatch pattern

If you identify any other AutoCAD feature that you miss when running Carlson with IntelliCAD, please email us at support@carlsonsw.com and we willl add to this list which helps guide future developments.

Bibliography

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property of their respective holders.

All links contained herein open in a new web-browser window.

That CAD Girl – April Newsletter

June 8, 2009
Our April Newsletter can be downloaded HERE

Carlson Software User

Conference

June 8, 2009
The 2nd annual Carlson User Conference has wrapped up and was a success. And, even more fun, a lot of news was broken at the conference.

- **Dewberry** Case Study, "Choosing and Implementing Carlson Software"
- **ESRI** Announces Partnership with Carlson & Software Grant for Carlson's IntelliCAD Users

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Carlson Software Expands Carlson College

June 8, 2009
That CAD Girl named as certified trainer for the expanded **Carlson College**

Carlson Connection Launches

June 8, 2009
Carlson Connection launched on April 1st and is the new online community for anyone using or evaluating Carlson Software. This uniquely collaborative community brings together users, consultants and resellers along with many Carlson staff including sales, technical support and programming.

Check out www.carlsonconnection.com for the latest news, updates and discussion.

That CAD Girl – March

That CAD Girl

Newsletter

June 8, 2009
Our March Newsletter can be downloaded HERE

Is IntelliCAD&#0174 A Good Alternative?

June 8, 2009
Carlson Software now includes a copy of the IntelliCAD engine with each copy of their software so that users who have planned to install Carlson on top of their AutoCAD&#0174-based program can try it out, do a comparison and judge for themselves whether it is a good option for their office. You can see the history, a comparison to AutoCAD and a 5-minute video demonstration of IntelliCAD by following the links.

I have been told that the current IntelliCAD platform (version 6.4) contains approximately 70% of the functionality of AutoCAD.
Also, some commands currently run slower than in AutoCAD and some will run faster than in AutoCAD. The next major release will be IntelliCAD 7 which will have ObjectARX type abilities and will run faster.

For current AutoCAD users who dive into every new feature or push customization to its limits…
I doubt you'd be happy with the IntelliCAD version at this time because some of those commands are missing or have legacy
behavior.

For current AutoCAD users not as invested in the bells and whistles…
IntelliCAD will probably be a fantastic, cost effective alternative to your AutoCAD.

The ideal situation(s) for IntelliCAD?

- Offices currently using AutoCAD LT as a "gap-filler" instead of more costly CAD licenses. Why? Because

IntelliCAD supports
LISP files, 3D data, XREFs, Images and several other AutoCAD functions that are not included in AutoCAD LT

- Survey/inspection field crews using an IntelliCAD version on laptops to be taken out of the office
- Offices needing a low-cost CAD option for project managers
- Offices needing short-term CAD licenses for summer interns

Visit our IntelliCAD with Carlson software page and our More About IntelliCAD page to learn more.

The Case for Online Training

June 8, 2009

With the economy what it is and everyone trying to get as much bang for their buck as possible, I'm finding that online training for your CAD software programs is an increasingly

popular and cost effective option. Although this post describes my personal approach and may be different considering your trainer, hopefully it will answer some of your questions about online training and will encourage you to give it a try.

How does it work?

There are several online services that trainers may use for online training. WebEx, GoToMeeting and GoToWebinar are all very commonly used and popular. My preference is GoToMeeting and GoToWebinar as they have a very low footprint on your computer and are simple to use. When first entering an online meeting, a small installation of the program occurs allowing you to view and interact with the presenter's computer.

GoToMeeting is smaller scale and better for personalized training. GoToWebinar can handle up to 1,000 "attendees" and is typically used for presentation or demonstration to a large group.

Some of the online meeting services are free, but most require a monthly fee. The fee is paid by the organizer who then has the ability to schedule meetings/webinars in advance

or “Meet Now” for meetings on the fly. Your organizer will either email you a link to the meeting site or can tell you the link on the phone. Each meeting has a unique “Meeting ID” that you will enter at the main page.

GoToMeeting is typically used for standard training where more than one person may need to show their screen and/or be given control of the mouse and keyboard. This interaction can take place in a variety of ways. When in a meeting, anyone can be given (and must accept) the “Presenter” role which allows others to view their computer. And, even though the Presenter always has priority, control of the mouse movement and keyboard entry may be granted to others in the meeting. This allows someone else to work on my computer remotely.

The audio portion of the training usually takes place by calling in on a conference call line supplied by GoToMeeting. VOIP (Voice Over Internet Protocol) is also available allowing you to use your computer’s speakers and microphone but it is not recommended because of quality.

GoToWebinar is used for larger scale demonstration and presentations and can accommodate up to 1,000 Attendees. Online Webinars are generally structured to have one or more

Presenters making the presentation.

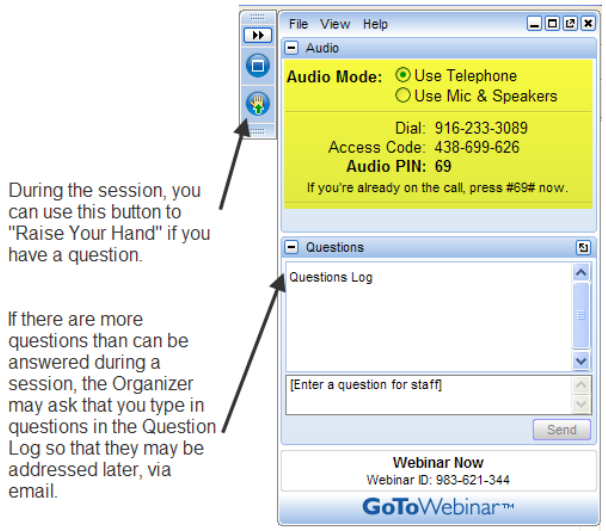
Like GoToMeeting, the audio portion of GoToWebinar usually takes place by calling in on a conference call line supplied by GoToWebinar. However, in a Webinar setting, the Attendees are muted automatically by the Presenter so that everyone isn't blessed with the sound of crinkling potato chip bags and elevator music when someone puts the call on hold! The Presenter has the ability to un-mute one or more Attendees as needed. The audio of all Attendees is managed by the Presenter by having each Attendee enter a unique "Audio PIN" upon arrival.

GoToWebinar has 2 ways to ask and respond to questions from Attendees. The Control Panel has a "Raise Your Hand" button that notifies the Presenter there is a question. Depending on time constraints, the Presenter may decide to un-mute and answer the question during the online session. If there are more questions than can be answered during a session, the Organizer may ask that you type in questions in the "Questions Log" so that they may be addressed at a later time.

Pros and Cons

That CAD Girl

I've put together what I consider to be the Pros and Cons of online training for CAD Software programs.



Pros

- Can eliminate travel time and expenses
- Very cost effective option for customized one-on-one training
- Allows for personalized, absolutely customized training because it's normally one on one.
- Can't find a local trainer? No problem. Felicia

Provencal can train you from Hawai'i – although you may want to go to her!

- Can be set up within minutes if there is a pressing technical support issue or project that suddenly comes up.
- Can be scheduled in shorter blocks of time – one of the best ways to make sure you retain what you are taught. I like to schedule 2 hours maximum per session.
- Shorter blocks of time allow for easy customization of training topics from one session to the next. If more time is needed on certain features, it's easy to squeeze in another 2 hour session.
- It IS interactive!
- All sessions can be recorded and played back at your convenience for a refresher

Cons

- Some people are more comfortable sitting beside and working directly with the trainer
- It's less interactive than hands-on, in person training.

- For hands on training and depending on the material being covered, it may not work as well if you have several folks needing training at one time.
- Requires a high-speed connection and a telephone headset allowing two hands on keyboard. A speakerphone can be used as long as feedback doesn’t become an issue.

Real World Example

I recently worked with a client from out of state. He is a grading contractor who thought he needed Carlson TakeOff training but, after some discussion, realized training in basic CAD (IntelliCAD) needed to come first and then TakeOff training.

The initial proposal was for me to travel there and spend 3-4 days training this client plus a second person (a competitor, in this case) who needed the same training. Both of them decided to give online training a try.

We scheduled online training for every morning one week. I worked with one from 7:30 to 9:30 am and then with the other

from 10:30 – 12:30 pm. After the 3rd day, we had covered so much material that one asked to skip the next day so he could work with it himself and apply what he'd learned so far.

We ended up skipping two days. By the time we met again, he'd worked with it enough and become so much more proficient with the basic CAD operation that we were able to fast-forward through the next couple sessions and started working on his current project. Another subsequent session was cancelled because the rain finally stopped!

And then a few days later, he needed to get his project finished and out to bid. So, after our first session one morning, we set up another session at 4:00 that afternoon and worked until almost 7:00 that evening.

Both customers ended up very happy with the amount of material we covered and where they were with the software when we wrapped up our regular training. They still have the video recordings of the training for their reference to go back to when needed. In the end, the cost was almost the exact same as it would have been had I fulfilled the original proposal but they both learned and retained much more because the training was customized and personalized to their

specific jobs.

Like to know more?
If you'd like to discuss online training for yourself or your group, please call 919.417.8351 or email us at ContactUs@thatcadgirl.com.

Top Ten Benefits of Carlson Software

June 8, 2009

1. **Gives Users Platform Choice**
   Carlson Software is built on both AutoCAD® and IntelliCAD®, allowing its users to choose their CAD platform. The software can be run on AutoCAD, AutoCAD Map®, Land Desktop® or Civil 3d® for versions as far back as those built on AutoCAD 2000. The IntelliCAD that is included for Free is a virtual clone of AutoCAD

that works natively in DWG format files (no need for import, export or conversion).

2. **Goes from Concept to Completion**
   From data collection, to design and drafting, to estimating, through stakeout, to machine control, you'll find complete, interactive software solutions with Carlson, therefore allowing you to skip rework and data conversions.
3. **Provides Advanced Technology & Innovation**
   Carlson provides industry-leading breakthrough features across land surveying, civil engineering, construction and mining to enable its users to do more, do it better and in less time.
4. **Enables Dynamic 3D Design Using Standard Drawing Entities**
   A unique approach that gives Carlson users all the power they need for automatic or by-command updates and still allows for regular drafting on the entities plus seamless sharing of drawings with other design professionals.
5. **Works For and With Its Customers**
   To us at Carlson, success is measured in the quality of our products and the satisfaction of the individuals

and companies that use them. Customer input leads directly to new state-of-the-art features.

6. **Believes in Independence**
   Carlson Software's independence fosters both our creativity and innovation and that of our users. We are free to focus on our customers to provide better, constantly improved software that "does more."
7. **Provides Full Data Compatibility**
   Carlson's product line provides full data interoperability through the use of dozens of built-in drivers, including full support of the industry standard LandXML format for civil data exchange.
8. **Gives Free Technical Support**
   Get support from Carlson via phone, email, discussion groups and webcasts. There is no limit on the number of support calls and no product retirement. We service all versions of all of our products.
9. **Has World-Class Training Options**
   Software is an investment and you can learn how to best put it to work for you at Carlson College. Attendees get personal one-on-one attention – it's a hands-on learning experience.
10. **Allows Choice of Maintenance as Needed**

Each new product line at Carlson Software provides new customer-driven features. Carlson customers are allowed to choose to upgrade based solely on the merits of the software’s new features. There is no retirement of software.