

AutoCAD problem solvers

BY BILL FANE

In theory, everyone who needs to access an AutoCAD drawing file owns a full, legal copy of the software. In practice, however, many users only need occasional or limited access. The designer needs a full working copy of AutoCAD to create and edit the drawings, but, often, the recipient only needs to view them and, possibly, print a copy. A classic example would be when the design department sends a drawing to the toolroom or to production. It's pretty difficult to justify the cost of a full copy for such limited use.

Moreover, if the recipient of a drawing file does have a copy of AutoCAD, it's difficult to ensure that he is working from the same version as the sender.

A number of third-party applications have been developed to solve these two problems, but now San Rafael, Calif.-based Autodesk Inc., the developer of AutoCAD, has come up with its own solutions. The good news is they are free and available for download at www.autodesk.com.

For the first situation, when someone receives an AutoCAD drawing file but does not own AutoCAD, all he needs to do is visit www.autodesk.com/dwgtrueview for the free download of DWG TrueView.

Once installed, it opens and displays any AutoCAD drawing back to version 2.0. Its interface looks remarkably like a subset of AutoCAD itself. This is no coincidence when you realize the DWG TrueView program is simply a subset cut from standard AutoCAD. For this reason, 100 percent compatibility is virtually guaranteed.

DWG TrueView supports almost all the viewing functionality of AutoCAD itself. It displays standard 2-D objects, as well as 3-D solids. It supports model space, paper space layouts, sheet sets and named drawing views. Users can pan and zoom as desired.

Three-dimensional objects can be displayed as wire frames or in any of AutoCAD's standard shading or hidden modes.

Layers can be frozen, thawed and set to plot or not plot. Named layer state sets are supported. Layer colors, line

types and line weights can be changed. The result can be printed using AutoCAD's full range of options.

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Though DWG TrueView does not seem to support line weights, it does. If the original drawing was saved with "show line weights" turned on, then DWG TrueView will display them.

As indicated, the line weights assigned to individual layers can be changed. This does not change their appearance on screen, but it can have an impact on how they print, because line weights can be turned on or off when printing.

Revisions cannot be saved, but they can be published to AutoCAD's DWF format.

Like most application programs, earlier releases of AutoCAD cannot read a file produced by a later release. This is not a vicious plot to force people to upgrade, but is actually quite logical. At the time an earlier release was written, the programmers did not know what features would be in the next release. Autodesk remedied this a bit with AutoCAD 2004, which can read a file produced by 2005 or 2006.

The problem is there are a great many users still running Release 14 or AutoCAD 2000. It is true that later releases can "save as" back to earlier releases, but this does not help if you are the recipient of a drawing file and don't own the later release. This can also be a problem when you are not even trying to use AutoCAD. Many post-processor programs, such as stress analysis and CNC machining programs, can read an AutoCAD drawing file, but only from earlier releases.

Autodesk's new DWG TrueConvert program solves this problem. It is a

free download at www.autodesk.com/dwgtrueconvert. (An important point to note is that AutoCAD does not need to be installed for DWG TrueConvert to work.)

This utility accesses any AutoCAD file up to the current 2004/5/6 release and translates it back to AutoCAD 2000 or Release 14. (The latter format is the same as AutoCAD LT 98.)

It can be used on a single file or in batch mode for a list of files. If you find that you are regularly converting the same set of files, you can create and save a named file list. The message in the dialog box warns that the original file will be converted and overwritten, so you might want to make a backup copy first.

Usually, no translation is perfect. As indicated, later releases contain features that did not exist in earlier releases, so one might expect them to be dumbed down into the best approximation. For example, tables did not exist in Release 14 and so they might be turned into a block consisting of lines and text. Similarly, fields might turn into Mtext or, perhaps, attributes attached to a block.

However, when this author translated an AutoCAD 2006 drawing into Release 14 format, the tables and fields displayed properly in Release 14. Moreover, when the file was opened in AutoCAD 2006 again, the program correctly announced that it was opening a Release 14 drawing, and yet the tables and fields worked normally in AutoCAD 2006.

DWG TrueConvert also brings earlier releases forward, but this is not usually an issue because AutoCAD itself opens earlier releases. Once again, DWG TrueConvert is a subset of AutoCAD, so it should be as close to 100 percent compatible as possible.

All in all, these two utilities are quite useful, especially considering the price.

About the Author

Bill Fane is a former product engineering manager, a current instructor of mechanical design at the British Columbia Institute of Technology and an active member of the Vancouver AutoCAD Users Society. He can be e-mailed at Bill_Fane@bcit.ca.