

DataCAD Boston Users Group

c/o Shu Associates Inc.
120 Trenton St.
Melrose, MA 02176-3714
(781)662-0020 Tel. & Fax
<http://world.std.com/~eshu/dbug.htm>
eshu@world.std.com

A Committee of the Boston Society of Architects

November DBUG Meeting
DBUG Meeting
November 16, 2005
Host: Evan H. Shu & DATACAD LLC
World Trade Center, Boston MA

About 50 folks gathered for *Build Boston* at the World Trade Center for *DBUG's 18th Anniversary* meeting and enjoyed the traditional DBUG chocolate cake. Evan Shu welcomed the group and recruited hosts for the 2006 year. Introductions were made going around the room, including those who had attended the very first organizational meeting (Dec 2, 1987) to a person who was attending his first DBUG meeting.

Trivia Quiz

Evan took the group through an 18-point DBUG Trivia quiz on 1) chronologically ordering the various "firsts" in DataCAD and DBUG history; 2) identifying the icons, and 3) identifying the longevity of DBUG hosts. Greg Barriere won first prize (score of 14) of the CTW SketchUp Tutorials. Other runnerups, Chuck Plaisted, Ed Wolfstein and others, won CDs of *Cheap Tricks* Vols 9-15 and CADD Tutorials online, from Geoff Langdon's new business venture.

Mad House II

Mark Madura gave this group an update on the ongoing construction work on the addition to his "Mad" house in Avon, Connecticut. (see *Oct. meeting notes* for details). He reviewed some of the advanced rendering techniques he used for creating the custom porch lights, as well as using photos and bitmaps in combination with o2c rendering.

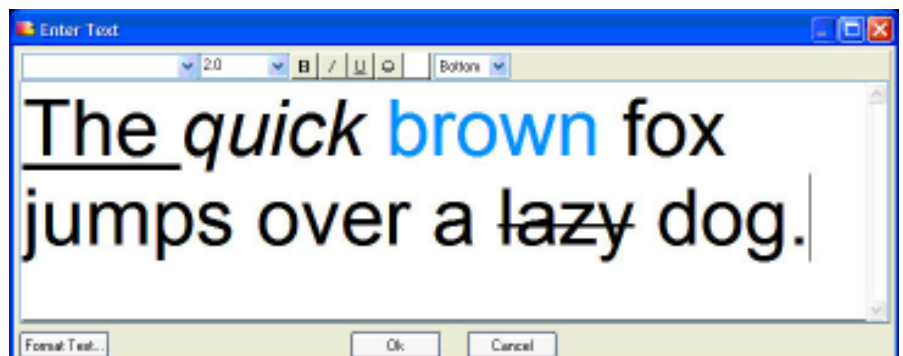
DataCAD 12 Alpha Preview

Notes by Neil Blanchard:

Here's my notes (taken on my Palm Zire 71) with additional comments and explanations, from last night's 18th Anniversary DBUG meeting at *Build Boston*.

Some of the new features in DataCAD 12:

- * Expected time of delivery is Spring 2006 (April-May-June)
- * v11.08.02 will open v12 files w/ new features modified a bit. If you don't edit those new items, they will "round trip" back to v12 okay. [In other words, "backward compatibility."]
- * SketchUp files can be inserted or XRef'd into v12 w/ textures, layers & possibly components. SKP files becomes a symbol which is "editable"
- * New object snapping: flyouts identify possible snap points. Works in 3D as well. Snapping looks to be improved a lot — you can snap to anything: associative hatch, nested symbols in nested XREFs, polylines, ellipses, edges of Clip Cubes, you name it.
- * Optional 64bit Display List — set in *Preferences*
- * Multi-Line text: initial version will only be usable for True Type fonts, but later CHR's will be added, or possibly with a different tool. This is huge, but only if we get the CHR support.
- * SHX fonts are natively supported



*Figure: DataCAD 12's
Multi-Line text capability*

Figure: DataCAD 12's Property Editor and multi-scale dimensions (far right).

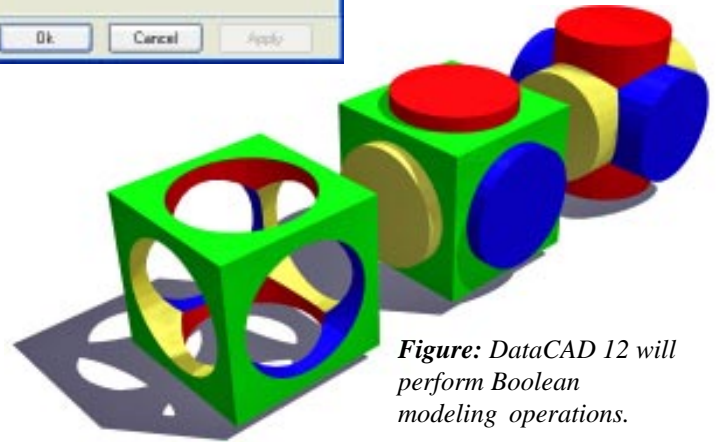
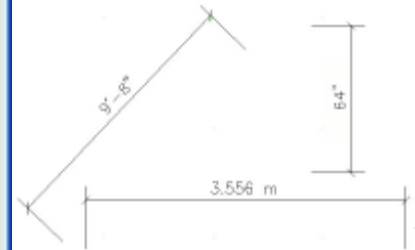
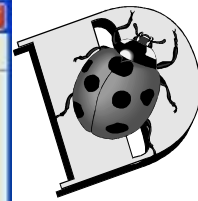
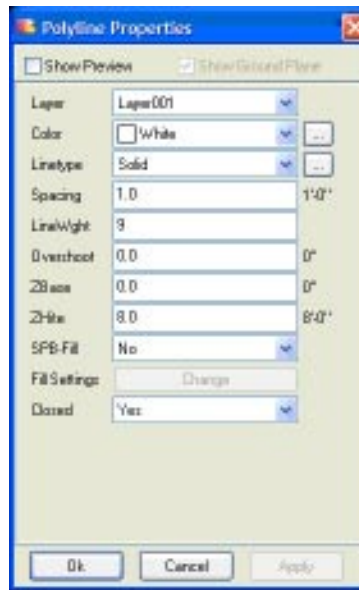


Figure: DataCAD 12 will perform Boolean modeling operations.

* Entity Property editor dialog — Control-Right Click on any entity and you can change almost any property, like it's layer, color, etc. (See Figure at right.)

* Materials can be assigned by entity which supersedes the layer material setting.

* Edit symbols directly — *Control-Right Click* on a symbol and it essentially opens a new drawing with that symbol in it, and then when you are done, it has the option to update the symbol in that drawing, or save it to the disk, or only affect that one symbol. This has a lot of overlap with SketchUp and the MSP to DWG export (later on), as well as other things.

* Independent dimension settings — different scale types, different rounding settings, and also prefixes and suffixes are supported. You can “lock” the settings for a dim (or not).

* POWERCLIP!!! This is a “clip fence” for XREFs! You can use any polyline to clip an XRef. This is very sweet.

* SYMBOL CLIP!!! This is the same sort of feature for clipping symbols! Which is great — and it has a lot of implications, since SketchUp files and other things are treated like symbols in v12 — so you'll be able to use a fence clip on SKP files, etc.

* WYSIWYG linetypes These are the “Windows” linetypes that are used in things like CorelDraw. They can be used as smooth arcs and circles and also can be used in conjunction with DataCAD linetypes, so you can turn a batt insulation into a dotted batt insulation.

* MSP to DWG exporting!!! Wow — this is killer! All MSP sheets are exported WYSIWYG to a DWG: XREFs and Self-References are converted into symbols, and can be clipped (see what I mean about “overlap”?) and can be exported to a DWG file. Whew, lemme sit down now...

But wait, there's another BIG one:

* DataCAD v12 will do Boolean Operations!!! This means it can Add or Subtract or show the “Common” shape left between any group of 3D shapes! This is huge.

This is a precursor to smart walls, for example — all building components that are “smart” need to be able to have Boolean functions. “Smarter” walls, doors, and windows will be in the first build of v12.

* Lastly, we will be able to access something that has always been in DataCAD: *Construction Planes*. You will easily and quickly be able to make the drawing screen orthogonal with these construction planes and then draw in them. Mark showed four 3D shapes on the screen; all at completely different orientations, and we could see the square construction plane at the base of each shape. He then just clicked on the plane and the drawing screen was instantly orthogonal to that 3D shape. All our GTVs are essentially the same as these construction planes.

I can't be totally sure, but I really like where this seems to be leading. And that is to being able to draft onto the planes of a model, as well as easily edit something like a skylight in a roof, or any other thing in any 3D plane. I sincerely hope that this is leading us into an integrated virtual model, where we just draft in the details, with a 3D model at the core of things, and produce our working drawings — our bread and butter, in a greatly improved DataCAD v12.

Added Note from Michael Smith: The one thing I would add to Neil's notes is that Mark stated that the first build of v12 will absolutely have smart walls, doors and windows. He noted that “version 12 has to have that.” Unfortunately he didn't have anything to show us last night, but the beta testers will probably see something after the first of the year, with a planned release date for the spring of 2006.