Autodesk

DWF[™] Tips & Tricks



Sharing complex design information has never been easy. Since design files are large, sending sheet sets and 3D models to printers, or sharing work with extended team members, has taken a lot of time and effort, not to mention bandwidth. DWF™ technology changes all that. DWF-based designs are compact, secure, and easy-to-use. In fact, because sharing rich 2D and 3D design information is a snap with DWF, completely digital workflows become possible—streamlining the flow of information across the entire project team.

This handy pocket guide of DWF Tips and Tricks provides individual users and entire project teams with the information needed to get the most from DWF. To learn more about DWF visit www.autodesk.com/dwf.

Publish

The ability to publish DWF files is built into every Autodesk® design application and available free* of charge when using third-party applications with the Autodesk® DWF™ Writer.

 Information on how to publish DWF files from Autodesk products is available in the product documentation. Information is also available online at www.autodesk.com/dwf-publishing.

*This product is subject to the terms and conditions of the end-user license agreement that accompanies download of this software

Publish 3D DWF Files from AutoCAD-Based Products

Create and publish DWF files of 3D models with the 3D DWF PUBLISH command, available only if you have installed the 3D DWF Publishing feature with AutoCAD® 2006-based products.

- On the command line, enter 3ddwfpublish.
- 2. In the 3D DWF Publish dialog box, under DWF File Name, change the name and location of the DWF file to be saved, or use the [...] button to navigate to a new location for the 3D DWF file.
- 3. Under Objects to Publish, click one of the following:
 - All Model Space Objects. All model space objects are published to the 3D DWF file.
- Selected Model Space Objects.
 Create a selection set of model space objects, which are published to the 3D DWF file.

4. If the drawing contains xrefs, the Group By Xref Hierarchy option is selected by default. Clear the check box if you do not want to display the objects grouped by xref hierarchy in the published DWF file.

- Under Group Individual Objects By, select one of the following options to group individual objects in the DWF file for viewing. Click OK.
 - *Layer*. Group individual objects by layer.
 - Object Type. Group individual objects by object type (for example, by block).

Increase the Precision of the DWF File

Specify the pixel resolution for vector and raster graphics when creating DWF files. The higher the resolution, the greater the precision but the larger the file size.

- From the File menu, choose Plot to display the Plot dialog box.
- 2. Ensure that DWF 6 ePlot.pc3 is selected. Click Properties to display a tree control.
- Select Graphics from the tree, and expand it. Select Custom Properties in the tree control, and then click the Custom Properties button.

4. Set Vector Resolution to the desired

value. You can leave the other DPI values (Gradient Resolution, Color and Grayscale Resolution, and Black and White Resolution) as they are. Valid values from the pull-down menu are between 150 and 4800. Use the keyboard to enter a custom value, such as 30270.

Add Object Properties from AutoCAD Blocks

Enable team members to access
AutoCAD block properties in the DWF
file by setting DWF publishing options.

Publish Options.

- 1. From the File menu, choose Publish.
- 2. In the Publish dialog box, under Publish To, click DWF File, and then click
- In the Publish Options dialog box, under DWF Data Options, Block Information, select Include from the drop-down list.

Note: By default, Block Information is set to Don't Include. If you change the setting to include block information, you can use the viewer to view or print block property and attribute information in the DWF file.

- 4. Click OK.
- In the Publish dialog box, either continue with publishing tasks or close the dialog box.



Pass It On: Publish DWF and Email

Easily email a DWF file when using Autodesk DWF Writer.

- 1. Select the file to be published, and choose Publish DWF and Email.
- The default email application opens, automatically creating a new email message.
- The subject displays the name of the published DWF file.
- The DWF file is automatically attached to the file.
- The URL to download the free Autodesk DWF Viewer is provided to streamline the process.

Publish from Microsoft Office Documents

With Autodesk DWF Writer installed. users can publish DWF files from Microsoft® applications (PowerPoint®, Word, Excel®, Visio®, Outlook, and Internet Explorer) and share them as part of the project set.

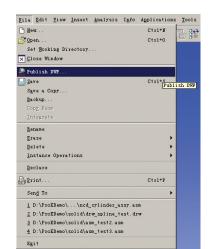
- 1. Click the Publish DWF button on the Microsoft application toolbar, or from the File menu, choose Print and then select Autodesk DWF Writer in the list of available printers.
- 2. Specify a file name and location for the published DWF file.
- 3. Choose Print.



Publish from SolidWorks® 2005 or Pro/ENGINEER® Wildfire 2.0

Install Autodesk DWF Writer 3 to publish 3D models and design data from Solid-Works® 2005 or Pro/ENGINEER® Wildfire 2.0 software.

- 1. From the file menu, select Publish DWF to automatically turn your 2D drawing or 3D model into DWF.
 - Learn about publishing from other applications, by visiting www.autodesk.com/dwf-publishing.



View & Print

In the past, viewing rich design data required the purchase of CAD software. Now, the free*, downloadable Autodesk DWF™ Viewer means that everyone on the team can navigate sheet sets, access design information, and print whatever they need.

Download the free Autodesk DWF Viewer at www.autodesk.com/dwfviewer-download.

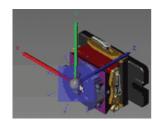
Pull Apart a 3D Model

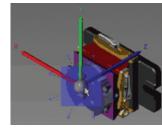
Autodesk DWF Viewer users can navigate 3D models published from Autodesk applications or with the free Autodesk DWF Writer. Follow these steps to rotate and pull apart individual pieces of a model:

- 1. From the Tools menu, choose Move and click Rotate.
- In the Model palette or view area, click the parts that you want to move or rotate.

Remove a Part from the Selection

Press and hold the Ctrl key and click the part again (Ctrl+click). In the Model palette, use Shift+click to select consecutive parts by clicking the first and last parts in the series.





Begin Move



Result

Move Along an Axis

On the axis along which you want to move the part, click that axis near the origin. Drag in either direction along the axis. Alternatively, press the Up Arrow key to move away from the origin or the Down Arrow to move toward the origin.

Move Within a Plane

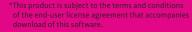
Roll the cursor over a plane defined by two axes until a plane icon with arrows appears, and click. Drag the part in any direction.

Move Parallel to the Screen

Click the origin, and drag the part in any direction. Or use the keyboard arrows to move left, right, up, or down.

Rotate

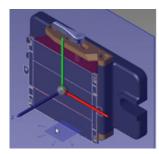
On the axis around which you want to rotate the part, click near the end of the axis and drag the part around the axis. Or press the Down Arrow key to rotate 1 degree clockwise or the Up Arrow key to rotate 1 degree counterclockwise. To rotate the part in 45 degree increments, press and hold the Shift key while using the keyboard arrows.



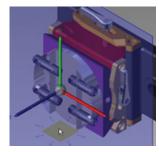
Cut 3D Cross Sections

Cut through a model with a section plane and manipulate the view in various ways by moving and rotating the section plane and flipping the view.

- Open a model and from the Tools menu, choose Cross Section> XY Section, YZ Section, or XZ Section.
- A transparent purple sheet (the section plane) and a tripod drop into the center of the model, cutting through the model to reveal a cross section.
 Move or rotate the section plane to reveal a different cross section each time.
- 3. The three legs, or axes, of the tripod meet at a central point called the origin. To change the cross section revealed, move or rotate the section plane by moving the cursor over the tripod. Hot spots appear, each enabling the user to move the section plane in a different way.



Before



After

Move Along an Axis

On the axis along which you want to move the section plane, click the axis near the origin. Drag in either direction along the axis. Click the Up Arrow key to move away from the origin or the Down Arrow key to move toward the origin.

Move Within a Plane

Roll the cursor over a plane defined by two axes until a plane icon with arrows appears, and click. Drag the section plane in any direction.

Move Parallel to Screen

Click the origin. Drag the section plane in any direction.

Rotate

On the axis around which you want to rotate, click near the end of the axis. Drag the section plane around the axis. If you press and hold the Shift key while using the keyboard arrows to rotate, the section plane rotates in 45 degree increments.

Use Flexible Printing Options

Preview the job before sending it to the printer. Partnerships with printer manufacturers like HP and Océ help assure fast, high-quality output.

Print to Spec

Customize the settings that affect output from standard to large format. Choose from among the following options:

- 1. Full Page or the Current View
- Paper Size or select Use DWF Paper Size
- Landscape or Portrait
- Fit to Page or Print to Scale
- Tile across multiple pages

Preview What You Print

- 1. From the File menu, choose Print to open the Print dialog box.
- Choose the settings that affect your preview, like paper size or landscape view.
- 3. Click the Show Print Preview button.



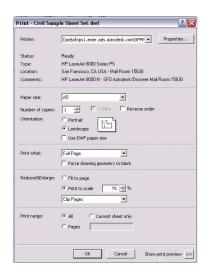
Print Instantly to HP Printers

1. Click the HP Instant Printing button.



Note: The button automatically appears if you are connected to a supported HP® Designjet™ printer.

 The optimal print settings are chosen automatically based on the properties of the DWF file.



Access Design Intelligence

Publish detailed design information from Autodesk® Architectural Desktop 2004 and later versions, AutoCAD® 2006– based products, and Autodesk Inventor® software, for viewing in Autodesk DWF

Viewer or Autodesk® DWF™ Composer.

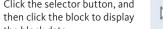
View and Sort Object Properties

Click the Properties window.

Access Block Information

In the Content Browser, select the Properties window, and then choose Object Properties from the drop-down menu.

Click the selector button, and



the block data.

Search for Design Data
In Microsoft® Windows® Explorer, select
Search, and enter your search string to
find data within the DWF file such as
doors, bolts, and more.

Navigate Sheets or Views Using Hyperlinks

From the main menu, choose View>Show>Hyperlinks (Ctrl+H) to display hyperlinks in blue. To follow a hyperlink, hold down the Ctrl key and click the hyperlink (Ctrl+click). The drawing, file, or web page to which it was linked opens.

Present in Microsoft Office Applications

Share the full design intent in Microsoft PowerPoint, Excel, or Word whether it's a client presentation, product documentation, or bill of materials.

- 1. Drag the file from Windows Explorer into the document.
- Alternatively, from the Insert menu, choose Object and Autodesk DWF Viewer Control, then right-click and select Autodesk DWF Viewer Control Object and then Properties to embed an interactive DWF.

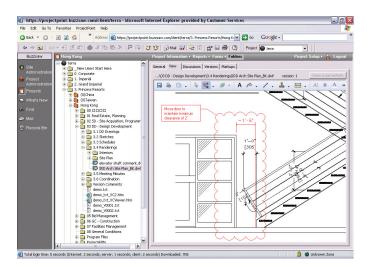
Note: To view the document, the user must have Autodesk DWF Viewer installed.

Post Files to Autodesk Buzzsaw

Autodesk DWF Viewer and Autodesk DWF Composer are fully integrated into the Autodesk® Buzzsaw® collaborative project management solution.

Follow these steps to efficiently share your designs:

- 1. Drag DWF files into the project folder.
- Notify the project team using the Buzzsaw notification system. Updates and versions are automatically tracked.



Bonus Autodesk DWF Viewer Tips

- Use the mouse wheel button to zoom in and out. To pan, hold the button down and move the mouse.
- Select Options in the Content Browser to show thumbnails, list views, or bookmarks of the original DWF data.
- When rotating 3D objects, keep the triad at least slightly oblique to the screen to move or rotate. You cannot move or rotate the axis that points directly toward you.

Review & Mark Up

No more looking through faxes and emails to incorporate feedback by hand. With Autodesk DWF Composer software, team members can review, measure, and mark up designs, and then round-trip redlines and changes back to the original design application. All changes are automatically tracked and kept in the context of the design.

view & Mark Up

v & Mark Up

Work with Advanced Redlines and Markups

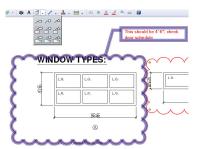
Autodesk DWF Composer includes easyto-use shapes, text, freehand, stamp, and custom symbol tools in addition to markup tools.

Control Markup Shape

Hold down the Shift key to constrain the range of movement when marking up drawings.

- 1. To start again, press the Esc key and try again.
- 2. To delete a markup, use the Selection tool and press Delete.





Color Code Reviews

Use different markup colors to indicate different users.

- 1. Select from the 48 predefined colors or one of your own.
- Change the Text Color and Line Color on the main menu, and then click your chosen color.



Save a New Markup View

When you create a markup, the current view of the page is stored with that markup. To change and automatically store a new view, pan and zoom to the desired view, and then move the markup slightly or modify it in some way.

Measure Accurately

The dimension tools with the AutoSnap™ feature help project team members determine lengths, polylines, and areas.

Snap to Endpoints

Set the measure tools to snap to endpoints, midpoints, and lines for precision measurement of design elements in the DWF file. Click the Tools command, and turn on the Snap to Geometry feature.

Zoom In for Greater Accuracy

To achieve greater accuracy, zoom in to the section of the drawing to which you are applying the starting and ending points of the dimension.

Use Custom Symbols and Stamps

Use symbols to annotate and mark up information in the office or in the field.

Create Custom Symbol Catalog

Publish the 2D drawings, images, or text to a DWF file using the Autodesk DWF Writer. In Autodesk DWF Composer, import this file into the symbol catalog.

1. From the toolbar, click the Stamps and Symbols button.



- 2. Select Import DWF as Symbol Catalog.
- 3. Browse for and select the DWF file that contains your symbols, and click Open or press Enter.

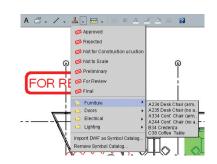
Create Your Own Stamp

Create custom annotations and stamps by double-clicking a stamp and typing to insert text, or highlight the text you want to change.









Manage Your Project Information in One Place

Work with multiple document types in one multisheet DWF sheet set, combining images, sketches, project timelines, specifications, bills of materials, and other project information.

Capture Information with Snapshot Tool

Add a snapshot to an existing DWF file, or create a new DWF file by adding one or more snapshots to a blank file.

1. Click the Snapshot button.

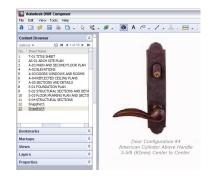


- 2. Set up the subject of your screen shot.
- 3. Click the Capture button on the Snapshot window title bar.

Drag and Drop

Combine DWF files, raster images, and other project information into a single DWF file or send it out for review:

- 1. Drag and drop, or use File>Open to view and mark up many different types of image files, such as IPEG or GIF files.
- 2. Drag a page or pages into an email or onto the desktop to create a new DWF file.



Advanced Tips

Take advantage of these advanced DWF tips from the experts.

Install Across Your Company

Install Autodesk DWF Viewer or Autodesk DWF Composer across your company easily, using command-line scripting and the Tarma installation software.

Note: Detailed information about the Tarma installation software is available at www.tarma.com/support/index.htm#/support/cmdline.htm.

 DwfViewerSetup.exe/q: Perform a silent (quiet, unattended) installation. During silent installations, the Setup wizard is suppressed and the entire installation, registration, or uninstallation process is performed without user intervention. This feature is intended for unattended installations and removals. 2. **DwfViewerSetup.exe /q2**: Perform an invisible installation. In this mode, the entire installation, registration, or uninstallation process is performed without user intervention and with a completely hidden user interface. (Note, though, that the Setup process still appears in the Windows Task Manager's list of running processes.)

Embed Autodesk DWF Viewer in HTML Documents

Autodesk DWF Viewer is available as an ActiveX° control that is embedded in Microsoft® Internet Explorer, providing a smooth installation of the free Autodesk DWF Viewer in web pages.

- Embed DWF files directly in web pages by using the <object> element tag.
- Access an HTML sample that demonstrates how to embed a DWF file at www.autodesk.com/dwf-developers and click on Code Samples.

Note: Microsoft Internet Explorer 5.01 or later is required.

Save DWF Files That You View

Follow these steps to save a local copy of a DWF file published to a website:

- Right-click the DWF file and choose
 Save As. Alternatively, click the Save
 As button on the toolbar.
- 2. To save a local copy of the DWF file you are viewing, specify a file name.

Use API to Customize and Extend Functionality

Use the Autodesk DWF Viewer and Autodesk DWF Composer application programming interface (API) documentation to integrate DWF Viewer or DWF Composer within websites or third-party applications. The documentation provides instruction on features such as navigation to a specific page or view, control over layer visibility, the ability to show and hide the toolbar and context menus, as well as control of the viewer behavior. Visit www.autodesk.com/dwf-developers to download the API documentation.

Additional Resources

Visit the DWF Center www.autodesk.com/dwf

Participate in the Discussion Groups www.autodesk.com/dwfviewer-discussion www.autodesk.com/dwfcomposer-discussion

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Find Developer Tools and Information www.autodesk.com/dwf-developers www.autodesk.com/dwftoolkit



"DWF is an intelligent design format, meaning that engineering data is not lost when drawings are converted from DWG. DWF allows us to zoom in on drawings with vector precision and view all the intelligence built into the files. DWF out-performs all the other available formats so drastically that there's hardly a comparison between them."

Chas Thompson, Senior AutoCAD Support Engineer,
 Siemens Logistics and Assembly Systems Inc.

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