



AutoCAD®

Lynn Allen's Tips and Tricks
for Using AutoCAD 2010

Autodesk®

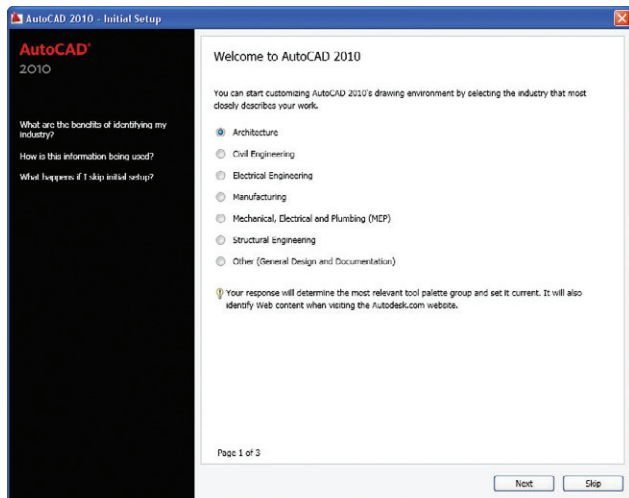
User Interface

For those of you who are moving from AutoCAD® 2009 to AutoCAD® 2010 you should feel right at home with the user interface.

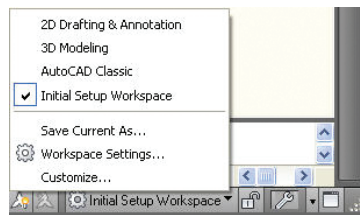
Initial Setup

When you load AutoCAD 2010 you will be asked to select the industry and settings that best suit you. AutoCAD will in

turn create a drawing environment that addresses your selections for drawing templates, tool palettes, and when visiting www.autodesk.com. No worries if you bypass this screen as you can also find Initial Setup on the User Preferences tab in OPTIONS.



AutoCAD will also create a new workspace based on your selections and add it to the other default workspaces.



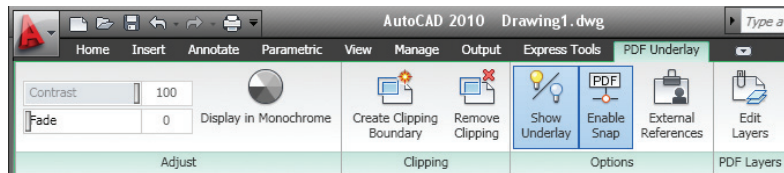
Ribbon

The Ribbon, introduced in AutoCAD 2009, is more contextual than ever as it automatically takes you straight to the tools you need (meaning less clicks for you!). The task based Ribbon is made up

of tabs, each tab is made up of multiple panels, and each panel is made up of multiple tools.

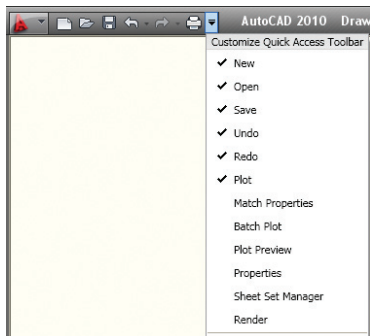
You can drag panels off the ribbon to display as a “sticky” panel. Sticky panels stay put even if you switch to another tab. Of course the Ribbon is completely customizable and you can even create your own ribbon tabs that change automatically when a specific object is selected or command is executed. AutoCAD 2010 now displays up to three rows of icons so you can get to the tools you need even faster!

NOTE If you resorted to the AutoCAD Classic workspace in AutoCAD 2009, be sure to give the new smarter Ribbon a try in AutoCAD 2010!



Quick Access Toolbar

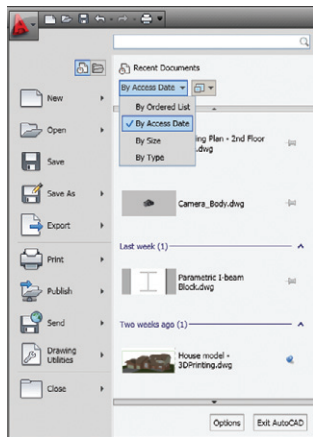
Located in the upper-left corner of the screen is the powerful Quick Access toolbar. Here you will find the frequently used New, Open, Save, Undo, Redo, and Plot commands. Selecting the down-arrow allows you to quickly customize it with your favorite commands. Here you will also find the option to return the menu bar to the screen or display the Quick Access Toolbar below the Ribbon.



TIP It's really easy to drag any Quick Access Toolbar from one workspace to another in the CUI.

Application Menu

Here you'll find commonly used File tools as well as recently viewed files. Be sure to pin frequently used drawing files so they don't fall off the list! You can display recently viewed files as images or icons as well as group them by Access date, size or file type.



You can also run a quick query in search of any AutoCAD command. A double-click on any listed item will launch the associated command.

InfoCenter

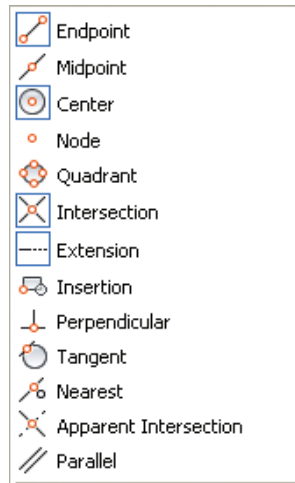
You will find the InfoCenter a quick means to search for help, including information that resides online. Just click the arrow to open or close the search field.



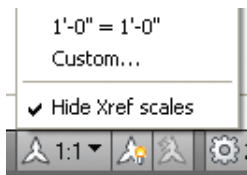
Status Bar

If you are upgrading from AutoCAD 2008 or earlier, you'll notice some nice improvements to the Status Bar. A right click on any tool lets you choose to view text or icons for the standard settings, such as Osnap, Grid, and Dynamic Input. Standard settings turn blue making it easier to see which settings are on (much appreciated!).

Right-clicking many of these options (such as Polar or Osnap) also enables you to make quick work of changing the settings (thus saving you two extra clicks).



TIP Check out the new Hide XREF Scales option added to the VP Scale list.



Tooltips

Tooltips have been expanded to provide more information as you need it. The longer you hover the cursor over a tool, the more information appears. (You can control this feature in more detail on the Display tab in the Options dialog box.)

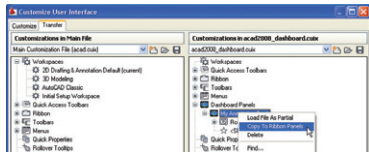
Hidden Message Settings

Throughout the application, warning messages have been updated to provide more help. Should you decide to turn them off, they become hidden messages. It's easy enough to turn them back on in the Systems tab in the Options dialog box.

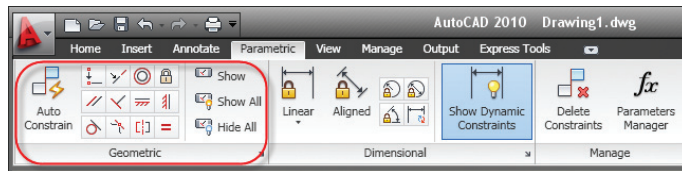
The Dashboard

For those of you who customized your Dashboards, you can now bring them into AutoCAD 2010 through the Transfer tab in the CUI command. Simply right click on the selected dashboard panel to copy it to a ribbon panel in the same CUI. Then simply drag and drop it to the main CUI.

And if you prefer all of your ribbon tools to be located vertically, similar to the Dashboard, simply undock it and anchor it to the left or right side of your screen.



Parametrics: Geometric Constraints



The addition of Parametrics to AutoCAD 2010 is going to make your AutoCAD objects smarter than ever! Two powerful components of Parametric Drawing are geometric constraints and dimensional constraints—and now AutoCAD has both!

Geometric constraints allow you to create a relationship between objects or key points on objects. Whereas traditional object snaps are temporary, constraints stay with the objects to ensure you are able to keep the design intent. For example, you may want two lines to always be perpendicular to each other, or an arc and a circle to always be concentric.

The Ribbon is the way to go when defining geometric constraints. The Parametric tab makes it easy to add and control geometric constraints. You can also use the GEOMCONSTRAINT command.

Adding Constraints

Simply select a geometric constraint tool, such as parallel, and select the two objects you want to maintain a parallel relationship. The object selected first is key here as the second object will adjust to be parallel to the first. Such is the case with all the geometric constraints.

A quick Constraint Primer:



Coincident Insure that two objects coincide at a specific point. The point can also lie anywhere on the extension of an object.



Collinear Makes the second object lie in the same infinite line as the first.



Concentric makes two arcs, circles or ellipses (or a combination) share the same center.



Fix Locks a point on an object to a coordinate in the WCS.



Parallel Makes two line or pline segments parallel. (Perpendicular: Makes two lines or pline segments perpendicular.)



Horizontal Makes a line or two points on an object horizontal (parallel to the X axis).



Vertical Makes a line or two points on an object vertical (parallel to the Y axis).



Tangent Makes two objects such as an arc and a line tangent to each other.



Smooth Makes a spline contiguous with another line, arc, pline or spline while maintaining G2 continuity.

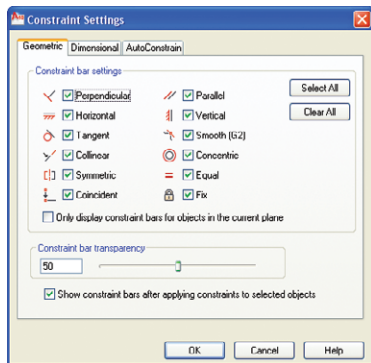


Symmetry Imagine a mirror command where the objects continue to maintain symmetry after the fact!



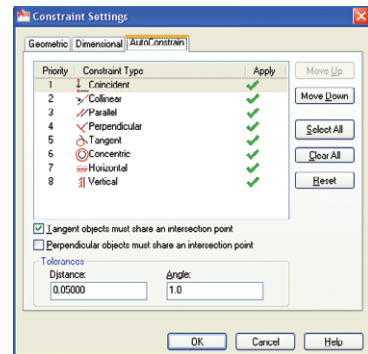
Equal A real time saver as you can set any two lines to always maintain an equal length or two circles to have the same radius. You modify one, the other updates automatically! A nice multiple option here as well.

Geometric icons appear on the objects to indicate the attached constraints. These constraint bars can be dragged to any position on the screen, hidden by selecting Hide All from the ribbon or turned back on with Show All. The Show option lets you to select the objects you want to display constraint bars. Manage a variety of constraint bar options in the Constraint Settings Manager.



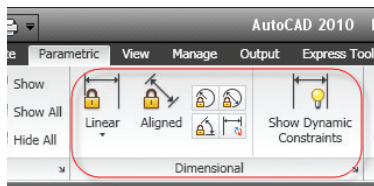
AutoConstrain

This is the best tool ever! Select a group of previously drawn objects and AutoCAD will automatically constrain them for you! Use the AutoConstrain tab in the Constraint Settings manager to set up priority, tolerances, etc. (CONSTRAINT-SETTINGS command if you don't want to use the ribbon)



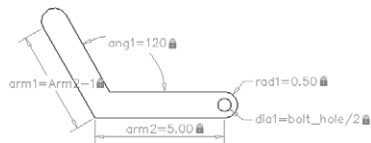
The geometry in AutoCAD has always driven the dimensions. We draw a line the correct length and then dimension the line. What if you could drive the geometry from the dimensions? You change the value of the dimension and the geometry automatically updates! That is exactly what we now have in AutoCAD 2010.

You'll find the dimensional constraints located in the center of the Parametrics tab on the ribbon. You can also use the DIMCONSTRAINT command.

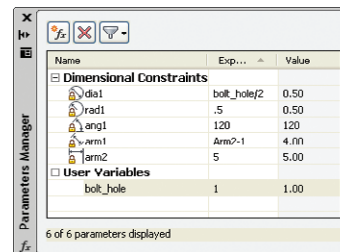


Here you will find the standard types of dimensions, but these dimensions are able to drive our geometry. For example, you can dimension a circle with the Radial option and later control that circle by simply changing the dimension value. You'll want to use Dimensional Constraints on geometry you want to be able to easily change or on geometry you want to constrain to a specific size. If the distance between two holes needs to always be 3mm, constraining it dimensionally will force that distance regardless of what happens to the rest of the geometry.

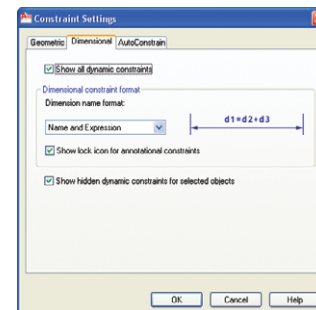
TIP You can change a traditional dimension to the new constrained dimension with the DIMCONSTRAINT command



A lock icon displays to help you visually distinguish a constrained dimension from a traditional dimension. Their size is zoom-invariant (always the same size) and geometrically constrained dimensions do not plot. You'll notice that each is assigned a name such as D1 or Ang1. These names are completely customizable in the Parameters Manager and you can create your own user parameters. Expressions can be set to be dependent on other values as well.



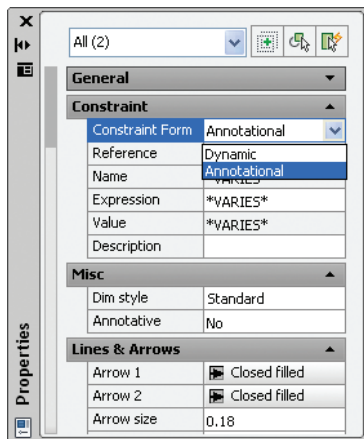
The Constraint Settings manager controls the display of your dimensional constraints. Here you can switch the values to display without the expression or turn off the lock icon.



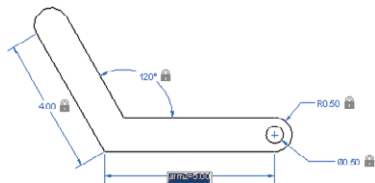
You can easily edit a dimensional constraint with a double click on the dimension text or by changing the value in the Parameters Manager. You can rename the constraints in the fashion as well.

Changing to Annotational Dimensions

So what if you'd like to print these dimensional constraints? No problem—simply select the dimensions you want to print and convert them to Annotational dimensions in the Properties Manager. Here you'll be able to control their style, size, etc.



The good news is that these are still the smart geometric constraints which means you can still double click on them to change their value!



TIP If you prefer to work with annotational dimensions from the beginning, set the CCONSTRAINTFORM system variable to 1 or select the Form option in the DIMCONSTRAINT command.

Dynamic Blocks and Parametrics

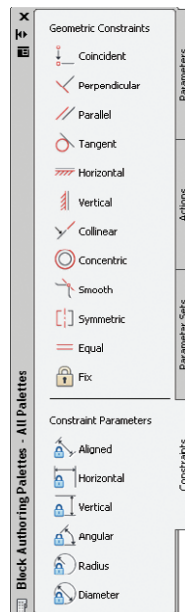
Great news! Parametrics can now be combined with the power of dynamic blocks!

Updated Block Editor

The block editor ribbon tab has been enhanced to contain both geometric and dimensional constraints.

A new tab has also been added to the block authoring palettes specifically for parametric constraints.

Assigning geometric constraints in the block editor works much the same as in the drawing editor. If you bring constrained geometry into the block editor it will remain constrained.



Dimensional Constraints

Dimensional Constraint parameters can also be added to dynamic block geometry. Their name is in turn exposed as a property for the block, much like the standard dynamic block parameters. When attaching Dimensional Constraints to block geometry, you can also control the number of grips available to the user for editing purposes.

NOTE Be sure your constraints are contained in the block definition, not added after the fact for the best results.

TIP Be sure to stick to the Block Editor ribbon when attaching dimensional constraints (don't grab them from the Parametrics tab!)

Construction Geometry



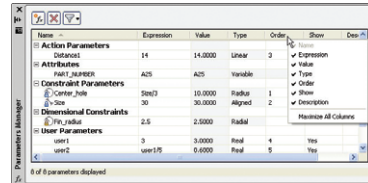
Now you can create construction geometry that displays in the block editor but not on the inserted block. The new BCONSTRUCTION tool makes it easy to convert existing geometry to construction geometry which displays in a gray dashed linetype.

Test Blocks

No longer do you need to exit the block editor to test your blocks! The new Test Block tool lets you try your block out without requiring you to save changes and exit the block editor (which will save you plenty of time!).

Parameters Manager

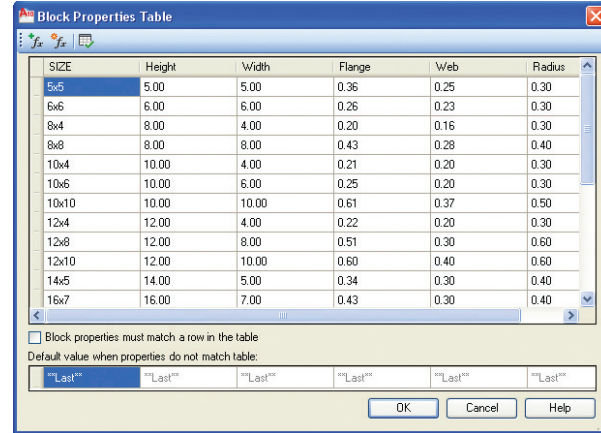
You can access all of the assorted block parameters and attributes in the new Parameters Manager. You can control whether a parameter is displayed in the Properties palette and the order that the parameters appear.



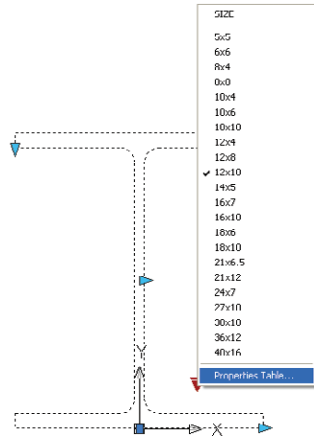
Block Table

Here you can really kick up the power of your dynamic blocks! Using the Block Table tool (BTABLE), you can define different variations of a block. You can key these variations in manually or paste them in from an Excel spreadsheet.

You can even further control the block insertion by selecting the Block properties must match a row in the table thus avoiding the creation of random non-standard parts.

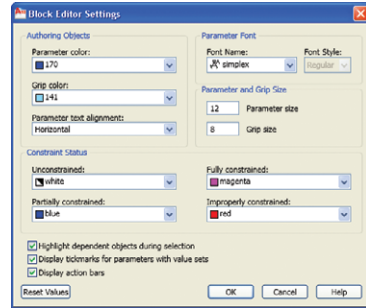


A grip on the inserted block lets you quickly switch between the different values listed in the Block table. Selecting Properties Table from the grip menu displays the entire block table so you can see all the values and even sort on different columns.



Block Editor Settings

You can control all the settings for the block editor environment in the Block Editor Settings dialog—including colors, sizes and alignment options.



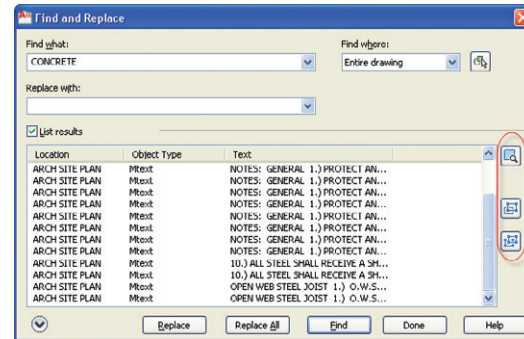
TIP Mixing the new geometric and dimensional constraints with the traditional parameters and actions can lead to varied results and is not recommended.

Annotation Step Savers

Use these handy tricks to buy yourself some time when annotating your drawings in AutoCAD 2010.

Find

The updated FIND command now includes a Zoom button in the results list to ensure you remain zoomed in on the found item after exiting the command. The new selection set tools make it easy to create a selection set out of the found results.



TIP These new tools are only visible when the List results box is checked.

Multileaders

Multileader Styles now let you specify vertical attachment settings (Content tab) and you can specify a scale for a block type of multileader.

TIP Now you can access the Text Style dialog from the MLEADERSTYLE command.

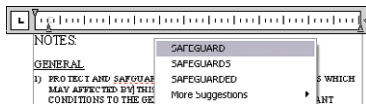
MTEXT and Spell Check

Use ESC to Exit MTEXT

Now when you click Escape in the MTEXT editor, the software gives you a chance to save your text (no more losing your text edits!). Make this the default if you choose.

In-Place Spell Checking

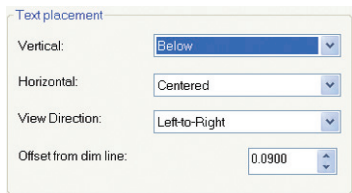
Catch those spelling errors as they are happening in MTEXT. AutoCAD underlines in red those words that are not in the dictionary, and the right-click menu offers spelling suggestions.



A new Undo button has been added to the SPELL command, and, its one click faster to select objects to spell check.

Dimensions

You can now assign a text placement option below the dimension line in the Text tab of the Dimension Styles dialog box. You can also specify the text direction as Left-to-Right or Right-to-Left.



A new Sub-units factor and suffix have been added to Zero Suppression. This would make it easier to get a text value such as 45 cm rather than .45m.

Object and Layer Properties

See how object and layer tools in AutoCAD 2010 can make your dreams come true.

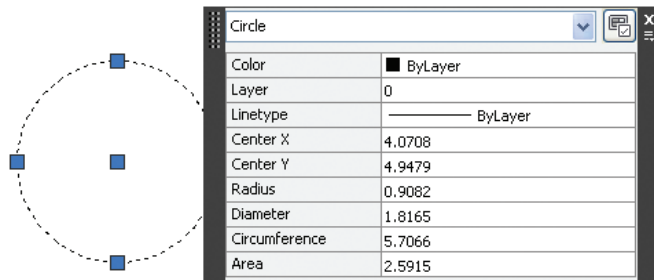
Quick Properties

The Quick Properties tool enables you to view and modify object properties in place, without having to go to the Properties palette. You can turn Quick Properties (QP) on or off from the status bar. After turning the feature on, simply select an object and the properties

display for editing. You can control which properties are displayed for each object in the CUI (for speedy access select the Customize button in QP).

Layer Management

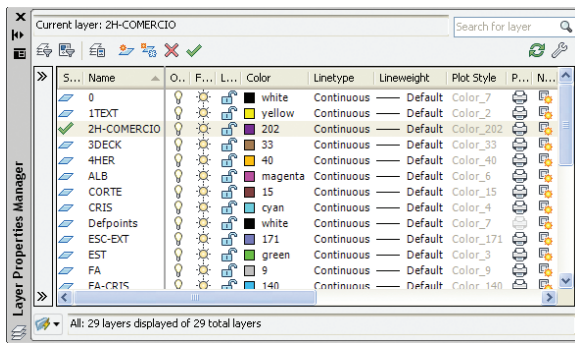
The Layer Properties Manager is modeless so you can keep it displayed as you use other commands. That means you can dock, autohide, or anchor it just like your other tool palettes. And it is now dynamic—any changes you make in the



Layer Properties Manager are instantly applied to the drawing (no more “Apply”).

If you have ever had a hard time viewing the layer name column when you slide over to the right side of the column, you will be happy to know that now you can freeze columns so they stay put as you use the slider bar. By default the Name column is frozen. If you need more real estate in the dialog box, you can now collapse the Filters pane.

Now you can access the Select Color dialog box directly from the Layer drop-down list by selecting a color swatch. If the layer has a viewport color override it now has a white border. It's also much easier to tell which color you are looking at in the Select Color dialog with the new black border and arrow!



Measuring Tools

The new, more visual measuring tools in AutoCAD 2010 will make quick work of mining valuable information from your drawing.

The Utilities panel of the Home ribbon contains the new updated measuring commands (These are also found in the MEASUREGEOM command).

Distance

Used to measure the distance between two points, AutoCAD 2010 now visually displays the distance, delta x, delta y and the angle (in the xy plane) A new Multiple option allows you to continue to pick points as AutoCAD displays a cumulative distance. If you need to include an Arc in the distance you can easily switch to Arc mode.

Radius

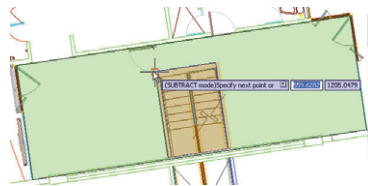
Use the new Radius tool to quickly display the radius of a selected arc or circle (Quick Properties would also work here).

Angle

Quickly measure the Angle between two lines, of a vertex, two points on a circle, or an arc.

Area

Much improved over the standard AREA command, visual feedback makes your selection clear. Add and Subtract options are also available in the new Area option with the subtracted areas displaying in a different color. An arc option makes it easy to measure curved spaces.



Volume

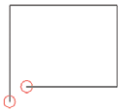
Easily add a height to a boundary to calculate the volume. You can also find the volume of solids and regions.

Step Savers

These features will really help you boost your productivity.

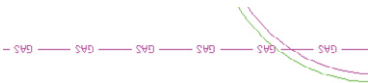
Hatch

Two nice new features with crosshatching have been added. Now it's easy to edit non-associative hatch patterns with grips! And if AutoCAD finds a gap in your hatch boundary, it will point out the gap with two red circles.



Reverse

Have you ever had a linetype with text heading the wrong direction with the text upside down? The new REVERSE command makes it easy to reverse the direction of any linetype. This option has also been added into the PEDIT command.



Spline to PLINE

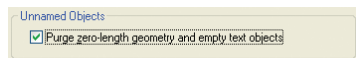
A new convert to Polyline option in the SPLINEDIT command lets you quickly make the conversion. You will be prompted for a precision value between 0 and 9999, with the higher value being more accurate.

NOTE Too high a value could impact performance.

The new system variable PLINECONVERTMODE controls whether straight segments (0) or arcs (1) are used. You can also select a spline object in the PEDIT command and convert it to a pline.

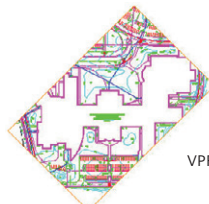
Purge

A new option for purging zero-length geometry and empty text objects has been added to the PURGE command. This should really help clean up your drawing!

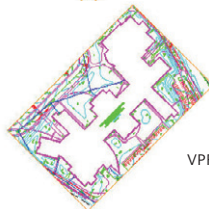


Rotated Viewports

When you rotate a viewport in AutoCAD do you want the view to rotate with it? Well now you have a choice. When VPROTATEASSOC is set to 0 the view will not rotate. When VPROTATEASSOC is set to 1 (the default) it will!



VPROTATEASSOC=0



VPROTATEASSOC=1

Export Layout to Model Space

You can export all visible objects from the current layout to model space with the EXPORTLAYOUT command.

NOTE Objects that are outside the paper boundaries of the layout are also exported.

Speedy WBLOCKS

Should you decide to turn an existing block or dynamic block into a WBLOCK, it is easier than ever. Simply select the block, enter W for the WBLOCK command, and your selected block is ready to go.

Missing Printers Identified

Missing printers are now identified with a "Missing" prefix instead of a suffix—no more accidental truncation of that key piece of information.

Recover Drawings Along with Xrefs

Now you can run the recover process on a drawing and all the associated xrefs. Find this capability in the Application menu under Drawing Utilities or use the RECOVERALL command.

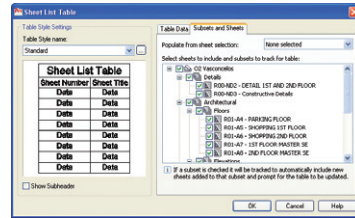
ETTRANSMIT Enhancements

You no longer need to save your drawing before executing the ETRANSMIT command. You will also find the handy Purge option in the Transmittal Setup dialog box to help ensure that you are sending nice, clean drawings. You can now include unloaded file references in the transmittal set.

Sheet Sets

An additional option on the Sheet List shortcut menu enables you to publish in reverse order. Selecting Edit Subset and Sheet Publish Settings from the right click menu sends you to the new Publish Sheets dialog box making it easier than

ever to control the publish property of multiple sheets. You'll also find the updated Sheet List Table dialog has many nice enhancements including the ability to create a sheet list from a subset of sheets.



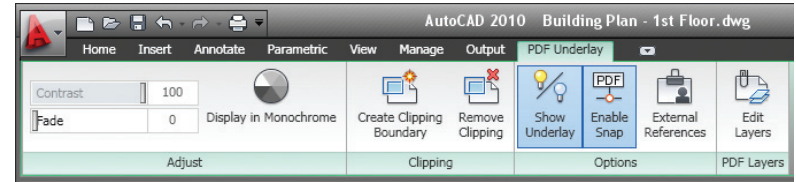
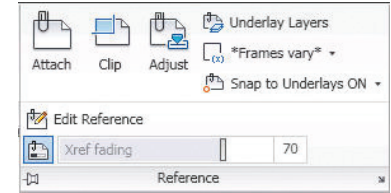
Auto-Complete in File dialogs

File Navigation dialogs now support auto-complete (thus saving you time when typing file names).

External Referenced Files

(PDF, XREF, DGN, DWF and Image files)

The Reference panel on the Insert tab of the Ribbon makes it easy to attach and modify all of your externally referenced files. You'll find a one stop shop that helps you easily clip, fade (even Xrefs!) and control the display of reference frames along with other valuable tools.



Context Sensitive Ribbon

You're going to love how the context sensitive ribbon automatically displays only those commands which are relevant when you select one of your externally referenced files. The options that appear on the ribbon are the options that relate to the selected type of object!



NOTE OSNAPS only work in PDFs created from AutoCAD.

Attach PDF files!

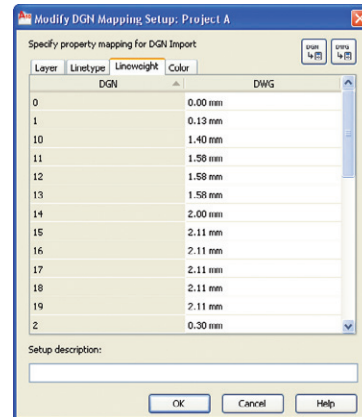
The super good news is that now you can bring a PDF into AutoCAD (as an underlay). You can clip the PDF, snap to the PDF, control layer visibility and fade the PDF. Easily edit the clip boundary with grips, much like you can with an XREF and even invert the clip boundary.

Working with DGN Files

Now you can attach Bentley MicroStation® V7 and V8 DGN files to your AutoCAD drawings or export DWG files to V7 and V8 DGN. Clip the DGN from the context sensitive ribbon, control layers and adjust the contrast, fade, and monochrome (or DGNADJUST).

Import V7/V8 DGN data with DGNIMPORT or the Import tab on the ribbon. When importing, you see a dialog box that prompts for information regarding external DGN references, text nodes, and units to help you get the best results.

The DGNMAPPING command maps DGN levels, linetypes, lineweights, and colors to AutoCAD layers, linetypes, lineweights, and colors (and vice versa).



Frames

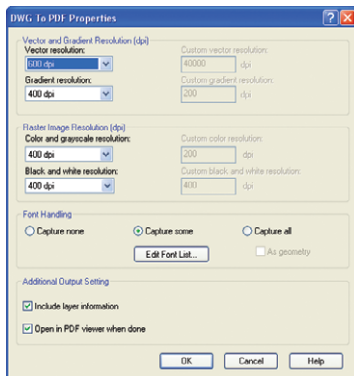
A new FRAME system variable lets you control the visibility of all your externally referenced files. This can be easily found in the context sensitive ribbon and overrides the individual frame system variables (such as IMAGEFRAME).

Lost Reference Files

Nothing is more frustrating than opening a drawing and finding out an externally referenced file is missing! Now AutoCAD makes it easier than ever to locate them by greeting you with a new tool that can take you straight to the External References Palette.

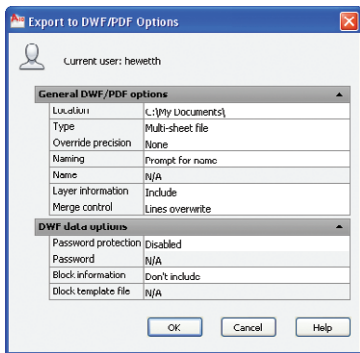
Create Smaller and Higher Quality PDF Files!

Default vector resolution has been increased from 400 dpi to 600 dpi (better lineweight precision). True Type fonts are exported as text now (rather than graphics) thus decreasing the file size and lending itself to searching and copying text in the final PDF. You can also specify merge control, include layer information and automatically view the PDF file when finished.



NOTE Be sure to select DWG to PDF.PC3 in the Plot command.

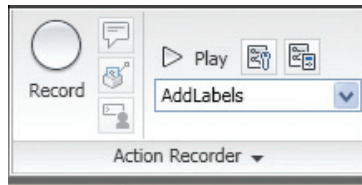
You can find similar options on the Output ribbon tab under Export to DWF/PDF Options including the ability to specify multi-sheet.



Action Recorder

Imagine being able to quickly and easily record your drawing steps for repeat use. All designers have tedious tasks they do throughout the design day—now you can record it once and replay it as many times as you want. You can even include such features as pausing for user input, selecting objects, and more.

On the Manage tab, simply click the Record button on the Action Recorder panel to start recording your steps.



The Action Recorder records actions from the command line, toolbars, ribbon panels, pull-down menus, the Properties window, the Layer Properties Manager, and the Tool palette.

After you are finished with your task, simply click the Stop button. You are prompted for a Macro Name, and a text

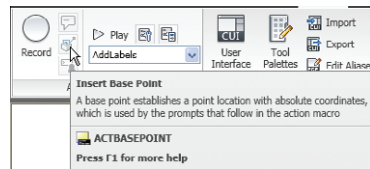
version of your macro appears in a box (the Action Tree) for you to view. A file with an extension of .actm is then saved to the directory indicated in Options.

Now you are ready to try your macro by clicking Play.

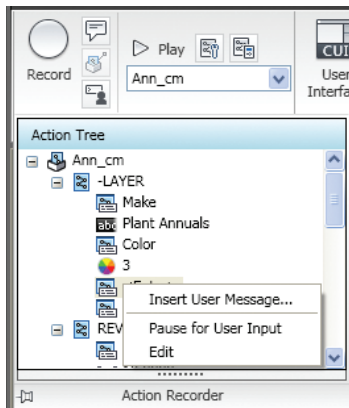
From the Action Tree you can:

- Right-click any action line of your macro to pause for user input (for example, you want the user to input the radius of a circle).
- Right-click any action line of your macro to insert a user message to help lead your user.
- Double click on values to edit.

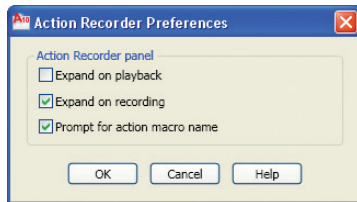
NOTE A new tool lets you add base points into your action macro.



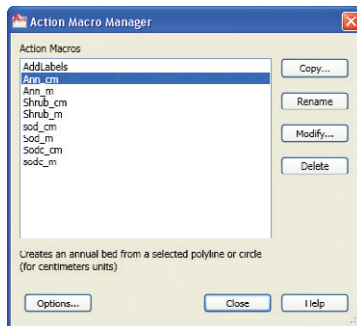
Macros don't understand dialog boxes except for the Layer Manager and Properties dialog boxes. All other commands with dialog boxes need to be run at the command line, with a dash [-] in front of the command. For example: -HATCH. An Action Macro can get you into a dialog box, but the user would need to enter any information and exit manually.



The Preferences button enables you to determine the behavior of the Action Tree.



The new Action Macro Manager makes it easy to organize your macros.



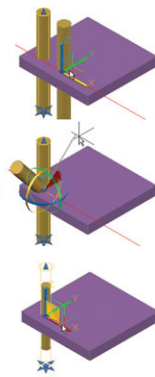
3D Tips



If you plan on working in 3D be sure to switch to the 3D Modeling workspace. This will insure the 3D tools display in the Ribbon.

The 3D Gizmo

AutoCAD 2007 introduced the gizmo with 3D Move and 3D Rotate options. A new 3D Scale gizmo has been added for even more 3D functionality.

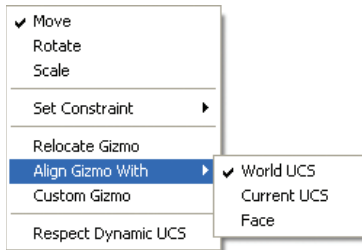


If you are using a 3D visual style the gizmo will display when an object is selected. The Sub-object panel on the Home tab makes it easy to change from one gizmo mode to another.



You can also go directly to a specific gizmo with the 3DMOVE, 3DROTATE and 3DSCALE commands. You'll find that the new AutoCAD 2010 gizmos go directly to the center of the selection set (saving you that extra step).

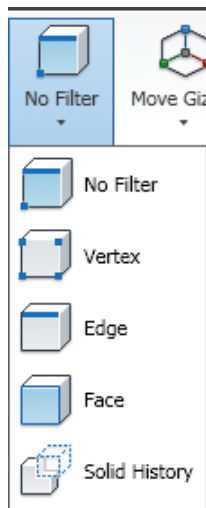
A right click on a gizmo enables you to modify the gizmo's behavior. Here you can constrain to a different axis or plane, relocate it and realign it.



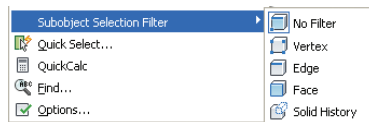
TIP You can also change to a different gizmo by hitting the space bar after selecting an axis

Selecting edges, faces and vertices

In the past it has been tricky selecting between an edge, face or vertex. The Subobject panel on the Home tab also makes quick work of this now!



You can also access these selection options from the right click menu (when no objects are selected yet).



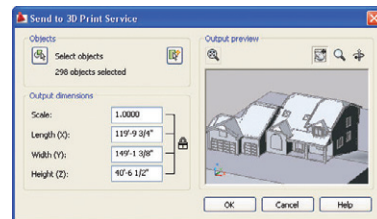
TIP Remember that you need to use the Ctrl key to pick subobjects.

New Surface Options

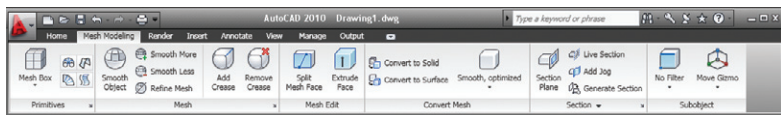
The Solid Editing panel of the Home tab now lets you perform unions, subtractions, interferences, intersections and imprinting on surfaces as well!

3D Printing

Use the new 3DPrint command to send your 3D AutoCAD drawings to a STL-supported 3D printing vendor. A friendly utility will walk you through the steps needed to ensure your model is 3DPrint ready. After selecting the solid objects you want to print you will find yourself in the Send to 3D Print Service dialog. Here you'll find a friendly preview pane and scale controls (with a helpful finished output size). A final OK will send you to a site with possible 3D Printing vendors.



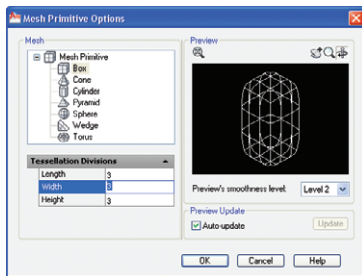
Mesh Modeling



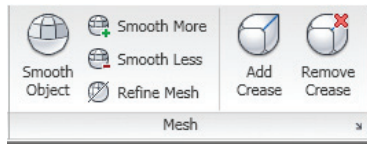
The new Mesh Modeling makes it easy for you to do free-form design.

You'll want to make sure you use the Ribbon here as all of your Mesh Modeling tools can be found in one location.

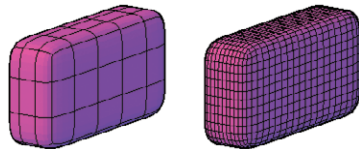
You'll find familiar shapes such as Box, Cone and Cylinder in the Primitives panel. Set up the number of tessellation lines in the Mesh Primitive Options dialog box.



By default, your meshes are created with no smoothness. You can easily smooth them with the Smooth More option in the Mesh panel.

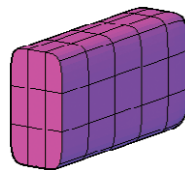


Continue to Smooth your meshes more or less based on your requirements. Refining a mesh will increase the number of faces on your mesh.

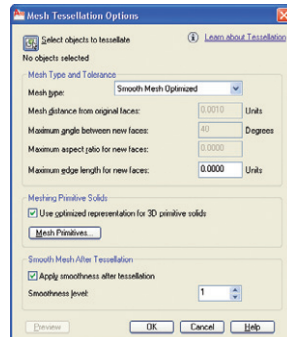


TIP Use the Smooth Object tool to turn a 3D solid object into a mesh object.

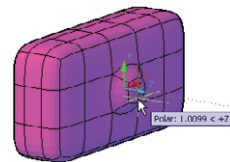
To create a hard edge on your mesh you can use the Add Crease tool.



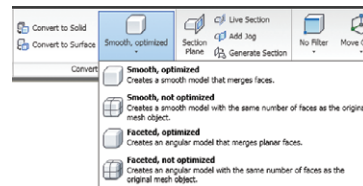
You can control the level of smoothness (maximum 4) along with many other mesh parameters in the Mesh Tessellation Options dialog.



You can split or extrude a face in the Mesh Edit panel.



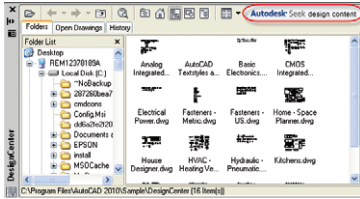
The biggest bonus? You can convert the watertight meshes (no gaps) to solids. These and more conversion tools are available in the Convert Mesh panel.



Added Extras

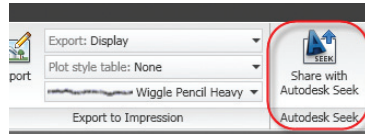
Autodesk Seek

Don't miss out on the great content available (for free!) up on Autodesk Seek. Easily accessed from Design Center you will find 2D and 3D drawings, DWFs, PDFs, etc available for you to download and use.



And if you should decide you'd like to share your designs with others you can use the Share with Autodesk Seek tool

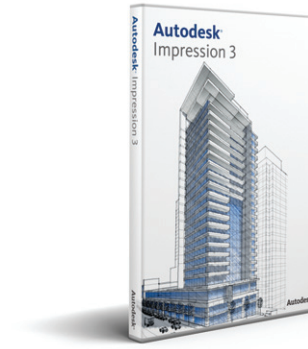
located on the Output tab of the Ribbon (or execute the SHAREWITHSEEK command).



Autodesk Labs

Be sure to visit to visit Autodesk Labs to stay up and running on tomorrow's technology. At labs.autodesk.com you can download (for free) many cool tools regardless of your discipline.

Bonus Section: Autodesk Impression



Impress colleagues and clients with graphics created directly from your CAD drawings with Autodesk® Impression software (available to subscription customers only). Now you can bypass the tedious and time-consuming task of creating graphics by hand or importing CAD files into graphics software for polishing.

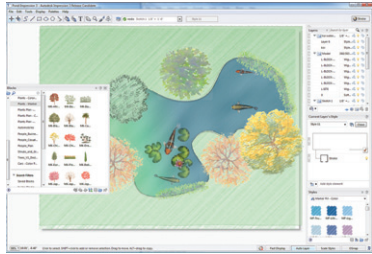
Simply open your DWF or DWG file in Impression and add strokes, textures, fills, and entourage (such as people, plants, and cars) to create your own custom illustration.

Getting Started

Use the Jump Start Tour to help you begin using Impression, with easy-to-follow, step-by-step exercises and informational videos. And if you want an even more in-depth introduction to the application, check out the Quick Start Guide on the Help menu.

Stroke Type

Try assigning a custom stroke style to incoming lines as you open a DWG file in Impression. Use the Import DWG wizard to select a favorite stroke for all incoming lines regardless of their layer. This can give your DWG file a hand-drawn look before you even start rendering.



Area Fill

Color in multiple areas quickly by using the Freehand option in the Area Fill tool. Drag a freehand spline path across the areas you want to fill in. Everywhere the spline crosses a bounded area, the selected fill style will be applied to the area.

Drop Shadow Effects

Adding a drop shadow effect to a style is a great way to add the illusion of depth to your illustration. For example, create a style with a drop shadow effect that you can assign to landscaping blocks such as trees or shrubs and it appears to give

the blocks height. You can also make the drop shadow appear inside the style for a pool or sunken effect.

Create a new set of styles—quickly!

Creating custom style libraries in Impression can be a laborious and time-consuming task. In order to create a new library you have to manually copy/create each style and modify the color of individual style elements one by one. The Style Book Wizard automates this process by generating a pre-determined number of color variations based on an existing “source” style (and that will definitely speed things up!)

Autodesk Design Review



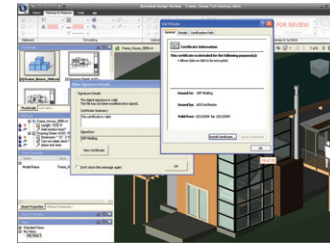
Make it easy for your colleagues who don't use CAD. When you publish to DWF™ (or DWFX) format, your colleagues can use Autodesk® Design Review software to view, measure, markup, and track changes to any design.

Autodesk Design Review 2010 new features:

- Enhanced user interface. Design Review now has a more intuitive, task-based look, consistent with other Autodesk products.
- Enhanced DWG viewing experience. Use Design Review to easily open and view DWG files.
- Highlighters. Use the highlighter markup tools to draw attention to specific information.
- Enhanced line formatting options. Change line patterns and line start and end styles to modify the appearance of your markups.

- Save Markups Summary. Design Review can now save a summary of all DWF file markup properties to a CSV file.
- Digital signatures. To help secure your data, you can now digitally sign DWFX files. And lots more!

The free download is available at www.autodesk.com/designreview.



TIP Be sure to specify the resolution for vector and raster graphics when creating DWF files—it allows for much greater precision!



Lynn Allen, *Cadalyst* columnist and worldwide Autodesk Technical Evangelist, speaks to more than 30,000 users each year. For the past fifteen years she has written a monthly column in *Cadalyst* magazine called “Circles and Lines” and is the voice behind *Cadalyst*’s “Tips and Tricks Tuesdays”. Lynn started using AutoCAD® software with Release 1.4, over 20 years ago, and got her start by teaching at the corporate and collegiate level for 12 years. A sought-after public speaker with a unique comedic style, Lynn has served as the Autodesk University emcee for ten years and is always one of the highest rated speakers. Her latest book is entitled *AutoCAD Professional Tips and Techniques*.

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