

DataCAD Boston Users Group

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A Committee of the Boston Society of Architects

Since the last users group meeting was way back in July, some 20-plus DBUGers got reacquainted and enjoyed convivial conversation over sandwiches, chips, and BSA beer. After introductions, meeting host Evan Shu welcomed everyone back and reminded folks of the 18th anniversary DBUG meeting to be held at the Build Boston conference on November 16th at 6 p.m.

BASIC LESSON: Goodies in DataCAD 11.08 (.01)

Evan explained that while the new Symbol Tools feature in DataCAD 11.08.00 is the rightful headliner to the latest free update for DataCAD, there were a number of other nice features that should not be overlooked. So, he pushed off explanation of Symbol Tools until last and first highlighted some of the other goodies in DataCAD 11.08.

* **Hatch Lock.** Great for keeping hatch alignment even when moving and rotating hatches: *Hatch/Hatch Type: LockOrig* (Lock Origin); *LockAngl* (Lock Angle); and *LockScl* (Lock Scale).

* **Infinity Clip (Ignore Z).** Eases frustration in using 2D Clip Cubes as frustrating z limits can now be turned off. Clip Cube (or XClip for XREFs), you will see a new toggle called *Ignore Z*.

* **Implied Match.** A mouse click saved is a mouse click earned. When you see the *Match* button (*Change/Rotate* menus), don't click on the button, click on the entity and "match entity" is assumed.

* **Keep Groups.** A wishlist item from DataCAD 3.1a fulfilled! New toggle *Move* and *Copy* menus remembers groupings even after copying which mixes groups (e.g. with Area box).

* **o2c Ground Plane.** Stay grounded with this handy new option which automatically puts in a ground plane in your object views. CTRL-right click, *Rendering Settings*, New Check Box.

Mark Madura provided undocumented DCADWIN.INI settings for configuring ground plane under [o2cViewer]:
GroundPlaneEnlargeFactor=2.0 [ratio of ground plane to entity extents]

GroundPlaneAtBase=[TRUE/FALSE/BLANK]

GroundPlaneAtHeight=[TRUE/FALSE/BLANK]

GroundPlaneMaterialFile=[path to desired MATERIAL.INI to control color, texture]

* **More Lights.** A workaround to limit of 7 shader lights in each drawing file by using XREF subsets.

Rendering Settings: "Use Lights from XREFs." Mark noted in his later presentation how he used one XREF per light for highest control.

* **Sticky, Sticky.** Menu now remembers setting for Contour Search, and 1 Line Trim menu behavior can be configured via the DCADWIN.INI [General] section.

October DBUG Meeting

DBUG Meeting

October 26, 2005

Host: Evan H. Shu FAIA, Shu Associates

BSA Building, Boston, MA

1LineTrim By Entity=(TRUE, Entity reset to on; FALSE, reset to off. (Default); if blank, By Entity retain's its last status.)

* **XREF Enhancements.** You can now do a *Select/UnSelect All Files, Multiple Insert* via CTRL-right click in file list of Reference Manager; Also you can insert multiple instances of the same XREF via *Insert/XREF*, side menu S2 for "multiple" (must have DataCAD 11.08.01).

Finally, Evan reviewed the powerful context menu Symbol Tools (*providing Cheap Tricks reprint Oct 05, see DBUG web page*). He highlighted how by CTRL-right clicking on any unexploded symbol, you could open that symbol's file folder in the Symbol Browser, replace that symbol with another, send it to the Object Viewer, explode that symbol in three different ways, and reset the z insertion point. He showed that the mirror text function now works for XREFs and symbols. The group discovered that if a symbol's folder is not accessible (e.g. off-network or other firm's file) that the Symbol Browser will instead open a menu of all the symbols in that particular drawing — could be quite useful!

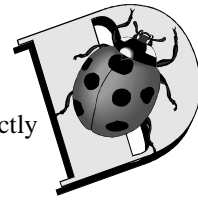
INTERMEDIATE LESSON:

Do-It-Yourself Home Improvement

In a "now, for something completely different" DataCAD President/CEO Mark Madura put on his virtual hard hat to show us what he has been working on in his "other life" and a home owner in Simsbury, Connecticut. His house is in a modern subdivision development, which was unfortunately built on a filled tract with serious soil erosion problems. Mark walked us through how he has dealt with a) supporting slip-sliding away deck footings with a new site retaining wall; b) creating a new yard area "the north forty" and c) built two additions on his basic Colonial Modern 3-story box.

This presentation, while aided with high-tech computer hardware, was more about good ol' fashioned nitty-gritty "Tool Time" hardware. Mark gave high praise for his find of some excellent nail removing pliers, "The Extractor" and he gave us some of the low down of operating your own Bobcat Mini Track Loader MT-52, which he rented when totally frustrated at trying to get a foundation excavator to his site. He added helpful information about various ridge and raft vents as well as about hardiplank siding.

It was an impressive tour-de-force of color slides showing everything from Mark & wife Jennifer lifting rafters into place to Mark presented a o2c and PhotoShop rendering of the finished work, complete with custom deck lighting. A listing of hard contact information on the multitude of topics he touched on are provided as follows.



Software:

DxO Optics Pro <www.dxo.com>
TreeSize Pro 3 <www.jam-software.com>
Beyond Compare <www.scootersoftware.com>
Photoshop Elements 3 (replaced with version 4)
Paint Shop Pro 9 (formerly JASC Software bought by Corel & replaced by Paint Shop Pro X-\$99)
High-Logic Font Creator 5 <www.high-logic.com>
Microsoft Photo Story 3 (free download)

Magazines:

Fine Homebuilding <www.finehomebuilding.com>
MaximumPC <www.maximumpc.com>

Web Sites:

Weather Underground <www.weatherunderground.com>
October Rainfall at Windsor Locks 16.33" (41.49 cm)

Computer Hardware:

Sony DSC-F828 (replaced with DSC-R1)
DSC-R1 image sensor 21.5 x 14.4 mm (10.3 megapixels, 3,888 x 2,592)
<www.sonystyle.com>
WACOM Intuos 2 (6x8) (replaced with Intuos 3 - \$350 <www.wacom.com>
Olympus P-440 8 x 10 Photo Printer (discontinued) - \$400
HP Color LaserJet 2550 (replaced by 2600n) - \$400

Hardware:

Bobcat Mini Track Loader MT-52 <www.bobcat.com>
The Extractor (Extracting Pliers) - \$22.50
<www.nailextractor.com>

Building Materials:

V-400E Ridge Vent, RS-400 Raft-A-Vent Eave Vent
<www.cor-a-vent.com>
Hardiplank Lap Siding <www.jameshardie.com>

ADVANCED LESSON: DataCAD 12 Alpha Preview

A surprising majority of the group stayed on late into the night (past 10 pm) so they could get a first glimpse of the upcoming DataCAD 12, which is now in the "alpha" build state.

First and foremost, while no parametrics were demonstrated, Mark did say that DataCAD 12 will include useful parametrics that will allow you to alter attributes for walls, windows, and doors after the fact. He hopes that aspect of DataCAD 12 will be ready to preview at the *Build Boston* users meeting on November 16. Among the other juicy items for DataCAD 12 that we saw were as follows:

- a) an optional double-precision display list (while DataCAD 11 has a double-precision database, it still uses a single-precision display list, which can cause some snapping inaccuracies in certain cases);
- b) the ability to insert *SketchUp* files directly, and do on-the-fly translations of *SketchUp* models directly into the o2c viewer;

c) the ability to edit symbols directly (change color, etc.) without need to explode them;

d) the inclusion of Multi-line text (word wrap and text highlighting capability) with complete compatibility with AutoCAD's *MText* feature;

e) an ability to use SHX fonts directly and the ability to save and reload text styles;

f) an ability to change text attributes (angle, aspect, alignment) via CTRL-right click context menu;

g) complete object snapping "anywhere" to "anywhere" (including fills and hatches) with dynamic flyout "snap tips" (e.g. "tangent" or "intersection");

h) *ClipCube* and *X-Clip* boundaries are now snappable;

i) *ClipCube* and *X-Clip* boundaries can be in drawn using polyline fence mode;

j) the ability to combine different dimension scale types within a single drawing file (e.g. ft-inches and metric) along with other dimension enhancements;

k) smoother arc construction display with cursor right on curve;

l) the ability to render materials by color, layer, or entity, and texture definitions which can be bound to an entity and embedded in drawing file;

m) the ability to save and re-load various printing/plotting configurations;

n) ability to export MSP to AutoCAD *PaperSpace* format;

o) the addition of so-called "Windows" linetypes, which are pixel-based and scale-independent for WYSIWYG display and printing;

p) the provision of an optional choice of software protection in lieu of hardware dongle.

Finally, Mark stated that their intent is to make drawing files compatible forward, backwards, and round-trip between DataCAD 11 and 12. New feature items in DataCAD 12 would either be interpreted (e.g. rectangular *ClipCube* instead of fence *ClipCube*) or would not display in DataCAD 11, but as long as these items are not edited, such a drawing file would come back into DataCAD 12 intact. Obviously, there was plenty of food for thought in this early preview, and all looked forward to the November Build Boston meeting for the unveiling of the next installment.



Symbol Tools

If there is one overriding reason why you should stop everything and download the free DataCAD 11.08 update (*Help/Check For Update*), it is for the excellent *Symbol Tools* feature.

Just as the Symbol Browser feature introduced with DataCAD 11 helped us declare independence from exasperating templates, the new Symbol Tools feature will help you declare independence from the template and symbol browser menus in general when working with symbols.

When you CTRL-right click on any *unexploded* symbol, you will see a pop-up context menu display over your symbol as shown in *Figure 5*. The top choice is the very useful *Open in Symbol Browser*. You may have a bunch of different symbols on your sheet and say, you want to place a new elevation key symbol. Rather than hunt through the directories to find your proper folder, you may already know that it is in the same folder as the room key symbol already on your drawing. CTRL-right click on the room key symbol and pick *Open in Symbol Browser*, and you are quickly in business.

Another excellent use for the *Open in Symbol Browser* function is when you want to replace a symbol with another symbol from the same folder. Not only can you bring up that folder quickly with *Symbol Tools* but you can choose the *Replace* function from the same pop-up and get the job done PDQ. (*Figure 5*).

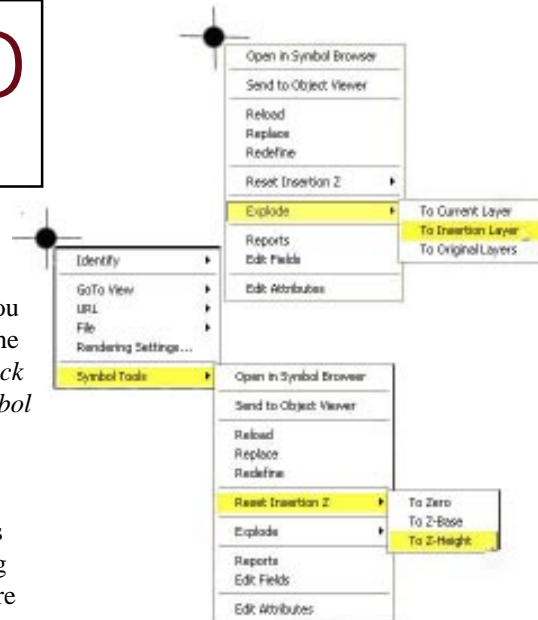


Figure 5: Right-clicking on a symbol with pop-up the new *Symbol Tools* menu.

Another nice feature for 3D work is the *Send to Object Viewer* command, which will immediately open and view any 3D symbol you have in the Object Viewer for checking. A presentation cheap trick utilizing this command might be to segment various parts of your 3D model (say, the kitchen or the family room) as a saved symbol. Now with a CTRL-right click you can pop-up a view of just that part of the model for 3D viewing and discussion.

Are you aware that DataCAD symbols now remember the layers that each part of them came from? When you explode such a symbol, you can take advantage of this imbedded information — now with some new options. In that same *Symbol Tools* menu, you will see a secondary flyout under *Explode* (*Figure 6*) with these options:

Current Layer (explodes symbol's entities to current active layer)

Insertion Layer (explode symbol's entities to symbol's insertion layer)

Original Layers (Explode symbol's entities to their original layers)

The first option is the traditional explode to the active layer option that is done via the Template menu; the second option is the new explode choice (only via *Symbol Tools*) that keeps the entities on the same layer that they were placed on, and the third option puts them back in their original named layers (and will create those names if not already in the drawing file).

Reset Insertion Z is a nice new option for doing 3D modeling, since it is often the case that your placed symbols come in too high or too low. You are now given these 3 basic options to quickly reset those symbol heights: a) *To Zero*; b) *To Z-Base* and c) *To Z-Height*.

Finally, you are given quick access via *Symbol Tools* to the functions of *Reports*, *Edit Fields*, & *Edit Attributes* (*Apr 05*).

A couple of other symbol enhancements were also put into DataCAD 11.08. From the *Symbol Browser Options* menu, you now have two Reload choices: *Reload All* versus *Reload On*. The *Reload All* option reloads all symbol definitions regardless of their corresponding layer on/off status as it did previously. The new option, *Reload On Layers Only*, only reloads symbol definitions that sit on layers that are turned on.

Another fix/enhancement is that you can now have the text within a symbol behave predictably when you *Mirror* them. *Fix Text* "off" will flip the text over while *Fix Text* "on" will keep the text readable after the flipping. In earlier versions, the text would always flip when mirroring a symbol regardless of the *Fix Text* setting.

The new Symbols Tools function in DataCAD 11.08 is a great addition to any power drafter's arsenal of tools. Update your copy of DataCAD 11 and start using it today. <