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# Autodesk® Inventor™ and DWG TrueConnect: A Perfect Combination

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**MA215-5P** Learn how to transition smoothly to Autodesk Inventor using your existing drawing content and templates. Explore the possibilities of DWG TrueConnect and discover how moving from 2D to 3D doesn't have to be difficult or painful. In fact, combining the two can make your life much easier.

- Key Topics Covered**
- Inventor DWG / AutoCAD interoperability
  - Reusing AutoCAD templates
  - Sharing .DWG files with AutoCAD
  - Bulk .IDW conversion

## **About the Speaker:**

Thom was a Solutions Engineer with Autodesk's Manufacturing Solutions Division for seven years. He now works as a Mechanical Solutions Specialist for the Strategic University team in Autodesk Worldwide Education. He has designed all kinds of products using Autodesk software including cabinets, ships, castings, electronics, and consumer goods. He began working in 3D with AutoCAD Release 9 in 1988, and has been a proponent of the advantages of 3D ever since. In his role at Autodesk, Thom uses his experience to help Universities transition their programs to include Autodesk software.

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## Autodesk Inventor and DWG TrueConnect

### Why .DWG?

Many of us have been creating .DWG files for much longer than we would ever like to admit. On the bright side there are roughly 8 million people “legally” making .DWG files today so we’re definitely not alone.

According to the latest numbers available for Inventor sales, that’s also about 7,999,278,000 people that aren’t using .IDW files as 2D drawings. The reality is that anyone using a 3D system as the “standard” is probably creating more .DWG files in their company than whatever formats their “standard” systems create. Now the vast majority of AutoCAD users will be able to open and even augment Inventor 2D drawings with no need for translation.

The benefits of DWG TrueConnect extend far beyond sending files to AutoCAD users. In this class we will attempt to cover the options that hold the greatest value for the greatest number of users.

### What can be done?:

There are a lot of subtle ways that the DWG TrueConnect technologies might be used but the vast majority of its applications are very straight forward and easily discovered.

Capabilities for Inventor users:

- Reuse existing AutoCAD templates (.DWG) to maintain consistency
- Open, View, Measure, and Print AutoCAD drawings (regardless of version) without installing AutoCAD, just Inventor
- Reuse or convert AutoCAD Templates for Inventor drawings
- Create 2D drawings that can be opened directly in AutoCAD 2008
- Copy data directly from the AutoCAD drawing for reuse in Inventor
- Add drawing views, text, and other information to existing AutoCAD drawings
- Add ‘Layouts’ to an existing AutoCAD drawing
- Use existing AutoCAD Blocks in Inventor drawings
- Don’t add Inventor dimensions to AutoCAD geometry. It is NOT associative
- Cannot modify existing AutoCAD geometry



## Autodesk Inventor and DWG TrueConnect

Capabilities for AutoCAD users:

- Open Inventor Drawings without the need for a conversion process
- Drag and drop Inventor drawing views into existing AutoCAD drawings as blocks through Design Center
- Add notes, details, existing blocks and other standard information to the Inventor Drawing
- Add 'Sheets' to an existing Inventor Drawing
- Don't apply AutoCAD dimensions to Inventor geometry. It will NOT be associative
- Cannot modify Inventor component views

### A bit on the experimental side:

Create drawing views using Inventor on an additional 'Layout' in and AutoCAD drawing and reusing those views as local blocks on other sheets.

Obtain and use a customer's AutoCAD border to create Inventor drawings including mapping objects to their layers

Use Design Center to drag and drop Inventor drawing views of machinery into AutoCAD facility floor plans or architectural drawings.

### Sharing back to older versions:

To share with AutoCAD users working with releases older than 2008 will require them to install a free Object Enabler. You can find these on Autodesk's web site by searching for 'DWG TrueConnect Object Enabler'. Here are the URLs for those enablers:

AutoCAD 2007 DWG TrueConnect Object Enabler:

<http://usa.autodesk.com/adsk/servlet/ps/dl/item?siteID=123112&id=9611377&linkID=9242019>

AutoCAD 2004 (2005, 2006) DWG TrueConnect Object Enabler:

<http://usa.autodesk.com/adsk/servlet/ps/dl/item?siteID=123112&id=9611360&linkID=9240618>

AutoCAD 2000 (2000i, 2002) DWG TrueConnect Object Enabler:

<http://usa.autodesk.com/adsk/servlet/ps/dl/item?siteID=123112&id=9611336&linkID=9240618>



## Autodesk Inventor and DWG TrueConnect

### Templates

There are several approaches to templates and there are a few different options for translating them.

As you work with your company data and existing workflows. Some will find that they have a broad array of user disciplines that share the same templates. In those companies they may find that there are too many blocks in the AutoCAD templates and choose to still replicate the AutoCAD Template as a new, cleaner Inventor template. Others will copy the template and purge the non-mechanical blocks before conversion.

If you decide that translating the existing template is desirable you'll also need to decide if you want to leverage Inventor's ability to resize drawings. If so, it's probably best to translate the Title Block but use it in a dynamic Inventor border.

Some companies will want to continue to use a different Template for each sheet size or just simply use one sheet size. In these cases the conversion process may be a onetime 'Save As'.

There are other possible ways to reuse

### Blocks

Many companies have spent years developing their blocks whether they're embedded or used as details or XREFS.

AutoCAD blocks that are embedded in a translated template will still include any attributes. When creating a new drawing based on the converted template (or containing a converted title block) the user will be prompted for the values in the same way the AutoCAD user was. This is great for maintaining continuity and as a means of easing the transition from AutoCAD to Inventor for an experienced AutoCAD user.

### Migration

DWG TrueConnect should be very popular with companies making the move from AutoCAD to Inventor or just simply adding Inventor to their toolset. The ability to keep using the great detailing tools of Inventor and creating drawings that are easy to share using their existing methodologies is a great thing.

Having the ability to reuse any your legacy data if or when they want is may be even more important. I will leave it to you to decide when or why you convert it. The Task Scheduler will allow you to migrate files in bulk or on demand. Again, it's up to you when or if.



**Notes:**



**Notes:**