

Lynn Allen's

Tips & Tricks

for Using AutoCAD® 2007 Software

Autodesk



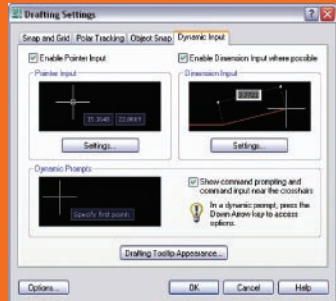
User Interface

Dynamic Input

Now you can have your command line conveniently follow your cursor. From the status bar, simply turn Dynamic Input on. Select the Down Arrow key to display any command options (or use the familiar right-click shortcut menus).

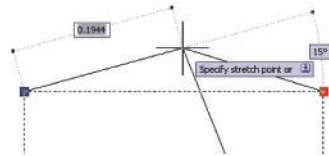
1. Right-click DYN to view the Dynamic Input tab of the Drafting Settings dialog box. Here you can indicate how much (or how little) information you want to display.
2. To display the command line input and prompts from the cursor, make sure Show Command Prompting and Enable Pointer Input are selected.

Tip: To turn on Dynamic Input you can also press the F12 key.



Tip: Press Ctrl+9 to turn the traditional command line on or off.

Creating existing geometry and grip editing enable you to change the length or angle of existing objects by directly entering the new value on the screen. To do so, be sure Enable Dimension Input Where Possible is selected. Note: Use the Tab key to toggle between the two values.



Tip: Set the system variable TOOLTIP-MERGE to 1 to display both the indicated object snap and the command prompts.

If you enter an unacceptable value, the software automatically highlights the value so you can reenter it.

Clean Screen

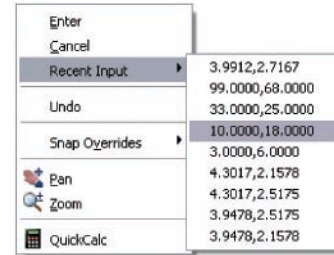
Use the new Clean Screen button located in the lower-right corner of the screen to turn off everything except for the status bar, menu bar, and command window.



Quick Command and Recent Data Access

The AutoComplete functionality finishes your input for you. This feature comes in handy if you forget how to spell a specific system variable or infrequently used command. Key in the text you know and use the Tab key to cycle through all the possibilities.

A Recent Input option appears on your shortcut menus, making it easy to recall a previously used value.



Rollover Object Selection Features

As you move your cursor over an object, the object is highlighted, helping to ensure that you select the correct object and making it easy to distinguish entire objects from individual objects such as plines versus lines.

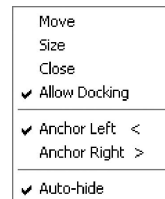
Distinguishable Windows

Standard and crossing windows are distinguishable by transparent windows of differing colors. You can control the functionality and colors in the Selection tab of the Options dialog box.

Controlling Toolbar and Tool Palette Placement

If you have all your toolbars and palettes right where you want them—lock them up! Right-click the lock symbol at the end of the status bar and select what you want to lock from the shortcut menu. Use the Ctrl key to temporarily override locking.

You can also choose to attach your palettes to an anchor tab based on the left or right side of the drawing area. Palettes roll open or closed as the cursor moves over them, keeping them out of the way but available for quick access. You can easily stack several on each side of the screen for maximum productivity. Simply right-click the name bar and choose Anchor Left or Anchor Right from the shortcut menu.



3D Tools

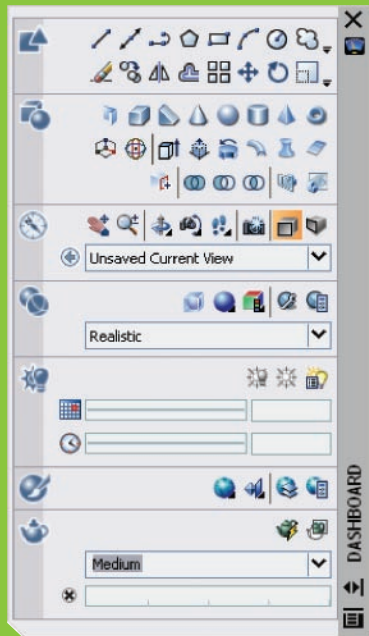
Plenty of new 3D tools are available to make your experience in 3D effortless.

Dashboard

The new Dashboard palette makes it easy to navigate the new 3D tools. It can be found under Tools>Palettes>Dashboard or by entering the DASHBOARD command. The dashboard consists of seven control panels:

- **2D Draw** (hidden by default): Access standard 2D drawing commands
- **3D Make**: Easily access 3D solids and surfaces
- **3D Navigate**: Set up various 3D views and animations
- **Lights**: Add lighting to your model
- **Visual Styles**: Create and move from one visual style to another
- **Materials**: Apply materials and textures to objects
- **Render**: Quickly access basic rendering functions

Right-click any of the control panels to hide or display them. It's also easy to resize, dock, auto-hide, and expand the control panels.

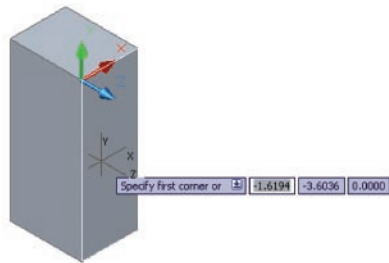


OPTIONS 3D Modeling Tab

This new tab focuses entirely on the new 3D functionality. Here are some highlights:

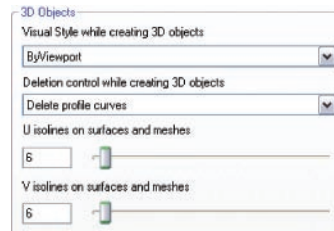
Dynamic Input

Adds a Z coordinate field when using dynamic input. Be sure to turn this on!



3D Objects

Controls the display of 3D solids and surfaces.



Visual Style While Creating 3D Objects: One means of switching Visual Styles (I prefer the dashboard).

Deletion Control While Creating 3D Objects: This key setting controls whether the profile and path curves are deleted once your 3D object is created. You may also choose to be prompted each time.

U and V Isolines on Surfaces and Meshes: Controls the number of isolines for surfaces and meshes.

3D Navigation

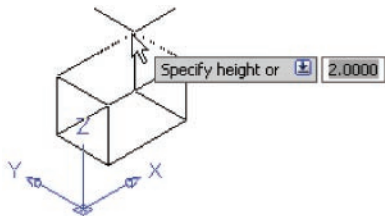
If you've used Autodesk Inventor® software, you've noticed the wheel zoom is the opposite of AutoCAD® software. Now you can match them!

This section also enables you to control walk, fly, and animation settings.



Dynamic Geometric Feedback

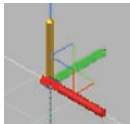
- The size, shape, and location of 3D objects dynamically display as you create them, making it easier to visualize your design. You can enter dimensions manually using Dynamic Input, or you can drag the cursor to visually specify them.



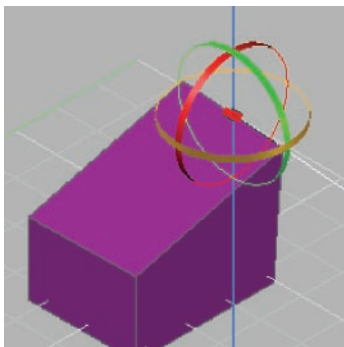
- No more fighting with the UCS command. You can easily draw on a new work plane by passing your cursor over the edge of an existing face until it highlights. This becomes a temporary UCS. DUCS, a new button on the status bar, needs to be on.
- Object tracking now works dynamically in 3D, even in perspective mode!

Tip: Holding down the Ctrl key as you pass your cursor over a solid lets you pick the various components of the solid for editing (very handy!). Select the blue grip to edit.

- Select an axis on the grip tool to lock in an X, Y, or Z direction for easy editing.



Tip: Use the spacebar to cycle from Stretch to Move to Rotate.



3D Solids & Surfaces

Solid Primitives

Creating 3D solid primitives is easy. Just follow the same steps you use with the correlating 2D commands.

Box

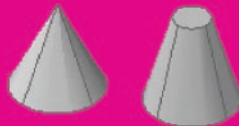
Similar to RECTANG, dynamically add in the height. You can also use a center point to define the cube.

Wedge

Draw the base rectangle and the height (the sloped face is placed opposite the first corner). The cube option draws a wedge with equal sides. You can also use a center point to define the wedge.

Cone

This feature has the same options as the CIRCLE command to define base followed by height, which is easy to select dynamically. You can also specify an elliptical base. Define height by selecting between two points (2P), or an axis endpoint. The Top Radius option creates a cone that does not meet at a point (cone frustum).



Cylinder

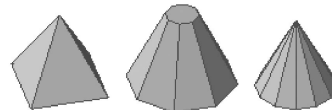
This feature has the same options as Cone, but the base and the top radius are equal.

Sphere

This feature has the same options you'd find in the CIRCLE command (center point, 3P, 2P, TTR), but it generates a sphere.

Pyramid

Use the new PYRAMID command to draw a solid pyramid (similar to the POLYGON command). You input the number of sides (3 to 32), base radius, inscribed or circumscribed (or use the Edge option), top radius, and height.



Torus

This feature has the same options as CIRCLE to define the distance from the center of the torus to the center of the tube. Use 3P or 2P to define the circumference. Then define the radius or diameter of the tube.

Helix

Now it's easy to create helical shapes by specifying the height, base, top radii, number, and height of turns and direction (clockwise or counterclockwise).



Swept Solids and Surfaces

Polysolid

Draw a polysolid the same way you draw a polyline, but include a height and width (like walls). You can also convert an existing line, pline, arc, or circle into a swept solid.

Extrude

Extruding an open object creates a surface, closed object, or solid. To create a solid from a profile using lines or arcs, use the Join option of the PEDIT command first to convert them to a single pline (you could also convert the objects to a region before you extrude).

Use the following extrusion profile options:

- **Path:** Specify an object as the profile for the path. The path is moved to the centroid of the object and used as the profile.

- **Direction:** Select the length and direction with two points.
- **Taper Angle:** Positive angles taper in from the base; negative angles taper out (0 is perpendicular).

Tip: You can also extrude an existing face (use Ctrl to select).

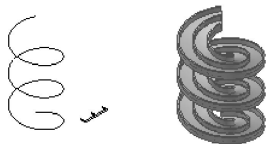
Extra Cool Tip: Press Ctrl+Alt inside a boundary (open or closed) to extrude! You don't even have to enter a command to perform this extra cool tip.

Sweep

Sweep an open or closed profile along an open or closed 2D or 3D path. A closed curve results in a solid. The profile is moved and aligned perpendicular to the path—no need to align it yourself anymore. The result is in the shape of the profile (the swept object).

You can also twist or scale the objects as they are swept.

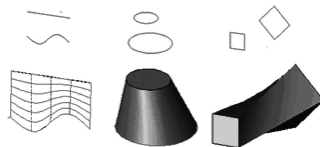
Tip: Use a helix as a path to create a variety of helical shapes.



Loft

Draw a 3D solid or surface through a set of two or more cross sections. Lofting through a set of closed cross sections results in a solid.

Many options are available for getting the perfect loft: guide angles, drafting angles, smooth fit, and more.



Revolve

The updated REVOLVE command can create surfaces or solids based on the profile and axis of rotation.

1. Select the objects to revolve.
2. Specify the start and endpoint of the axis of revolution.
3. Specify the angle of revolution.

Creating Surfaces and Solids

Creating Surfaces

Convert objects into surfaces with the CONVOTOSURFACE command.

Create surfaces from 3D solids with curved faces with the EXPLODE command.

Use XEDGES to extract wireframe geometry from solids, surfaces, and regions.

Use PLANESURF to create a planar surface by

- Selecting one or more objects that form an enclosed area
- Specifying the opposite corners of a rectangle

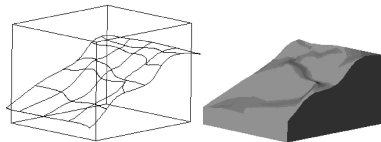
Creating Solids

CONVTOSOLID converts the following objects into extruded 3D solids:

- Uniform-width polylines with thickness
- Closed zero-width polylines with thickness
- Circles with thickness

THICKEN converts surfaces to solids by thickening a surface.

SLICE creates new solids by slicing existing ones. Define the cutting plane by specifying points or by selecting a surface or planar object.

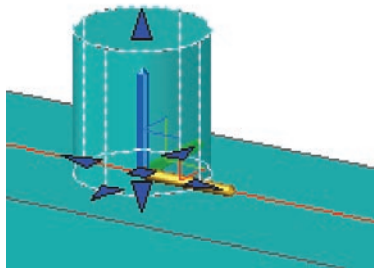


Creating Composite Solids

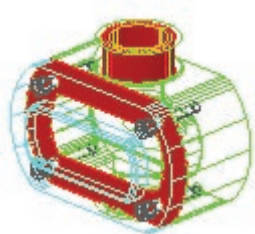
Union, Subtract, Intersect, Fillet, and Chamfer create composite solids. Use the Show History option in the Properties palette (or the SHOWHIST command) to display wireframes of the original forms that make up the composite.

Editing Solids

Easily edit existing solids in the Properties palette or by grip editing the solid. Use Ctrl to select the face or edge or to select objects within a composite solid. You can also use the grip tool to move along an axis or plane by hovering over the Move grip of a selected solid.



Tip: If you are having trouble selecting the correct face or edge, use the spacebar to cycle through all the possibilities!



Checking for Interference

Use INTERFERE to identify solids that interfere with one another. You can even select blocks and xrefs when searching for interferences and individual nested solids within a block or xref. Where solids intersect, the software creates and highlights temporary solids.

Align

Align works dynamically with 3D objects so you see the selected geometry align as you specify the destination points.

3D Viewing

3D Orbiting and Viewing

Use the improved 3DORBIT command to view your 3D models. Dragging the cursor horizontally moves the camera parallel to the XY plane; dragging it vertically moves it parallel to the Z axis. The shortcut menu lets you choose from a variety of navigation modes.

Navigation modes are as follows:

- The new Constrained Orbit mode keeps you from rolling the geometry completely over (3DORBIT).
- Free Orbit mode returns you to previous behavior and allows orbiting in any direction (3DORBIT).
- Continuous Orbit allows you to set the objects in continuous motion (3DORBIT).
- Adjust Distance controls the distance toward or away from the objects (3DDISTANCE).
- Swivel simulates the effect of swiveling the camera on a tripod (3DSWIVEL).
- Walk through a model at a fixed height above the XY plane (3DWALK).
- Fly through the model without any height restrictions (3DFLY).



- Similar to Adjust Distance, Zoom simulates moving the camera closer or further away (3DZOOM).
- Pan moves the view in the direction you drag (3DPAN).

Tip: Press Shift+middle mouse button for quick access to 3DORBIT.

Perspective

Easily toggle from Perspective to Parallel from the dashboard, or use the PERSPECTIVE system variable.

Walk-Throughs

Use 3DWALK to walk through your design using the four arrow keys. Alternatively, use W, forward; A, left; S, back; D, right. Drag the mouse in the direction you want to look. Perspective mode must be on.

Tip: Use the mouse wheel to roll in a walk-through and the left mouse button to swivel to a new direction.

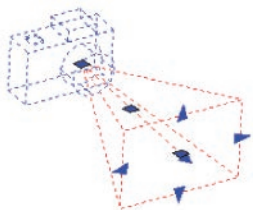
Adjust the step size and speed in the Navigation control panel.

Tip: You can also create an animation of your walk-through (ANIPATH command).

Creating Cameras

Use the CAMERA command to set up cameras for viewing your design. A camera icon is added to the drawing with a corresponding named view.

- **Location:** The point from which you are viewing the model.
- **Target:** The point that you are viewing (center of the view).
- **Lens Length:** Magnification properties of the camera's lens. The greater the lens length, the narrower the field of view.



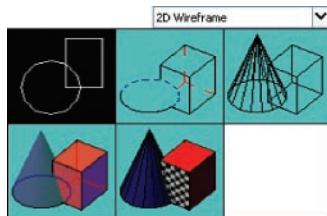
- **Front and Back Clipping Planes:** Specifies the boundaries that define or clip a view. Everything between the camera and the front clipping plane is hidden. Everything between the back clipping plane and the target is hidden.

Tip: Use the drop-down menu in the Navigation control panel of the dashboard to quickly restore a camera's view.

Visual Styles

Use Visual Styles to quickly change the display of edges and shading in a viewport. Create your own Visual Styles in the Visual Style Manager.

- **2D Wireframe:** Displays objects using lines and curves to represent boundaries with model space colors.
- **3D Wireframe:** Displays objects using lines and curves with a 3D look and feel. 2D objects such as raster images, OLE objects, linetypes, and lineweights are not visible.
- **3D Hidden:** Wireframe representation, hidden lines removed.
- **Realistic:** Shades the objects and smoothes the edges. Materials are displayed.
- **Conceptual:** Shades the objects and smoothes the edges using the Gooch face style. Objects are outlined. Less realistic but easier to see.



Productivity Tips

QUICKCALC—A Handy Calculator!

Derived from the Geometric Calculator command (CAL), QUICKCALC can be used to

- Perform a full range of calculations
- Convert from one system of units to another
- Perform more advanced functions with the Scientific panel
- Pass values back and forth to a command or the Properties palette
- Set variables for use across AutoCAD drawings and sessions

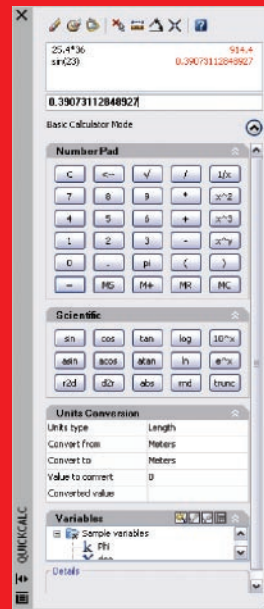
Layer Tips

New Layer Filter Warning

The new system variable LAYERFILTER-ALERT warns you when you have too many layer filters and can be used to delete any unwanted ones. For maximum flexibility be sure to set LAYERFILTERALERT to 3.

Tip: Use the FILTERS command to quickly removed extra layer filters.

Note: Selecting the Indicate Layers in Use option in the Layer Properties Manager could dramatically slow down software performance.



Tip: Quickly access the calculator by entering QC or pressing Ctrl+8.

Layer Express Tools Now Integrated into Core AutoCAD

Under Format>Layer Tools, you'll find popular commands such as

- **Layer Walk:** This powerful command makes it easy to see which objects reside on which layer.
- **Layer Isolate:** Isolate a layer (turn all other layers off) by selecting an object on the desired layer.
- **Copy to Layer:** Copy objects from one layer to another.
- **Isolate Layer to Current Viewport:** Freezes the layer in all but the current viewport.
- **Layer Delete:** Deletes the layer of a selected object and all objects on the layer, and purges the layer from the drawing. This command takes no prisoners!
- **Layer Merge:** Merges selected layers together.
- **Chspace:** Moves objects from paper space to model space, or vice versa. The moved object is scaled appropriately in the new space.

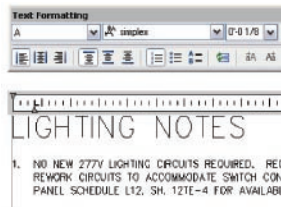
Express MTEXT

True in-place editing! The text in the MTEXT dialog box looks identical to the resulting text.

- Bullets, numbering, and lettering are available and automatically recalculate if something is added or removed from the list.
- Control paragraph width by sliding the end of the ruler bar.
- Double-click the end of the ruler bar to resize MTEXT box (such as the Microsoft® Excel® application).
- Use Shift+Tab to remove one level of nesting from a numbered or bulleted list.

Tip: Now the MTEXT editor zooms in when text is too small as long as MTEXTFIXED is set to 2.

Tip: The new DTEXTED setting of 2 enables you to select anywhere in the drawing to create new single-line text blocks in the DTEXT or TEXT commands.

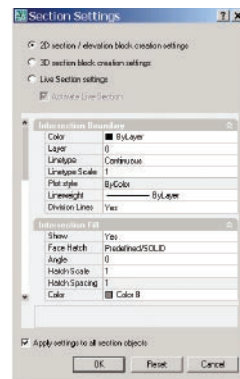
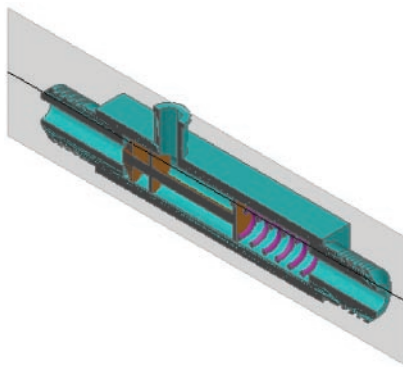


Creating 2D Drawings from 3D

Section

Use the new sectioning functionality to cut away geometry and create 2D drawings (in the form of a block) from your 3D geometry. The new SECTIONPLANE command easily creates the section. The shortcut menu makes it easy to position it correctly with live sectioning. If you need a section line that has jogged segments, the Draw Section option lets you pick multiple points throughout the 3D model.

Right-click any section line to access the Section Settings dialog box. Here you'll find all the settings for your section views.



Tip: If you update your model, you can also update the section view block by selecting **Replace Existing Block** in the **Generate Section/Elevation** dialog box—think of all the time you'll save!

Tip: Select a section plane and use the grip to switch between section plane, section volume, and section boundary.

Flatten

Use the new FLATSHOT command to create 2D line drawings from your 3D geometry. The result is in the form of a block—all hidden lines are captured.

Visualization

Lighting

Good lighting is key for visualizing and rendering a shaded 3D model. By default, the lighting is from two distant sources that follow the viewpoint as you move around the model. All faces are illuminated, and you control the brightness and contrast.

Creating Lights

You can create point, spot, and distant lights for more control over lighting (LIGHT command). Most user-created lights display glyphs.

Use LIGHTLIST to display all your lights.



- **Point Lights:** Similar to light bulbs, point lights radiate light in all directions. The intensity diminishes over distance, unless attenuation is set to None.
- **Spotlights:** Spotlights are useful for highlighting specific areas in your model because they emit a directional cone of light. The intensity of spotlights diminishes over distance.

- **Distant Lights:** Distant lights are useful for lighting objects uniformly. They emit uniform parallel light rays in one direction. The From and To points define the direction. The intensity remains the same over distance (no light glyphs).

Tip: Distant lights are the least performance intensive.

Sun Studies

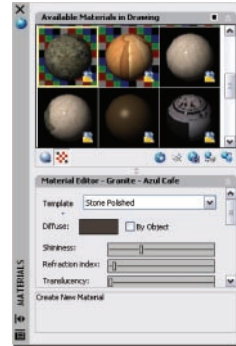
Similar to distant light, you define the geographic location, date, and time of day. Sun studies are valuable for showing the effects of shadows throughout the day. You can change the intensity and the color of the light (SUNPROPERTIES). The rays of the sun are parallel and have the same intensity at any distance.

Tip: Easily perform a dynamic sun study from the dashboard.

Applying Materials

It's easy to attach a material to an object or face by dragging the material from the various Materials tool palettes or the Materials window onto the object. You can also apply materials per layer. Once you attach a material, it is added to the drawing and displayed as a swatch in the Materials window.

Tip: You might find it easier to attach materials in parallel mode than in perspective mode.



AutoCAD® 2007 includes more than 300 materials and textures.

Tip: Use Ctrl to drag a material to a face rather than the entire object.

Rendering

It's easier than ever to create a realistic 2D image based on your 3D scene. The updated RENDER command launches right into rendering your images without you having to answer all types of technical questions. Rendering presets are tailored for quick preview renderings as well as high-quality ones.

Take advantage of these advanced rendering tips:

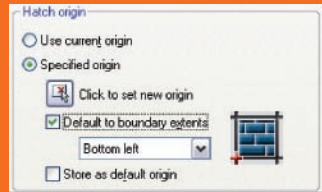
- For better performance use default lighting and turn off shadows.
- Don't go crazy with the lights! Too many could slow you down.
- Intersecting faces don't render as well. Use Boolean commands such as UNION and INTERSECT to correct.
- Faces that overlap and lie in the same plane (coplanar) occasionally produce ambiguous results, especially if they use differing materials. Move the objects so the faces don't occupy the same plane.
- Twisted faces don't render well. Be sure to create your faces with the corners in the proper order.



Hatching & Dimensioning

Annotation Time-Savers Control the Hatch Origin

Set a new origin by picking a point, or select one of four corners of the boundary extents. You can also choose to center it.



Create Separate Hatches

Toggle tells AutoCAD to treat each hatched area separately (for easy editing later).

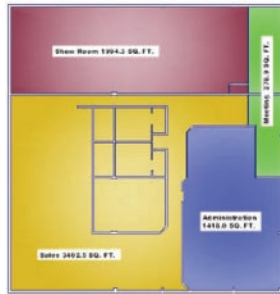
Specifying Hatch Boundaries

Hatch a boundary even if the entire boundary isn't visible. Add or remove boundaries to existing hatching.

Note: *If you've ever worked on a drawing where the boundary is missing (and you need it back), you know how frustrating it can be. You can now recreate hatch boundaries in the HATCHEDIT command!*

Find the Hatch Area

The Properties palette displays the cumulative area of one or more selected hatch objects. It's easy to add an updatable field of the area.

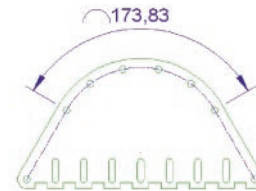


Dimension Improvements Varying Dimension Linetypes

You don't have to explode a dimension to change individual dimension or extension lines to a different linetype! (Great for centerlines.) Make changes in DIMSTYLE or the Properties palette.

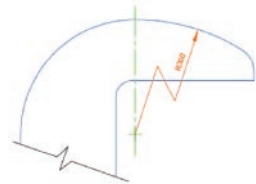
Dimensioning Arc Lengths

The DIMARC command lets you dimension the length of a dimension, complete with an arc length symbol if desired.



Jogged Dimensions

Dimensioning extremely large arcs can be a problem when the center point is off the screen. You can specify a jog angle to properly dimension large curves.



Flipping Dimension Arrows

The right-click shortcut menu offers the option of flipping your dimension arrow(s). Simply select the dimension near the arrow you want to flip and choose Flip Arrow from the shortcut menu.



Initial Length Symbol

AutoCAD software provides a symbol to indicate initial length, available from the Symbol list in the MTEXT shortcut menu.

Fixed Length Extension Lines

You can create dimensions using extension lines with a consistent length, regardless of how far away from the part you select. As a result, the extension lines might not even touch the geometry.

New Arrowheads

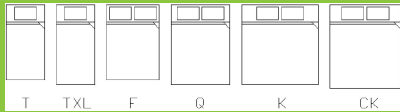
Two new arrowheads have been added: Origin2 and Small.



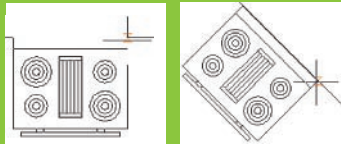
Dynamic Blocks

The new Dynamic Blocks enable you to create powerful and flexible blocks like never before. Some of the many advantages are as follows:

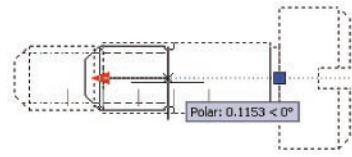
- One block, multiple definitions that could drastically reduce the size of your block libraries. For example, one bed block, many options.



- Create blocks that automatically align with existing geometry.



- Edit individual components of a block. You can even assign specific increments for stretching or rotating with minimum and maximum values.



- Create blocks with multiple insertion points.



Defining Dynamic Blocks

The new Block Definition Editor (BEDIT) makes it easy to create Dynamic Blocks or edit your existing blocks.

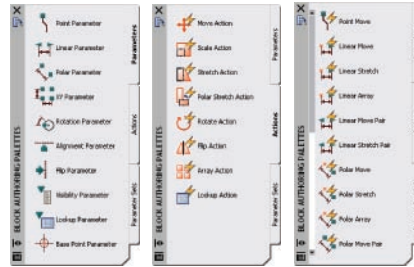
1. Select an existing block.
2. Right-click and choose Block Editor from the shortcut menu.

The Block Authoring palettes contain the tools to make your blocks dynamic. The process looks like this:

1. Select a parameter and assign it to a portion of your block.

2. Select the action you want to assign to that parameter. Place the action somewhere near the parameter. Most parameters must have at least one action.

Tip: Try one parameter or action pair at a time to help ensure that you get the proper results.



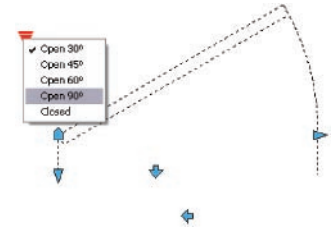
Parameters

Think of parameters as dimensions that drive the block geometry. Examples include

- Linear parameter to a door block to drive the width of a door (combine with Stretch Action).
- Rotation parameter to a chair of a table and chairs block permits individual rotation of the chair after insertion (combine with Rotate Action).

Selecting the properties of a parameter enables you to specify increments as well as minimum and maximum values.

Visibility parameters are used to assign multiple definitions to one block. Lookup parameters might be used to assign multiple sizes of a specific block. A simple right-click enables you to change from one size to another.



Note: AutoCAD 2007 automatically enables Reverse Lookup when multiple input properties are included with a lookup table.

Actions

Actions drive the geometry in specific ways. For example use Stretch to change the length of a bolt.

Note: An exclamation point displays to indicate parameters with no assigned action.

Finish by closing the block editor and trying out your new dynamic block!

Step Savers

Updates to Popular Editing Commands

Undo Options

- Undo options have been added to Copy, Offset, Fillet, Chamfer, Trim, and Extend.

Fillet and Chamfer

- If you just want to trim corners, use the Shift key to force a zero radius or distance, which is quite handy! Select the first object, and then hold down the Shift key to select the second object. It doesn't reset the fillet radius!

Trim and Extend

- Select All defaults to select all visible objects as cutting/boundary edges.
- Crossing/Fence options added as object selection options for the objects to trim/extend.
- Erase Option in Trim so you can also erase those extra objects along the way.

Stretch Command

- Now supports multiple crossing windows and standard object selection.
- Only those objects selected with a crossing window or crossing polygon are physically stretched. All other objects are moved.

Offset

- Erase the source object.
- Specify whether the new object is created on the current layer or the same layer as the source object.
- New Multiple option lets you continue offsetting a specific distance—no need to reselect a source object.

Rotate and Scale

- Copy option allows you to create a copy while you rotate or scale an object.
- The last rotation angle or scale value is available as a default.
- Pick any two points to specify a new angle or scale. You are no longer limited to using the base point as one of the reference points.

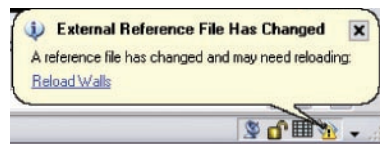
Rectangle

The Rectangle command has two additional options:

- Area option, where you define the length of one side and then total area
- Rotate option

Simplified XREF Notification

A simple click on Reload Modified Xrefs saves you time.



Join Command

This command combines individual segments of like objects into a single object. The objects do not have to meet. You can also use Join to combine lines and arcs with plines (although I prefer PEDIT for polylines). Join works on plines, lines, arc, elliptical arcs, and splines.



More Flexible MLINES

Trim and Extend work on MLINES.

Zoom Improvements

- Smooth Transition Zoom makes it easy to maintain orientation (system variable VTENABLE).
- Undo/Redo combines multiple pans and zooms (Options dialog box).

FIND Command

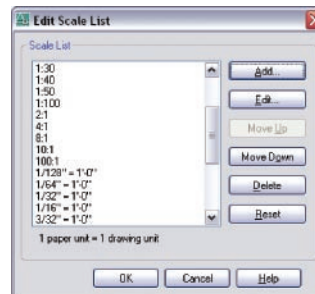
Find permits wildcards!

IMAGEFRAME

Set IMAGEFRAME to 2 to display but not plot the frame.

Customizable Scale List

Use the SCALELISTEDIT command to add, delete, edit, and rearrange the scale list used in PLOT, PAGESETUP, Viewport toolbar, and so on.



Fields

Object fields have been updated, enabling you to select objects between paper space and model space. LISP variables are also supported in fields.

Customize

Tables

The table formula function has been updated to recognize a comma as a period.

Model/Layout Tabs

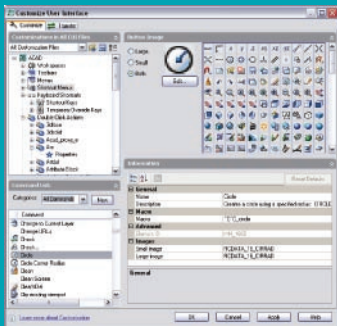
Regain valuable screen space by hiding the layout and model tabs. Right-click over the model or layout tabs and choose Hide Model and Layout Tabs. Get to your layouts by selecting them from the status bar buttons (speedy!).

Views

By default, layer visibility is stored with named views. Use the View Manager, and select Update Layers to update the named view to use the current layer settings.

Tip: Named views are a speedy means of restoring a viewpoint and layers, as well as other properties such as section planes. They are available for quick access from the dashboard.

Now you can customize your AutoCAD application with the new, friendly CUI command. The old menu files (MNU, MNS, and MNC) are out—the new XML-based CUI is in!



Migrate Existing Menu Files

It's easy to migrate existing menu files to the new CUI format using the Transfer tab in the CUI command.

Use the Customize tab to modify pull-down menus, toolbars, keyboard shortcuts, shortcut menus, and input device buttons. This friendly drag-and-drop system makes it easy to personalize AutoCAD to your individual needs.

Creating Palettes from the CUI

Now you can drag from the command list onto tool palettes.

Tip: Tired of pressing the F1 key by mistake? Change F1 from Help to Escape by setting up a keyboard shortcut in the CUI. Simply drag Cancel from the command list to the shortcut keys listing. Highlight Cancel and assign it to F1!



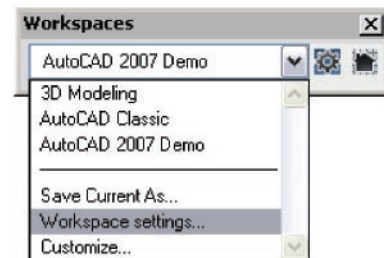
Double-Clicking

When you double-click an object, a command is launched. Now you can assign which command is executed for each type of object! For example, when you double-click an attribute definition, the DDEDIT command is executed, allowing you to edit only the attribute value. Maybe you'd prefer the EATTEDIT command, which allows you to edit all the properties in addition to the attribute value. Simply replace DDEDIT in the macro with EATTEDIT or drag Edit Attribute from the command list to the double-click menu.

Tip: For you Autodesk Inventor users, why not assign 3DORBIT to the F4 key in the CUI? It will make the transition between the two products so much easier!

Workspaces

Workspaces control the display of toolbars, menus, all tool and command palettes, and the command line. You can store workspaces for the different ways you choose to work. For example, your 3D workspace would be very different from your 2D workspace.



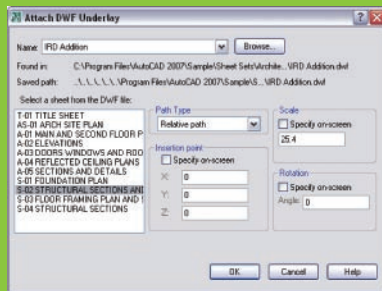
Share

Sharing your drawing information is important, and AutoCAD 2007 software makes it even easier to do so.

Using DWF Files as Underlays

The new DWFATTACH command enables you to use a DWF™ file as an underlay (similar to raster images). The DWF file is linked and not physically embedded into the drawing file, thus keeping the file size down.

You can snap to attached DWF files, and all layers from the DWF file are flattened into a single layer. The physical underlay is placed on the current layer.

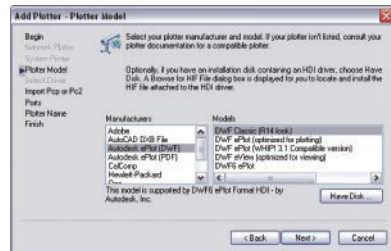


Use the DWFADJUST command to make display adjustments:

- **Fade:** The greater the value (0 to 80) the lighter the linework. A high contrast value can also blend the underlay into the background.
- **Contrast:** The greater the value (0 to 100), the more each pixel is forced to its primary or secondary color.
- **Monochrome:** Controls the color saturation of all linework.

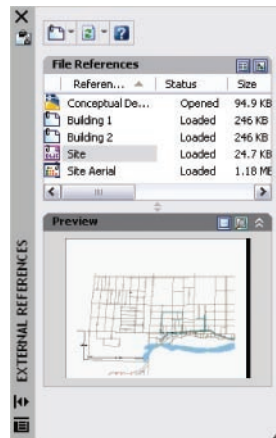
Plotting to PDF

Use the Add-a-Plotter wizard to print your drawings to PDF format. Under Manufacturers, select Autodesk ePlot (PDF) and under Models, select PDF.



External References

The XREF command can now be used to see all externally referenced files in a central location, including drawing files, images, and DWF underlays.



Saving to Older File Formats

It's easy to save back to previous releases of AutoCAD (as far back as AutoCAD® Release 14) to facilitate data exchange.

Access to DWG Files

AutoCAD 2007 lets you open DWG™ files all the way back to AutoCAD version 2.0. And free DWG format conversion and viewer tools let you access files and exchange data regardless of file version.

- Backward and forward conversion of DWG files from AutoCAD Release 14 to AutoCAD 2007 using DWG TrueConvert™ software.
- Share AutoCAD drawings easily and accurately with DWG TrueView™ technology. You can view, plot, and publish designs to the DWG format as well as publish files in the DWF format for quick and easy review and markup.

You can download DWG TrueConvert and DWG TrueView for free* (and we all love free!) at www.autodesk.com/dwg.

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

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Lynn Allen, *Cadalist* columnist and Autodesk technical evangelist, speaks to more than 30,000 AutoCAD users worldwide each year. For the past 12 years she has written a monthly column in *Cadalist* magazine called “Circles and Lines.” Lynn started using AutoCAD software with Release 1.4—more than 20 years ago. She has taught at the corporate and collegiate levels for 14 years and authored several books about AutoCAD. She is consistently one of the highest-rated speakers at Autodesk University and is a sought-after public speaker with a unique comedic style. Visit Lynn Allen’s blog at www.autodesk.com/lynnallen.

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