



DataCAD Boston Users Group

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<http://world.std.com/~eshu/dbug.htm>

A Committee of the Boston Society of Architects

DBUG Meeting Notes

April 26, 2007

**Host: Manny Snyderman and DATACAD
at Milford High School, Milford, MA**

Location: Milford, MA High School Computer Lab

About 25 people attended the gathering at Milford High School's former Woodworking shop, of which about 5 were current students at the High School. Vestiges of the former space were still apparent with the mezzanine still harboring remnants of cherry, maple and some mahogany boards.

After a round of Introductions of the people in attendance, Manny Snyderman opened up the evening with a background of the past few year's activities at the High School and why we were meeting at the High School. Manny's son goes to school at Milford, and after reading the School's Syllabus Manny noticed that the High School offered CAD classes, with further reading indicating that they used DATACAD. His neighbor, Mr John Burcato, was the Milford HS Principal, and after talking to him and investigating further, Manny realized that there was a significant problem with the CAD Class. Namely, outdated software, outdated computers, and a lack of training of the staff teaching the course. Manny decided to take responsibility to see if he could help in the situation through his contacts with Mark Madura, President of DATACAD LLC, a commitment from the Principal of Milford High School, and the dedication of Tom Rosa, one of the technology teachers at Milford HS, to provide a better environment and support for teaching technology courses at MHS.

Manny Snyderman then Introduced John Burcato, Milford High School's Principal to all in attendance. John recently was recently awarded the title of "Massachusetts Principal of the Year Award."

John opened his talk with his vision and the history of the vision coming to take form in the transition of the MHS Wood shop into a CAD training class with 25 modern networked computers. His vision was to build a foundation in technology, computers, CAD, and move them into robotics. Part of this vision also includes a Digital Photo and Graphic Design lab; the products of this class could be seen in the numerous photos and graphics displayed in the hallways. There is also an Advanced Computer Program-

ming Lab that teaches programming, C++, Visual Basic etc. These students now provide support and trouble shooting for the district.

John stated that the ability to see this vision take form was a celebration of the community based efforts of Manny Snyderman and Mark Madura who offered to provide the software, training and weekly support for this project. Manny was able to train Tom Rosa as well as provide weekly training on site at the school. Mark was able to provide support and the newest version of DataCAD 11 to the school, and they were able to secure funding for computers that would run the current operating software.

His vision includes using these technology based auxiliary classes that the kids enjoy to do as a way to keep the kids from dropping out. They want to come to school if only because of the auxiliary classes they end up getting an education because they look forward to the classes. With much of the industrial jobs having left Massachusetts, there are fewer opportunities for future employment for the skills learned in the wood shop, and he sees the technology department as a better way to have the kids build conduits and find future positions in the community.

Tom Rosa also spoke briefly and explained that the future for these kids was not in teaching them wood shop. Manny spend a number of hours training Tom Rosa one on one to bring him up to speed on DATACAD 11. Manny now works with Tom on a weekly basis to teach the students.

Manny then closed this portion of the presentation before we broke for an intermission. Manny presented a no-holed-barred description of what it was like to set up and teach a class of Architectural Drafting in High school where the students have a zero knowledge base of what architecture is about. He stated that what they are doing is taking these high school students and providing a basic education in drafting and materials so that these students would be able upon graduation to know how big a 2x4 was to being able to



Photo: Milford HS Principal John Brucato looks on at the new 25 station Computer Lab.

work in an office being productive doing redlines and being to understand the basic language of architecture.

I definitely got the impression that this is not something that can be done easily, without sacrifice, and without a commitment by all to see it through. It takes a strong commitment and effort by all to see it through. The rewards of these efforts were on display at the April DBUG Meeting. Kudos to all involved.

Manny stated that he would be happy to talk to anyone who was thinking about doing something like this in their community. Mark Madura also stated the importance of having a person at the local level committed to the vision to get something like this to work.

After the break, Mark Madura, President of Data Cad LLC unveiled the latest version of DATACAD 12 which was in release candidate #1 at the meeting. He stated that later in the coming week a Trial Version would be available for download.

(As of the writing of this they are now at release candidate #12, and are available for download in a test drive version good for 45 days without using a dongle. The download link can be found on the DataCAD website <www.datacad.com>

in the Forum section)

Mark showed the “Smart Entities” functions of the soon to be released Version 12 of the DATACAD program. “Smart entities” is a 2-D method for creating walls with windows and door located within the walls that respond to one another seamlessly in 3-D. The walls are created similarly to the way they are created now in V 11, except that



through a series of preset or customized parameters these entities appear seamlessly in 3-D with all wall finishes, trim, sashes, door lights, and material definitions. The ability to modify and replace or change the initial window or door selections can be completed without erasing the window or door through the use of the pull-down parametric interface. This way of producing quick 3-D models can also be turned off and regular line drafting can exist in the same drawing. The “Smart entities” are currently limited to walls, windows, and doors.

A large selection of standard walls and finishes which are pre-rendered and included with DataCad. Walls can be defined with two separate materials for the interior and exterior of the wall. There were numerous wall types including concrete, masonry to wood siding, all of which are possible to modify. The material selection includes more realistic material bitmaps, and textures. Many of the 3-D Symbols are similarly more render friendly. Much of the Andersen Window Catalog possible to select from the menu interface, and similar assortment of door styles and sizes are also possible to select. Future “Smart roofs” and other systems will be forthcoming in future releases.

Mark demonstrated the ability to import Sketchup files directly into DataCad including the Sketchup materials, Sketchup files can also be Xref'd into a DataCad file. Also the material definitions from the Sketchup models are imported into DataCad. They are working on a write to Sketchup format so the models created in DataCad can be saved in Sketchup format and downloaded to the 3-D Warehouse and Google Earth.

There is no longer support for CHR fonts (Yippee) all fonts used are SHX or True Type and all CHR fonts are auto-



Photo: Interested onlookers (left to right): Greg Barriere, Mark Madura and Manny Snyderman.



matically translated to SHX format. Did we mention Multi-line text is now available? Although we had a few problems at the presentation this is something that we have seen before. The ability to have multiple True type fonts, and multiple attributes such as bold and underline for different words and letters in the same line and multiple lines is now available. A Font Dialog box is also provided in this version.

There is a dynamic display which shows the outline of the entities being moved or dragged and not just a box of the outer limit of the selection.

You can also now control right click and select specific entities by drawing a box around them and having only these entities render in O2C. This is really a good thing for larger models where you are just working on a specific component.

Dynamic selection by area box: If you select an area from left to right, then the normal area select method is assumed, if you select right to left then crossing is turned on Object snapping is upgraded now a dynamic indicator flag appears as you move over the predefined snapping points, letting you know if the snapping point is a midpoint or an endpoint. Other snapping enhancements include a setting for pre-defined offsets from a snapping point.

Symbols, you can now edit unexploded symbol on the fly and save to your drawings for the symbol definition or you can replace or save as an additional symbol to the hard-drive.

Multiple dimension formats are available on the same drawing. Therefore both metric, and imperial as well as engineering and decimal formats can all be displayed at the same time.

Pen styles, you can have scale independent line types to your drawings and there is now the ability to have curved property lines appear correctly.

Pen Tables, you can now have multiple pen tables available for different plotting scales.

The reference File manager has been enhanced to give you more control over the Xrefs in the drawing including the ability to assign custom names to Xrefs

Mark recommended reading the "What's New" file (this is so you do not have to read the entire manual) and in this file is included some new terms and concepts that will help

Photo: Milford HS Technology teacher Tom Rosa



make your understanding of the smart walls a seamless change.

This includes Types, Type dependant, Type independent, Nodes,

Also there is a user selected and adjustable setting for offsets from any of the midpoints, intersections or endpoints of a wall. This will allow for dynamic snapping to a point 6" from the endpoint of a wall for setting the jamb of a new door.

Costs for upgrades and new systems were established and provided at the meeting.

Upgrade From Version 11 to Version 12 = \$395.00

Upgrade From Version 10 to Version 12 = \$495.00

Upgrade From Version 9 to Version 12 = \$595.00

Upgrade From Version 8.5 & Earlier to Version 12 = \$795.00

Full version = \$1,295

Each Additional seat = \$495

Student Version \$185 (this is the full version0

Currently there is no Lt Version

The possibility of having a USB Thumbdrive/hardware key with memory is being looked at so that you can have the entire program on the USB hardware key /thumbdrive.

— Meeting Notes by Gregory Smith, AIA