



Knowledge Base Topic:

## Sharing Objects and Drawings

Software: Civil 3D All Versions

### Sharing drawings with objects with others *without your* software or version

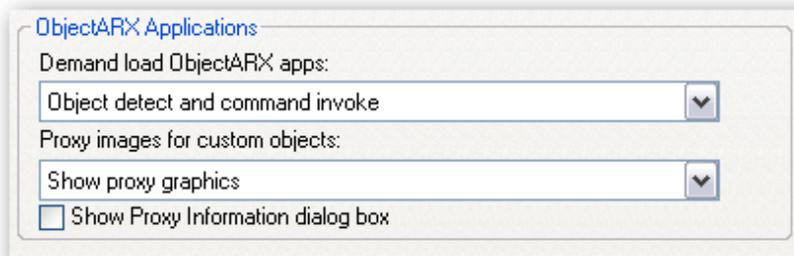
Objects are not backward compatible and never have been. Older Civil 3D software versions will convert newer objects to a proxy state and will not be editable. However, this does not apply to other Autocad entities in the .dwg file. The rules for opening .dwg files have not changed regardless of Civil 3D objects. AutoCAD entity edits themselves (not objects) can be saved and round tripped between AutoCAD and Civil 3D for any version.

**1. Best solution to retain object intelligence, use Object Enablers:** If someone needs to only view your drawing or make edits to basic Autocad linework or text (not objects), the best solution is to have your recipient install the Object enabler plug-in for their version at this link from Autodesk: <http://usa.autodesk.com/adsk/servlet/index?siteID=123112&id=2753223&linkID=9240618>

Autodesk® Object Enablers are freely downloadable collaboration utilities that enable you to use an Autodesk product to view and manipulate custom objects from other Autodesk products.

**2. Use Proxy graphics:** This works similar to using object enablers. You can utilize the proxy graphics utility within Autocad to create a graphic “stand-in” of your design objects. To turn on, at command: PROXYGRAPHICS (1). (By default this is off, and when off all objects types will display as a cube.) Please note, this will make your file size larger and leaving this variable on can slow performance and is best if left turned off until needed. Simply set variable and SAVE AS current or prior .dwg version.

Your recipient should make sure they can show proxy graphics In Options>Open and Save tab>ObjectARX applications panel set as shown:



**3. Save as DWFx file and open using DesignReview.** You can create .DWF or .DWFx files from your original drawing in your AutoCAD version. View them and their objects using Autodesk Design Review. The DWF file is a very small format design for the web and ideal for email exchange. This is a free program to view .DWF formatted drawings. Objects are visible, selectable and their properties are available to the recipient as well as the ability to measure, work with layers, views, compare drawings, print and much more. You do not have to set the proxy graphics variable for objects to be visible.

<http://usa.autodesk.com/adsk/servlet/mform?id=9131297&siteID=123112>

**4. Export.** You can use export within your version of AutoCAD to dummy down your objects to blocks, polylines and other AutoCAD entities. Use this instead of Save As (which does *not* modify your objects.) You can export to any version but the export functionality is only in products that create objects. Intelligence of the object will be lost forever in that drawing file.

From the File Menu, Select Export.

- Select AutoCAD DWG
- Select Export to {whatever your client requirements are, but in general R2000 is most versatile.}
- At the Export drawing name dialog, select a name and a location for your converted file. Out of the box, Civil 3D adds an 'ACAD-'prefix, so whatever name you call it will have ACAD-in front of the name. I would recommend you keeping this prefix.

Please note: If you have any xref and/or data references files attached to the drawing, you must go into that drawing and export it out. Then you have to re-associate the new xref name(s). The data ref files will be a bit trickier to convert as you have to redo the entire data reference file process. But in the end, you have an AutoCAD R2000 drawing that contains NO Civil 3D or NO AEC objects.

### **About AutoCAD and Civil 3D Versions**

Since AutoCAD 2010 the .dwg save version for any AutoCAD drawing has been the 2010 Base drawing version. (Other base versions were 2007, 2004 and 2000 for instance). Civil 3D 2012 uses the 2010 base version. Drawing files have never been backward compatible. These are default settings. You can save to an earlier base version by using SAVEAS.

As an example, If you are using Civil 3D 2012 and save to 2007 or earlier base version, you will get a prompt noting that you are selecting a version that will not work with your 2012 objects. Only AutoCAD objects can be edited.