# Lynn Allen's Tips & Tricks for Using AutoCAD® 2006 Software





# User Interface

### **Dynamic Input**

Now you can have your command line conveniently follow your cursor! Simply turn Dynamic Input ON from the status bar. Select the arrow down key to display any command options (or use the familiar right-click shortcut menus).

Right-click on DYN to view the Dynamic Input tab of the Drafting Settings dialog. Here you can indicate how much (or how little) information you want to display.

To display the command line input and prompts from the cursor make sure "Show command prompting" and "Enable Pointer Input" are toggled ON.

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

🕌 Drafting Settings	? 🛛
Snap and Grid Polar Tracking Object Sn	ap Dynamic Input
Peinter Input	Enable Dimension Input where possible Dimension Input
Oynamic Prompts	♥ Show command prompting and command input near the crosshaise
Drafting To	akip Appearance
Options	OK Cancel Help

You can control the input format for coordinates and input values by selecting Settings (you probably want to stick to Relative and Polar).

*Tip: Turn the traditional command line On/Off with Control+9.* 

or	mat
F	For second or next points, default to:
(	Polar format
(	Cartesian format
(	Relative coordinates
(	Absolute coordinates
(	how coordinate tooltips: ) As soon as I type coordinate data )) When a command asks for a point )) Always - even when not in command
	OK Cancel Help

Creating existing geometry and grip editing now allows you to change the length or angle of existing objects by directly inputting the new value on the screen. "Enable dimension input where possible" needs to be toggled on for this to occur. Note: Use the tab key to toggle between the two values.



There are five different fields you can choose to display for grip editing:

Resulting Dimension, Length Change, Absolute Angle, Angle Change and Arc Radius (available by selecting Settings under Dimension Input).

*Tip: Set the system variable TOOLTIPMERGE to 1 to display both the indicated object snap and the command prompts.* 

# Quick Command and Recent Data Access

The new AutoComplete functionality will finish your input for you. This comes in handy should you forget how to spell a specific system variable or infrequently used command. Simply use the tab key to cycle through all the possibilities.

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

<u>E</u> nter <u>C</u> ancel	
Recent Input	▶ 3.9912,2.7167
Undo	99.0000,68.0000 33.0000,25.0000
Snap O <u>v</u> errides	10.0000,18.0000 3.0000,6.0000
¥ Pan ⊄ Zoom	4.3017,2.1578 4.3017,2.5175 3.9478,2.5175
QuickCalc	3.9478,2.1578

## Quick Switch between drawings

When multiple drawings are open, each drawing will display as an icon on the Windows taskbar. To switch drawings, simply select the drawing icon (be sure TASKBAR is set to 1).

#### **Rollover Object Selection features**

As you move your cursor over an object, the object now highlights, helping to ensure you select the correct object (also makes it easy to distinguish entire objects from individual objects such as plines vs. lines).

#### Windows are distinguishable

Standard and crossing windows are now distinguishable by differing colored transparent windows. The functionality is controlled in the Selection tab of the Options dialog box.

# Palettes

# **Tool Palettes**

Tool palettes can be customized to contain your most frequently used blocks, hatch patterns, images, solid and gradient fills, macros (including LISP and ARX routines), and command tools. These become even more powerful when you assign specific properties such as layer, scale factor, rotation angle, and so on, to each tool. (Fantastic for hatch patterns!)



# Customizing the Tool palette using DesignCenter

- Display Tool palette by pressing Ctrl+3 or by selecting from the Tools menu.
- Open the DesignCenter<sup>™</sup> utility and drag blocks, xrefs, images, and hatch patterns one by one to the Tool palette. Or right-click on any drawing name in DesignCenter to create a new tab that contains all the content within the drawing.

# Creating Tools from existing objects

- 1. Select the object.
- 2. Drag and drop the object onto the palette using the right mouse button (the tool will land where the black line is displayed).
- 3. The command, properties, and style (where applicable) are now accessible from the palette (great for dimensions, text, and so on).

# Creating a palette tool from existing toolbars

- 1. Right-click on the Tool palette title bar and select Customize.
- 2. Drag and drop the desired command from any existing toolbar button.

# Additional Tool palette features

- Right-click on any tool and select Properties from the shortcut menu to set up the various parameters such as layer, scale factor, and so on, for each tool.
- 2. Control the transparency of the Tool palette by right-clicking on the palette (not on a tool) and selecting Transparency from the shortcut menu.
- 3. Control the display and size of the icons by selecting View Options from the shortcut menu (set to Icon Only to display more tools).
- 4. Save your tool palettes to disk as an XTP file for others to import using the CUSTOMIZE command (right-click to find export/import in the shortcut menu). You can also organize your tool palettes into specific groups for faster access and organizational purposes.
- 5. When inserting a block, you can change the scale and rotation angle from a shortcut menu.
- 6. You can also set the scale factor to DIMSCALE or PLOTSCALE by selecting Auxiliary scale factor in Properties (great way to set up a block or hatch pattern that automatically scales).

- AutoCAD<sup>®</sup> 2006 allows you to edit the properties of multiple tools at a time!
- Add separator bars and descriptive text to help guide the user through taskbased processes.

Tip: Use Tool palettes to quickly place dimensions or text of a specific style. Drag a dimension/text string onto the Tool palette; name it after the corresponding style.



# Locking Toolbars and Tool palettes in place

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

**Palettes** 

# Sheet Sets

Sheet sets were added to AutoCAD® 2005 to help you better organize your drawing files. You can combine the sheets in any order, even group them into subsets. Sheet sets make it easy to publish, archive, and eTransmit your project files.

#### **Sheet Set Basics**

- Each drawing sheet points to one layout.
- You can create several sheets from a drawing with multiple layouts.
- It's easy to add, remove, and renumber each sheet.
- Though the drawing files may come from many different locations, the Sheet Set Manager will keep track of them all for you.
- Multiple users can access and edit a sheet set at the same time, but only one user can edit the same sheet.
- Each drawing can belong to only one sheet set.

# Creating a Sheet Set

- 1. Open a drawing file.
- 2. Access the Sheet Set Manager (SSM) from the Tools menu or by pressing Ctrl+4.
- 3. Select New Sheet Set from the Files menu or from the Sheet Set Manager drop-down list.
- 4. This will take you to the Create Sheet Set wizard.



Use the Create Sheet Set wizard to set up the parameters for your new sheet set. Here you will:

- Choose to use an existing sheet set as an example, or define your own from existing drawings.
- Choose the name and location for your new sheet set (extension of .dst).
- Assign any specific properties such as template file, callout block, and so on.

Open a sheet by a simple double-click.

# **Adding Sheets**

# Adding new sheets from existing layouts

- 1. Right-click on any sheet and select Import Layout as Sheet.
- 2. Select the drawing name and the layout(s) you'd like to import.

### Adding new sheets from scratch

- 1. Right-click on the sheet set title or any sheet and select New Sheet.
- 2. Provide a sheet number and title.
- 3. Select the desired template file (if prompted).
- 4. The new sheet is added to the set and a new drawing file has been created.

# Importing existing model space views into sheets (Sheet Views)

Even if you don't use paper space layouts, you can take advantage of sheet sets. It's easy to place your model space drawings and views into an existing sheet.

- 1. Go to the Resource Drawing tab in the Sheet Set Manager.
- Select Add New Location and add your drawing directory (or directories).
- 3. All drawings and any existing named drawing views will display.

- 4. Right-click on the drawing file, or view and select Place on sheet (or drag and drop).
- 5. Drag the view into place, then right-click to select a specific scale.
- 6. The view is added and the drawing is now xref'd into the sheet.
- 7. If you've indicated a specific label block for views, it will insert automatically.



### **Sheet Views**

Use the Sheet Views tab to:

- Rename and renumber your sheet views.
- Add a view label or callout block to a sheet.
- Group the sheet views into categories and assign different callout blocks to each view category.





Tip: As you go forward with your drawings and sheet sets, you might find it useful to restrict each drawing file to one layout—since only one person can edit a drawing at a given time.

# **Organizing Sheets**

You can reorder, rename, and remove any of your existing sheets using the sheet set shortcut menu.

You can also create subsets of sheets for further organization purposes.

You can save a set of named sheets for speedy access.

Note: Removing a sheet does not delete the DWG file.



## **Creating a Sheet Index**

AutoCAD 2005 and AutoCAD 2006 will now automatically create a sheet table. You can quickly go to any sheet listed in the table by clicking the hyperlinked sheet name.

- 1. Right-click the title sheet and select Insert Sheet List Table.
- 2. Indicate a table style.
- 3. Place the sheet list table in the drawing.

#### Updating the Sheet List Index

Right-click on the table and select Update Sheet List Table from the shortcut menu.

Sheet I	_ist Table
Sheet Number	Sheet Title
C-01	Site Survey
T-01	Title Sheet
AS-01	Architectural Site Plan
A-01	Main & Second Floor Plans
A-03	Doors Windows & Rooms
A-04	Lighting Plans
A-05	Sections & Details
A-06	Elevations
S-07	Foundation Plan
S-08	Structural Sections and Details
S-09	Floor Framing Plan & Sections
S-10	Structural Sections

# New to AutoCAD 2006

Since Sheet Sets were introduced in AutoCAD 2005, users have submitted wishlist items for fine-tuning sheet sets. Below is a list of these enhancements:

- 1. You can open or import multiple sheets.
- 2. Creating a new subset can create a correlating folder.
- 3. Renaming a sheet now has the option of renaming the drawing file.
- 4. New icons indicate if a sheet is locked (in use) or missing.
- 5. You can open a sheet as read-only.
- 6. Callout and label blocks now display a preview image.
- 7. The View list can be sorted by view category or by sheet name.
- 8. Views can now be saved by sheet (less confusing).

ile name:	Drive Roller Asly Lower.dwg
der gath:	C:\Program Files\AutoCAD 2006\Sample\Sheet Sets\Manu
	File rename options
	Rename associated drawing file to match sheet title
	Prefix sheet number to file name

No more drawing grids by hand! AutoCAD 2005 and AutoCAD 2006 have a new intelligent TABLE object that will eliminate a lot of tedium and save you time.

### **Creating Tables**

Tables

Just as you do with dimensions and text, you first set up your table style in the Table Style dialog box.

- 1. Select Tablestyle from the Format menu.
- 2. Select New to create a new table style.
- 3. Set up your table style to reflect your needs, such as table direction, text height, alignment, border properties, and so on.



# Now you're ready to create your table

- 1. Select Table from the Draw menu.
- 2. Select your table style.
- 3. Indicate the number of rows and columns.
- 4. Input specific column width and row height, or let AutoCAD determine it by the table size.

### **Populating tables**

In-place editing makes it easy to fill in the cells.

- The Tab and arrow keys move across cells.
- Double-click a table cell to enter text using the MTEXT editor.
- You can also insert fields and symbols from the shortcut menu.
- Clicking in a table cell permits you to insert a block from the shortcut menu.

You can let AutoCAD software fit the block in the cell or specify a scale factor and the table will adapt accordingly.

• Clicking also allows you to merge cells, add and delete rows, and so forth. You can use grips to modify the table location, column width, and row height.

## Accessing tables from Excel

- 1. Copy Excel table data to the clipboard.
- 2. Select Paste Special from the Edit menu.
- 3. Select AutoCAD Entities.
- 4. Place the table in your drawing.
- 5. Formulas will also come across in AutoCAD 2006.

#### **Exporting AutoCAD tables**

The TABLEEXPORT command will save an AutoCAD table out to a comma separated value (CSV). This file can easily be taken into Excel or Access.

# Extracting Block Attribute Data to a Table

- 1. Execute the Attribute Extraction Wizard (EATTEXT).
- 2. Indicate which blocks to extract.



- 3. Select the attribute information to extract.
- Preview the table, reorganize columns by dragging the headers. The right-click menu allows you to sort by ascending or descending.
- 5. Select "AutoCAD table" as the output.

The information in the table is linked to the attribute data and is updateable.

			DO	OR SCH	EDULE			
SYM.	WIDTH	HEIGHT	STYLE	REF#	MANUFACTURER	QTY	COST	TOTAL
1	3'	6'-8"	TWO PANEL	TS 3010	TRU STYLE	2	189.00	378.00
2	- 5'	6'-8"	TWO PANEL	TS 3010	TRU STYLE	7	189.00	1323.0

# Performing Calculations on Table Data

You can apply simple numeric operations such as Sum, Average, and Count; create arithmetic expressions; and set cells equal to other cells. Select Insert Formula from the shortcut menu.

_			Paste	
	COCT	TOTA	Recent Input	•
_	189.00		Cell Alianment	•
	189.00	1323.	Cell Borders	
_	310.00	310.0	Match Cell	
_	329.00	329.0		
	119.00	476.0	Insert Block Edit Field	
0	F Sum		Insert Formula	•
	Avera	age	Edit Cell Text	
	Cell		Insert Columns	•
	Equal	ion	Delete Columns	

# Step Savers

# Updates to popular editing commands

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

#### **Trim and Extend**

- New Select All default to select all visible objects as cutting/boundary edges.
- Crossing/Fence options added as object selections 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 will physically be stretched; all other objects will be moved.

# Fillet and Chamfer

If you just want to trim corners, you can now use the Shift key to force a Zero radius or distance, which is handy! Select the first object, then hold down the Shift key to select the second object.

# Offset

- Allows you to erase the source object.
- You can 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**

- A new 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.
- You can now pick any two points to specify a new angle or scale (no longer limited to the basepoint being one of the reference points).

# **Customizable Scale List**

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

### **FIND command**

FIND now permits wildcards!

# IMAGEFRAME

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

# **XREF Notification simplified**

A simple click on Reload Modified Xrefs saves you time.



# **Object Snap updates**

- The new object snap "Mid between 2 points" eliminates the need to otherwise create those construction lines. Access it from the right-click OSNAP menu or by keying in M2P or MTP.
- OSNAPZ variable lets you replace the Z value of an OSNAP point with the current elevation (also available in Options).

# Rectangle

The Rectangle command has two new options:

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

# **New Join 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 (same as PEDIT). Join works on plines, lines, arcs, elliptical arcs and splines.



# Step Savers

# More flexible MLINES

Trim and Extend now work on MLINES.

# **Zoom improvements**

- Quickly zoom to the extents of one or more objects by selecting the new Object option in the ZOOM command.
- New Smooth Transition Zoom makes it easy to maintain orientation (system variable VTENABLE).
- Undo/Redo combines multiple pans and zooms (Options dialog box).

# Dynamic Blocks

The new Dynamic Blocks allows you to create powerful and flexible blocks like we've never had before. Some of the many advantages are:

• 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.



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



• You can create blocks with multiple insertion points.

 $1 \xrightarrow{\circ} 2$   $1 \xrightarrow{\circ} 1$   $1 \xrightarrow{\circ} 1$ 

# **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 select 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 wish to assign to that parameter. Place the Action somewhere near the parameter.
- 3. Most Parameters must have at least one Action.

*Tip: Try one parameter/action pair at a time to ensure you are getting 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 allow you to specify increments as well as minimum/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 allows the user to change from one size to another.



#### Actions

Actions drive the geometry in specific ways. Use Stretch to change the length of a bolt.

Note: An exclamation point will display to indicate any parameters with no assigned action.

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

# Productivity Tips

**Quickcalc: a handy calculator!** Derived from the Geometric Calculator command (CAL), you can:

- Perform a full range of calculations.
- Convert from one system of units to another.
- Use the Scientific panel for more advanced functions.
- Pass values back and forth to a Command or the Properties Palette.
- Set Variables for use across AutoCAD drawings and sessions.
- Access quickly by keying in QC or Ctrl + 8.

100 200	5× 8
1.77	0.1.4 1.70710.000707
Best-Calubler Flink	8
Hustorite	
THEFT	100 B
Unite Summerian Unite Spectral Concept Page	ť.
Volania armenta da	
Variables + Sp Graph contribu- S D	CALCER D

# Maximize a Viewport

While in a paper space layout, you can automatically maximize a layout to work on your model space drawing, using the entire drawing area. Doing so will not modify the scale factor or change the layer settings in any way.

- 1. Select the viewport.
- 2. Click the Maximize Viewport button on the status bar.
- 3. After editing, simply hit the Minimize Viewport button.

Note: Double-clicking on a viewport also maximizes it.

# **Draworder Step Savers**

- No more regenerating your drawing to see the results of the DRAWORDER command.
- If you create a new object based on an existing one, the DRAWORDER properties are also inherited (including copy, fillet, explode, and so on).

# Layer Tips

#### New layer filter warning

When you have more than 100 named layer filters, the new system variable LAYERFILTERALERT warns you and offers to help you delete any unwanted ones with a dialog box.

48.0	5 X V 10	et last 1						
Annan Annan Annan Annan Annan Annan Annan Annan Annan Annan Annan Annan Annan	Int Nate - 2 - Archit Issue - Archit Issue - Corro - Corro - Partice - Toto - Tot	Pr Feeg		Lundos CONLOSE CONLOSE CONLOSE CONLOSE CONLOSE CONLOSE CONLOSE CONLOSE CONLOSE	Lenergy - Solar - S	Ro take	2 1000000000	2 Docesson P
et führendistendid führelise								
I hand the I had a had a set	1.000		-	_	-		10	

### Layer properties manager

- Right-click on a column heading to maximize the column.
- Click the new Apply button to immediately apply layer changes.
- Added column for layer description.
- The new Status column displays whether a layer is current, used, or unused.
- Filters are added to control the list of layers that display in the Layer Properties Manager.
- The new Filter Tree view displays existing filters.
- Xref layers are automatically filtered.

Note: Selecting the "Indicate Layers in use" option could dramatically slow down the dialog box.

# **Property filters**

As you did with the previous Named layer filter dialog box, you have the ability to filter out any layer property such as visibility, color, name, and so on.

- 1. Select the New Property Filter icon.
- 2. Name the new filter list.
- 3. Indicate the desired filters.
- 4. The list provides a preview update as you assign filters.
- 5. When finished, the new filter appears in the Filter Tree view for quick access.

#### Group filters

It's easy to divide layers into specific layer categories:

- 1. Select the New Group Filter icon.
- 2. Name the new filter.
- 3. Display all layers by clicking on All.
- 4. Drag and drop the layers you want to be added to the new filter, or choose Select Layers>Add from the shortcut menu to select objects from the drawing. AutoCAD adds the object layers to the group.

**Productivity Tips** 

# Customization

ow you can customize your AutoCAD oplication with the new, friendly CUI immand. The old menu files (MNU, MNS id MNC) are out—the new XML-based JI is in!

Consulto Ver later to a				
A, Cotorier get tusses				
The second second second		-	(TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	and the second se
10 Contraction Plan	1 1 1	12	-	HAD DO NOT
0 M Low 0 D Selectory 0 D Selectory 0 D Selectory 0 Page 0 Page				
the Pole				
0 845		-	Sec. of the Owner	
		83	5 fi 🕮	
Company Million and	100 1000		House .	
			Now .	Side State State State State State
Cienced	Enert	-	Manager	The second statement
/ Canter, Burt lengte	ana -		Maco-	77.08
( Cede Bat Dal	604		Manager	
N. Canada and Canada	and a		and the second s	101_000
F. Ouete	and a second		and some	APPRIATE TO LODGE
Generation	DIFFECT.		Lawrence	RESULT IN COMPANY
Chings for East	LIPPLE			
Compte Const. and Compt/Pile	ELPHEN.		Sec.	
di Guat	104			
A Cest.	800	14		
1 Lanara del Calettate				eoi No

# Migrate existing menu files

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

Use the Customize tab to modify pulldown 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.

# **Basic menu syntax**

Enter

- Pause for user input
- **^C^C** Cancel (to make sure you're at the command prompt)
  - Repeats a menu macro

# **Temporary overrides**

Now you can override a particular setting with a specific combination of keys. For example, holding down the Shift key down toggles Orthomode on and off. Very handy! Below are just a few examples—you can use these or set up your own. There are even settings for right- and left-handed users!

- Shift+A toggle object snap mode
- Shift+E turns on endpoint osnap only
- Shift+M turns on midpoint osnap only
- Shift+C turns on center osnap only
- Shift+Q toggles Object Tracking
- Shift+X toggles Polar Mode

# Workspaces

Now you can store workspaces for the different ways you choose to work. For example, you might like your UI for paper space to be set up differently than model space. Workspaces control the display of toolbars, menus, all tool and command palettes, and the command line.

# **Fields**

Fields are equivalent to "smart text" that updates automatically. Use field data for such things as dates, sheet numbers, titles, and so on. Fields can work across sheet sets to update all instances.

### Inserting fields

Select fields from a list of predefined fields. These fields can be inserted into text objects, attributes, or table cells.

# There are three methods for inserting a field:

 Select Insert Field in the shortcut menu when prompted for text in MTEXT, DTEXT, ATTDEF, and BATTMAN. Some of these commands also have an "insert field" button.



#### 2. Press Ctrl+F.

3. Execute the Field command (this will place the field as MTEXT).

Whichever route you take, simply select the field you wish to add. The FIELD-DISPLAY system variable toggles the display of a gray background for field text (intended for easy recognition of Field text).

# Editing

Easily edit your fields by double-clicking. The appropriate editing command will appear (DDEDIT, EATTEDIT, and the like).

### Updating fields

By default, field values automatically update when you open, save, plot, eTransmit, or regenerate a drawing. You can suppress this automatic evaluation by setting the FIELDEVAL system variable. You can also use the UPDATEFIELD command to manually update.

Tip: It's easy to grab information from existing objects and assign it to fields. Just select Objects from the Field category in the Field dialog and select one or more objects. You can grab any information about the objects for your field (very handy for identifying the area of a hatch pattern).

# Annotation Tricks

## **Express MTEXT**

- True in-place editing! The text in the MTEXT dialog will look identical to the resulting text!
- Tabs and indents have been added. Simply click on the ruler bar to set your desired tab settings.
- Bullets, numbering and lettering are available and will automatically recalculate if something is added or removed from the list.
- Control paragraph width by sliding the end of the ruler bar.
- Double-click on the end of the ruler bar to resize MTEXT box (like Microsoft<sup>®</sup> Excel).
- Now you can easily add popular symbols (such as cubed and squared) to your MTEXT (from the shortcut menu).



 EXISTING LIGHTING SYSTEM IS FLEXIBLE DISTRIBUT HARDWRED SYSTEM AS SHOWN. RETURN ALL CA

# Display Controls

# Text background mask

The background mask option makes it easy to see your text when it sits on top of other objects.

1. Right-click in the MTEXT editor.

- 2. Select Background Mask.
- 3. Choose the opaque fill color (may use background) and the width around the text to cover.

Note: You may also use Properties to add a background mask to MTEXT objects.

#### Dimension text background mask

Place a background mask on your dimension text in the DIMSTYLE command.

1. Text Tab.

2. Set the Fill Color.

# New draworder controls for text and dimensions

The new TEXTTOFRONT system variable allows you to bring all your text or dimensions to the front of all the other objects.

### **Dimension Improvements**

#### Varying dimension linetypes

Now you don't have to explode a dimension to change any of the individual dimension or extension lines to a different linetype! (Great for center lines.) Make changes in DIMSTYLE or Properties.

### Dimensioning arc lengths

The new DIMARC command lets you dimension the length of a dimension (complete with an arc length symbol if desired)!



### Fixed length extension lines:

Now you can create dimensions using extension lines with a consistent length, regardless of how far away from the part you select (so the extension lines might not even touch the geometry).

### Jogged dimensions

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



#### Flipping dimension arrows

The right-click shortcut menu now 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 right-click menu.



AutoCAD 2006 provides a new symbol to indicate initial length (available from the Symbol list in the MTEXT right-click menu).

# DWF

#### **Create DWF Files**

Publish DWF<sup>™</sup> (Design Web Format<sup>™</sup>) files from AutoCAD for electronic view and markup. You can even publish your 3D models to DWF using the preview command 3DDWFPUBLISH.

#### Viewing and Marking DWF Files

2D and 3D DWF files are easily viewed by the lightweight Autodesk® DWF™ Viewer. This <2 MB viewer can be downloaded free at www.autodesk.com/dwfviewer. The Autodesk DWF Viewer has the following capabilities:

- Fast viewing of all drawing sheets.
- Zooming via window, extents, or in/out, plus easy panning.
- Ability to restore saved views.

**DWF & Bonus Tips** 



- Ability to turn layers on and off.
- Plotting to scale, with full fidelity, and with tiling if necessary.
- View and Orbit 3D models.

#### Autodesk DWF Composer

Autodesk<sup>®</sup> DWF<sup>™</sup> Composer takes the Autodesk DWF Viewer several steps further. With it you can measure distances and areas, access markup and redlining functionality, even create a markup file that easily overlays the original AutoCAD drawing. Autodesk DWF Composer automatically maintains a list of markups created, as well as comments made throughout the revision process. Expediting modifications has never been easier!

#### New to the latest Autodesk DWF Composer:

- You can create your own custom symbols for markups.
- Completed markups change to yellow.
- A new SNAPSHOT tool has been added to easily create DWF from your display.

### **Bonus Power Tips**

Here are a few of my all-time-favorite tips (even if you haven't upgraded to AutoCAD 2006 yet).

#### **Keyboard tips**

### Ctrl + R

Cycles through all of your viewports (very useful when you have a viewport within another viewport).

#### Ctrl + A

Use to quickly select all the objects in your drawing. Also selects all the text in the MTEXT editor.

## Ctrl + 0 (Zero)

*Cleanscreen toggle to hide all the toolbars, menus, and tool palettes.* 

#### Ctrl + PageUp

To move through your layout tabs. (or Page Down)

#### Ctrl+Tab

To cycle through all the open drawings.

#### Arrow Up/Down

To recall past commands (great if you misspell something). Also works to display past values when Dynamic Input is on.

# Tab

To cycle through possible object snaps.

## Shift

Holding down the shift key while selecting objects removes them from a selection set.

#### MTEXT Editor

Pick outside the MTEXT editor to quickly close it.

#### Grip tips

- Clear grips quickly without touching the keyboard by holding down the right mouse button.
- Hold down the Shift key to select more than one hotgrip.
- Use the Shift key to repeat distances and angles while in Grip mode.

#### **Cool system variables**

#### PEDITACCEPT

Turns off the extra prompt in PEDIT that displays when you select a line or an arc.

#### MAXSORT

Set higher if you find your layers are no longer in alphabetical order.

#### MTJIGSTRING

Use to customize the MTEXT sample string (defaults to ABC). Set it to your favorite Sports Team, pet, etc.

# Hatching Timesavers

Hatching

#### 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**

New toggle will tell 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 someone's drawing where the boundary is missing (and you need it back!). You can now recreate hatch boundaries!

## New DRAWORDER setting in BHATCH

The new updated Boundary Hatch command has an option to control the draw order of the hatch object. By default, the hatch pattern will be drawn behind the boundary, making it much easier to select the boundary for editing purposes.

the linest	Goundaries
Transmissioner and the second	Add Mike pane Add Mike pane Add Mike signer There is in the distance of the signer The signer is the signer of the signer Content of the signer of the signeroor the signer of the signeror
well Links	Canad Help (3)

### Hatch an area even if there's a gap!

The new Gap tolerance option in the Boundary Hatch command allows you to instruct AutoCAD to hatch an area, even if it's not completely closed. Simply specify a suitable gap tolerance value for your drawing (how big the hole can be!). Think of all the steps this will save! Use the arrow key in the lower right corner of the BHATCH dialog to set the Gap tolerance value. Be careful not to set the value too large or you'll find that it doesn't work.

# Tell your OSNAPS to ignore hatch patterns

Set OSNAPHATCH to 0. Also available in Options.

#### Trim now works on hatch objects

#### Find the hatch area

The Properties palette now displays the cumulative area of one or more selected hatch objects. Easy to add an updateable field of the area (see Customization tab for more info).



To purchase AutoCAD 2006 software, contact an Autodesk Authorized Reseller or visit www.autodesk.com/store.

We want your opinion on AutoCAD software! We are always interested in getting user feedback on new product features. If you'd like to volunteer, please visit http://myfeedback.autodesk.com.

© 2005 Autodesk, Inc. All rights reserved. Autodesk, AutoCAD, DesignCenter, Design Web Format, and DWF are either registered trademarks or trademarks of Autodesk, Inc., in the USA and/or other countries. All other brand names, product names, or trademarks belong to their respective holders.



Lynn Allen, Cadalyst 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 Cadalyst 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 level for 14 years and authored several books about AutoCAD. She is consistently one of the highest-rated speakers at Autodesk University and is a soughtafter public speaker with a unique comedic style. Visit Lynn Allen's blog at www.autodesk.com/lynnallen.

# Autodesk

Lynn Allen's Tips & Tricks for Using AutoCAD 2006 Software Part number: 0000000000015422 Suggested Retail Price: U.S. \$14.95

**OWF & Bonus Tips**