

# Using All of the AutoCAD Interface

The out-of-the-box AutoCAD interface is a generic compilation of the most commonly used features, which may or may not be the right combination for you. Whether you are a novice or an experienced user, it is important that you learn the different methods for using this interface.

In this chapter, you will learn how to modify the default interface components and how to expose some hidden interface features to better match your use of the software. You will start by learning how to modify the display and functionality of the default windows. Then, you will see how to optimize your coordinate input to match your use of AutoCAD. Next, you will move on to learn about the usage of hidden shortcut keys. Then, you will see how to control object selections and the associated display options. Finally, you will customize the default Status Bar.

In this chapter, you will cover the following topics:

- Taking Advantage of the New Features
- Controlling the Command Line
- Useful Input and Clipboard Shortcuts
- Using Clipboards efficiently
- Using Temporary Overrides
- Cycling in AutoCAD
- Hidden in the ViewCube
- Tailoring your Options
- Using those Tabs

By the end of this chapter, you will be able to optimize the interface to work more efficiently within your own work environment.

## Technical requirements

You will need a computer with either Windows or macOS to complete this chapter's exercises. I will be using the Windows environment for these examples. Any version of AutoCAD will work, but it is recommended that you use the latest version so your software matches the examples as closely as possible. I will be using AutoCAD 2025 throughout this book, and you can refer to the following link to confirm your hardware requirements:

[https://www.autodesk.com/support/technical/article/caas/sfdcarticles/sfdcarticles/System-requirements-for-AutoCAD.html?us\\_oa=dotcom-us&us\\_si=9b630dae4eb-4e94-b32d-01c1026e2a72&us\\_st=system%20requirements%20for%20autocad](https://www.autodesk.com/support/technical/article/caas/sfdcarticles/sfdcarticles/System-requirements-for-AutoCAD.html?us_oa=dotcom-us&us_si=9b630dae4eb-4e94-b32d-01c1026e2a72&us_st=system%20requirements%20for%20autocad).

## Formatting found in this document

COMMAND NAME: such as LINE, POLYLINE, and ERASE

*Mouse Controls*: such as *right-click*, *left-click*, and *left-click and drag*

*Keyboard Shortcuts*: such as *Ctrl + F*, *Shift*, and *Esc*

Key-in Commands: such as COMMANDS and COMMAND OPTIONS

## Command Locations

This table will display the various locations where you can find the command discussed. You should select the command location that best fits your method of using AutoCAD.

COMMAND NAME	Command Locations
Ribbon	Ribbon Tab Name   Ribbon Group Name   Command Name
Menu	
Command Line	COMMAND (COMMAND ABBREVIATION)

### Example:

CUI	Command Locations
Ribbon	Manage   Customization   User Interface

Menu	
Command Line	CUI (CUI)

## System Variables

This table will display each system variable as it is used throughout the book. It includes the description, settings, and all the available variable options.

### SYSTEM VARIABLE NAME

Description	
Saved in:	
Value	Setting Description
Value	Setting Description
Value (default)	Setting Description

### Example:

#### SELECTIONPREVIEW

Objects are highlighted when the pickbox cursor rolls over them. The highlighting indicates that the object would be selected if you clicked it. The setting is stored as a bitcode using the sum of the following values:	
Type:	Bitcode
Saved in:	Registry
0	OFF (will improve the performance of AutoCAD)
1	ON when no commands are active (the list dialog does not display)
2	ON when a command prompts for object selection (the list dialog displays the selected objects that you can cycle through)
3 (default)	ON when you “hover” over an object

## To get the most out of this book

This book assumes you are reading it chronologically. If a topic is explained earlier in an exercise, it might not be repeated again later.

This document has some conventions that you should be aware of to help you understand and follow the steps provided.

You can download the complete profile and exercises on GitHub at the following URL:

<https://github.com/PacktPublishing/AutoCAD-2025-Best-Practices-Tips-and-Techniques>.

To the PD: Please convert all the green tables above as images.

## Taking advantage of the new features

In this section, we will learn how to use the new interface features found in the most recent versions of AutoCAD. Using the newest features can improve your overall use of the software.

First, let's look at how to use the new "floating" or "undocked" drawing windows to take advantage of large and multiple monitor configurations.

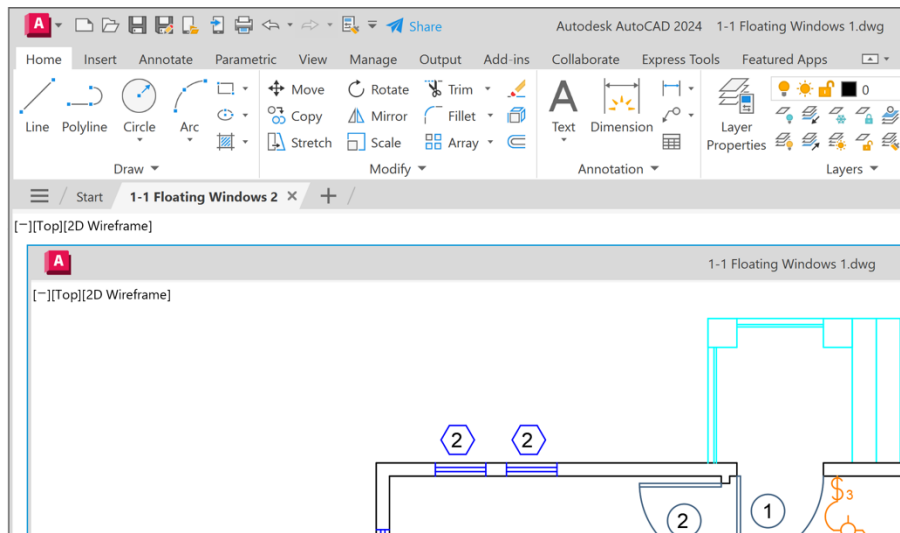
### Floating Drawing Windows

In this exercise, we will discuss how to take advantage of using more than one monitor. With more than one monitor, you might prefer to "float" your drawing windows to take advantage of that second monitor. The benefit of a "floating" drawing window may not be immediately apparent, so let me demonstrate how it can help you with your workflow:

- You can take advantage of multiple monitors by placing separate drawing windows on each monitor. This is more efficient than just stretching a single drawing window across multiple monitors.
- You can use floating windows to run commands between two drawing files.

Each of the floating windows has its own Command Line dialog. To demonstrate this feature, we need to have two drawings open and follow these steps:

1. Open the `1-1_Floating Windows 1.dwg` and `1-1_Floating Windows 2.dwg` files. Both files are now visible in the **File Tabs** area.
2. Using the **File Tabs** area, *left-click and drag* the `1-1_Floating Windows 1.dwg` file tab into the view window and release the mouse button.



**Figure 1.1: Floating Windows or Tabs**

3. This file is now a “floating” drawing window that can be moved to either monitor and maximized or tiled as needed.

### Note

This is a great feature for those of you who are used to the MicroStation application.

In the next exercise, we will look at how to PIN and RESTORE the “floating” view windows.

## Pin and Restore

Once the file window is “floating”, you can control the display order of the window using one of the following methods:

- Pin the windows to control the display order
- Tile the windows side by side

## Pinning or Tiling the Drawing Windows

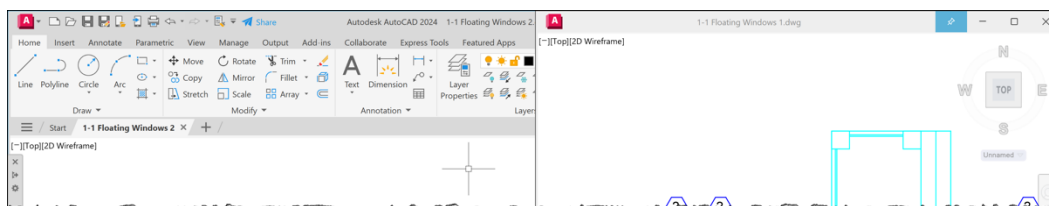
In this exercise, we will discover how to PIN and TILE the “floating” drawing view windows:

1. First, use the **PIN** icon found in the floating file’s titlebar to force that file on top of the AutoCAD application.



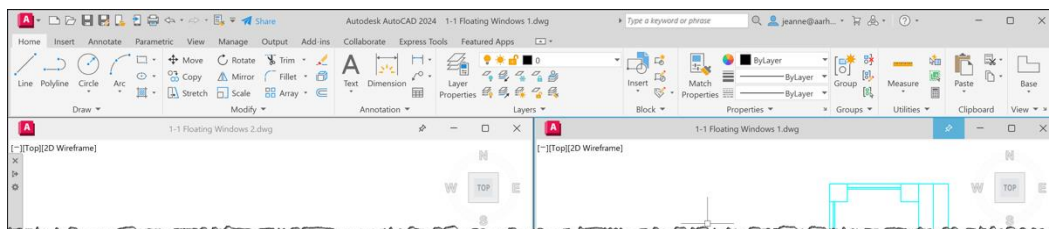
**Figure 1.2: The PIN icon**

The **PIN** icon will change to a blue-colored icon when activated. Resize the “floating” file window to one-half of the screen display. This prevents you from using the **Ctrl + Tab** shortcut key to toggle between open drawing files.



**Figure 1.2: Floating drawing window in Tile mode**

2. Next, **left-click and drag** the file to the right-side of the screen until you see it lock in place in TILE mode:
3. **Left-click and drag** the **1-1\_Floating Windows 2.dwg** file to the left-side of the screen until you see it lock in place in TILE mode.



**Figure 1.3: Floating drawing windows resized for ribbon display**

4. Resize both files so you can see the AutoCAD application ribbon bar.

5. Use the **PIN** icon on both files to force the drawing view windows to remain above the application window.

MATCHPROP	Command Locations
Ribbon	Home   Properties   Match Properties
QAT	Drop-Down List   Match Properties
Command Line	MATCHPROP

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6. Using the **Quick Access Toolbar (QAT)**, turn ON the icon for the **Match Properties** command.
7. Use the **QAT** drop-down list to add a checkmark to the **Match Properties** command.

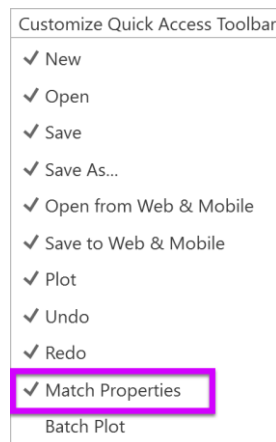
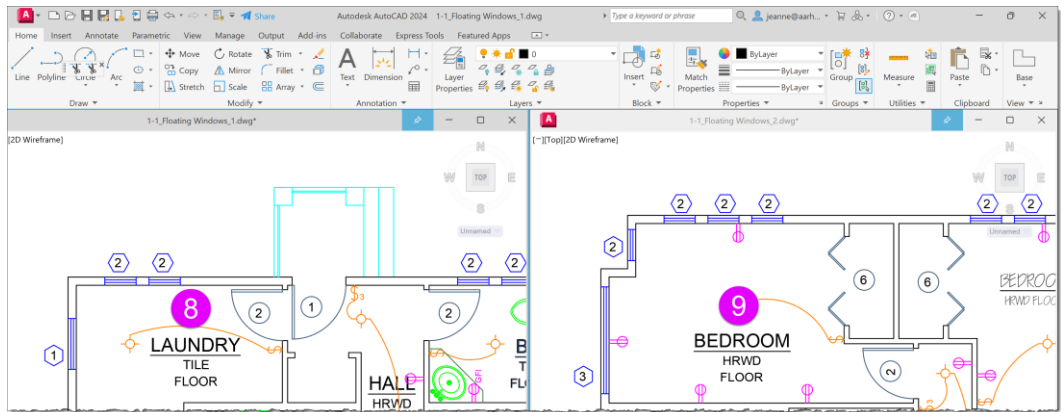


Figure 1.4: Quick Access Toolbar | Match Properties

8. Select the **1-1\_Floating Windows 1.dwg** file and select the MATCH PROPERTIES command from the **QAT**. **Left-click** on a ROOM NAME object to match the properties of the text object in this file.

9. Select the **1-1 Floating Windows 2.dwg** file and select a ROOM NAME text object in this view. The text object in this file will change to match the text object properties from the first file.



**Figure 1.5: QAT Match Properties**

You can re-dock a “floating” drawing window using **left-click and drag** to drop the file’s titlebar back into the **File Tabs** area and then release the mouse button.

### Note

Did you notice that each file has its own Command Line when working with “floating” view windows?

You can control this new feature using the SYSFLOATING system variable:

### **SYSFLOATING**

Controls the dock state of the drawing file tabs.

Type: Integer

Saved in: Registry

0 (default) Drawing file tabs are docked.

1 Drawing file tabs are floating

-1 The floating drawing file tab feature is disabled.

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On completion of this exercise, you should now be able to control the display of the drawing to take advantage of your hardware configuration and customize your QAT to include the MATCH PROPERTIES command.

## Controlling the Command Line

In this exercise, we will learn how to control where your Command Line dialog “lives” and how to find it when it goes “missing”.

### Lost Command Line?

Have you ever lost the Command Line window? I guess yes since it occasionally disappears while working in the interface. You can use the following two options to recover the Command Line from its hiding place.

#### Option 1 – Using a Keyboard Shortcut

The first option is to use the built-in **Ctrl + 9** shortcut key to toggle the command window ON and OFF. This will bring the Command Line dialog to the front of the application window from wherever it is hiding.

#### Option 2 – Using the CUI Dialog

The second option is to use the **CUSTOMIZE USER INTERFACE (CUI)** command to turn the command window ON or OFF.

The CUI command is available at the following locations:

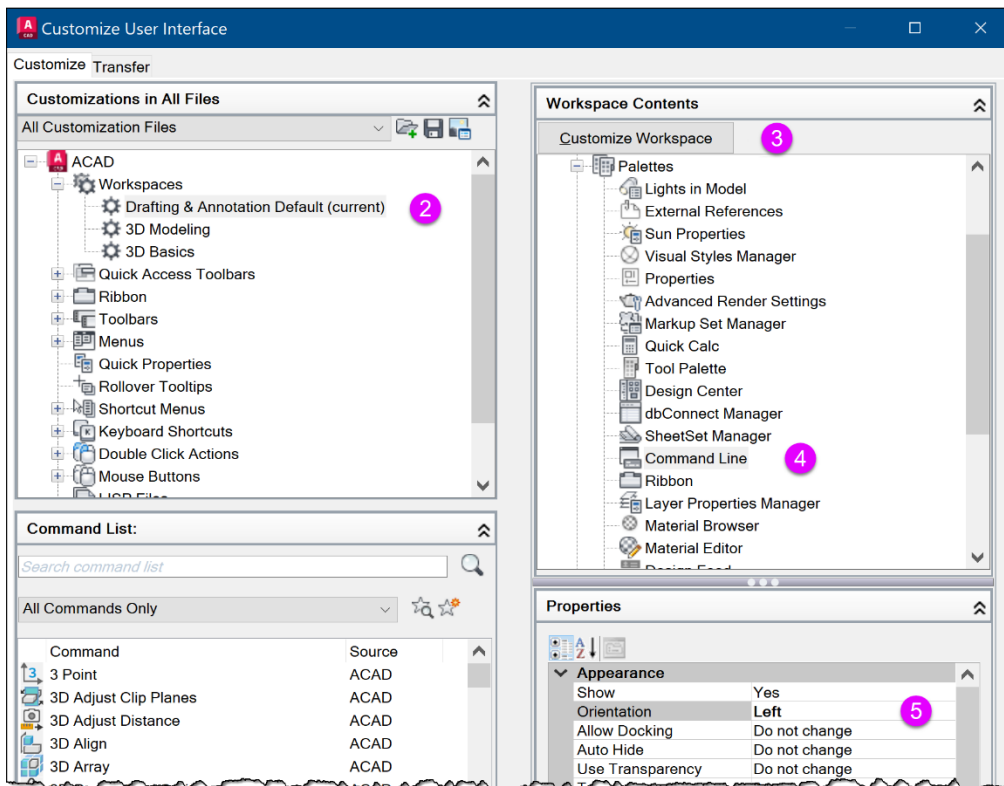
CUI	Command Locations
Ribbon	Manage   Customization   User Interface
Command Line	CUI (CUI)

**To the PD: Please convert this table into an image.**

Using the following steps, you can gain control of your Command Line dialog. To demonstrate this functionality, you need to be in a drawing file:

1. Open the **1-0\_BLANK.DWG** file.

2. Start the **CUI** command, and using the **Customize User Interface** dialog, select the **(current)** workspace.
3. Click the **Customize Workspace** button at the top of the right panel. This will turn all the menu items **blue**.
4. Expand the **Palettes** item and select the **Command Line** palette.
5. Using the **Properties** panel in this dialog, modify the **Orientation** setting to a different orientation using the **Floating**, **Top**, **Bottom**, **Left**, **Right**, or **Do Not Change** options. Click the **Apply** button and close the dialog.



**Figure 1.6: CUI dialog results**

The Command Line should appear at your selected location. I selected the **Left** command-line location.

On completion of this exercise, you will be able to control the location and display properties of your Command Line to improve your overall use of your screen's real estate.

## Does your Command Line keep moving?

Are you having problems with your Command Line not “sticking” at your preferred location? Me too, and it can be very annoying!

Locate and size your Command Line as needed and use the **Ctrl** key when dragging it to the desired location. Holding the **Ctrl** key while moving the Command Line dialog disables the “magnet” or “docking” capability for the positioning of the Command Line dialog and forces the location to be memorized.

Use the following steps to prevent the Command Line dialog from moving around in the interface:

1. Continue using the **1-0-BLANK .DWG** file.
2. Select the Command Line using the “dotted” end of the title bar, then **left-click and drag** it to a new location while holding the **Ctrl** key. If you **drag** the dialog down into the Status Bar area of the interface, you will see that it no longer forces the “docking” functionality.
3. **Drag** the Command Line dialog to your preferred location and re-size it to one line to minimize the required screen real estate. As an experienced AutoCAD user, you probably don't need to see more than one line of the Command Line dialog, and you can always use the **F2** key to review additional lines when needed.



On completion of this exercise, you will be able to control the location of your Command Line with more precision and disable the “docking” functionality, when needed, to make the most of your screen real estate.

## Useful Dynamic Input

In this exercise, we will learn how to use Dynamic Input and clipboard shortcuts to improve your productivity when using precision input and Dynamic Input.

## Know your Dynamic Input rules

Have you ever wanted to input **Absolute** coordinates when using the new Dynamic Input feature? Let's verify that you have your **Dynamic Input** enabled:

1. Open the 1-2\_KNOW YOUR COORDINATES.DWG file.
-  2. Using the Status Bar, **left-click** on the "hamburger" icon and select **Dynamic Input** from the list to turn it ON in the Status Bar.
-  3. This will turn ON the **Dynamic input** icon.

First, let's review the basics of AutoCAD coordinate input:

- **Relative Coordinates**: 2,20 is relative to the previous coordinate location
- **Absolute Coordinates**: #2,20 is an absolute coordinate location in the current UCS
- **World Coordinates**: \*2,20 is a world coordinate location

Once you understand these rules, you can input them using two different methods.

### Method 1

For the first example, we want to add an object vertex at the absolute coordinate of 0,0 using Dynamic Input. When using Dynamic Input, if you key in 0,0 the coordinate is interpreted as a "relative" coordinate from the current cursor location. If you key in #0,0 it is forced to be interpreted as an "absolute" coordinate.

Use this override setting when inputting the coordinate values by typing in a # character before the coordinate.

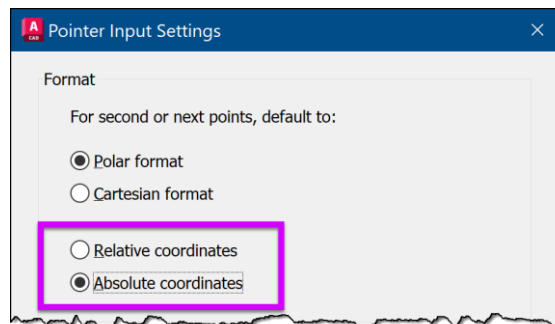
1. Select the **LINE** command and **left-click** inside the SQUARE object to start the line.
2. **Drag** the cursor to the left side of the SQUARE object, key in #0,0, and press **Enter** to complete the command.

3. **Drag** the cursor to the topside of the SQUARE object, key in **0,0**, and press **Enter** to complete the command. Notice that the line is not continued using this key-in, as it is interpreted as X=0 and Y=0 from the current location.
4. Use **Esc** to cancel the current command and **Ctrl + Z** short
5. cut key to UNDO the previous lines.

If you key in **Absolute** coordinates more than **Relative** coordinates, you will want to change your input settings when using Dynamic Input to avoid using all the # characters during input.

Let's change our default input settings before we draw the next line. Follow these steps:

1. Continue using the **1-2\_KNOW YOUR COORDINATES.DWG** file.
2. To access the **Dynamic Input Settings**, **right-click** on the Dynamic input icon in the Status Bar and select the **Dynamic Input Settings** command.
3. Using the **Enable Pointer Input**, select the **Settings** button.
4. Using the **Pointer Input Settings** dialog, select the **Absolute coordinates** format for our X,Y,Z key-ins.



**Figure 1.7: Absolute Pointer Input Settings**

5. Click **OK** to save your selection and click **OK** to close the **Dynamic Input Settings** dialog.

6. Select the **LINE** command and **left-click** inside the SQUARE object to start the line.
7. **Drag** the cursor to the left side of the SQUARE, key in **0,0** and press **Enter** to complete the command. This time, the LINE is drawn to the ABSOLUTE X,Y coordinate without using the # prefix.

Upon completion of this section, you can now use these rules and settings for your coordinate input. You can control and simplify your coordinates more easily and still take advantage of Dynamic Input.

## Are you using all of the Clipboard?

Everyone knows that you can use the **Ctrl + C** Windows shortcut keys to copy objects to the clipboard and **Ctrl + V** to paste them back into a drawing. These are wonderful shortcuts, but they have a “flaw” in our AutoCAD workflow. These methods don’t allow you to define a base point to control the insertion point for the paste portion of these actions. Instead of using the typical Windows shortcuts, use the **Copy With Base Point** clipboard command to control your base point.

CLIPBOARD	Command Locations
Ribbon	Home   Clipboard   Copy   Copy with Base Point
Command Line	COPYBASE (COPYB)
<b>Right-Click</b> Menu	Clipboard   Copy with Base Point

**To the PD: Please convert this table into an image.**

## Copy with a base point

In this exercise, we will use the **Ctrl + Shift + C** shortcut to define a base point and copy objects to the clipboard, which is quicker than using the right-click menu to access this command.

1. Open the **1-3\_KNOW YOUR COORDINATES.DWG** file.
2. Select the ARROW object and **right-click** to access the **Clipboard | Copy With Base Point** command.

3. Using the ENDPOINT OSNAP, **left-click** at the tip of the arrowhead to define the base point.
4. Next, use the **Ctrl + V** shortcut to PASTE the clipboard contents into the drawing using the newly defined base point.

#### Note

You can also use the **Ctrl + Shift + X** shortcut to CUT objects from a drawing to the clipboard and define a base point.

### Paste and rotate from the Clipboard

Another clipboard option that is “hidden” from many users is the ability to rotate the clipboard contents during **PASTE** operation.

1. Continue using the **1-3\_SMARTER\_CLIPBOARD.DWG** file.
2. Use the **Ctrl + V** shortcut to PASTE the ARROW graphics again, and key in **R** to pre-define the desired angle of the ARROW graphics.

#### Note

This is a “hidden” command option and is NOT displayed in the Command Line but is available to use.

3. Key in **90** to rotate the new ARROW graphics 90 degrees and **left-click** in the drawing view to place the new rotated graphics.

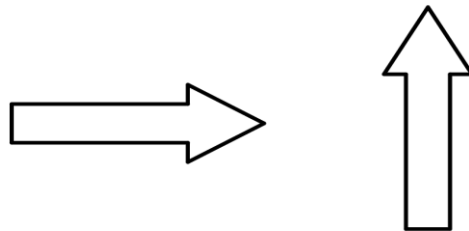


Figure 1.9: Paste and Rotate

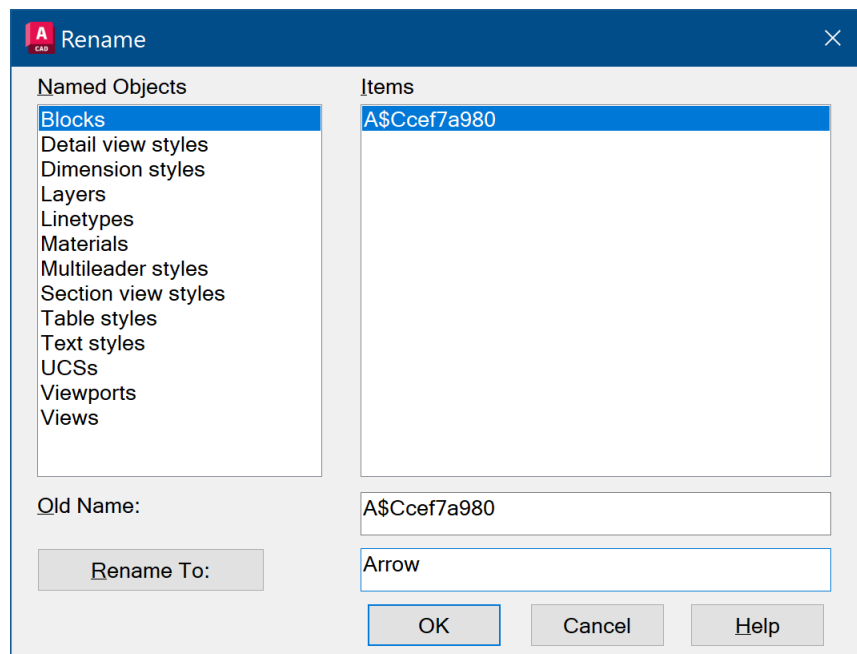
## Paste as a block from the Clipboard

In this exercise, we will continue to use PASTE from the clipboard contents and convert all graphics as a BLOCK object during the PASTE process:

1. Continue using the 1-3\_SMARTER\_CLIPBOARD.DWG file.
2. Use the **Ctrl + Shift + V** shortcut to PASTE the clipboard graphics as a BLOCK.
3. The resulting BLOCK object will be an ANONYMOUS BLOCK with an **A\$C....** block name.
4. Using the Command Line, key in RENAME to give this new block a logical name.

RENAME	Command Locations
Command Line	RENAME (REN)

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**Figure 1.10: Renaming the Block**

Upon completion of this section, you should be able to more efficiently use the clipboard to COPY and PASTE drawing objects and place them correctly during the clipboard commands.

## Using Temporary Overrides

In this section, we will use several keyboard overrides to override command functionality on-the-fly to help control the placement and editing of objects in the drawing file.

### Shift for ORTHO

In this first exercise, we will learn to use the **Shift** key to automatically apply the ORTHOGONAL (ORTHO) angle lock without using the **F8** function key. The **Shift** key will apply ORTHO as a temporary override while executing a command:

1. Open the **1-4\_Shortcuts.dwg** file.
2. Select the LINE command and **left-click** in the view window to start the line object.
3. **Drag** the cursor to the right and up at approximately 45 degrees. By default, POLAR is turned ON, and you can draw the line at any angle.
4. Hold down the **Shift** key to force ORTHO to be applied, limiting your angle options to “0” or “90” degree angles.
5. Release the **Shift** key to return to the previous POLAR angle options.

#### Note

Refer to **APPENDIX X** to review other temporary overrides of default settings.

## Cycling in AutoCAD

For several years now, the functionality to perform object cycling between objects using the mouse and keyboard shortcuts has been available to assist in the selection of specific overlapping objects. In the newer versions of AutoCAD, you can use the new Selection Cycling tool available in the Status Bar. In the next example, let's look at both methods for object cycling.

### Object Cycling “the Legacy way”



When you **Hover** over overlapping objects, you can use the **Shift + Spacebar** shortcut to cycle between all the overlapping objects. Once the object you need is highlighted, you can **left-click** to select it.

By default, the **SELECTIONPREVIEW** system variable is set to **3**, which allows a preview of the object under the cursor location. Other settings are available as shown in the following table:

#### SELECTIONPREVIEW

Objects are highlighted when the pickbox cursor rolls over them. The highlighting indicates that the object would be selected if you clicked it. The setting is stored as a bitcode using the sum of the following values:

Type: Bitcode

Saved in: Registry

0	OFF (will improve the performance of AutoCAD)
1	ON when no commands are active (the list dialog does not display.)
2	ON when a command prompts for object selection (the list dialog displays the selected objects that you can cycle through)
3 (default)	ON when you hover over an object

**To the PD: Please convert this table into an image.**

Use the following steps to use the “LEGACY” method for cycling between overlapping objects.

1. Open the **1-5\_Object\_Cycling.dwg** file.

2. **Hover** the mouse over the overlapping objects at **P1** and use **Shift + Spacebar** to cycle between the objects at that location. You will find that there are four objects at this location:

LINE, LINE, POLYLINE, POLYLINE

3. Use **Shift + Spacebar** to toggle the highlight between all four objects. When the object you want to select is highlighted, release **Shift + Spacebar** and **left-click** to select that object.
4. Use the **Esc** key to clear the active selection set.

Next, let's learn how to use the new method for controlling the selection of overlapping objects.

## Object Cycling “the New way”

In this exercise, we will look at the dialog option provided by newer versions of AutoCAD to assist with the selection of overlapping objects using the **Selection Cycling** tool in the Status Bar. Use this method if you struggle to see the highlighted objects demonstrated in the previous method:



1. Continue using the **1-5 Object Cycling.dwg** file.
2. By default, the **Selection Cycling** tool is turned OFF. Using the Status Bar, **left-click** on the “hamburger” icon to turn on **Selection Cycling**.
3. **HOVER** the mouse over the overlapping objects at **P1** and make note of the **Cursor Badge** that informs you of the overlapping objects at this point.
4. Select the overlapping objects at **P1**, and a **Selection** dialog opens to display all objects at that location.

### Note

You can turn off the display of the cursor badges using the CURSORBADGE system variable.

### CURSORBADGE

Determines which cursor badges are displayed in the drawing area.

Type: Integer

Saved in: Registry

1	Turns off cursor badges used in the following commands: AREA, COPY, DIST, ERASE, ID, LIST, MASSPROP, MEASUREGEOM, MOVE, ROTATE, SCALE, TRIM, and ZOOM
---	---

2 (default)	Turns on all cursor badges
-------------	----------------------------

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In this exercise, we learned how to better control the selection of overlapping objects using both the legacy and new methods we have available.

Next, let's learn how to control OSNAP Cycling.

### OSNAP Cycling

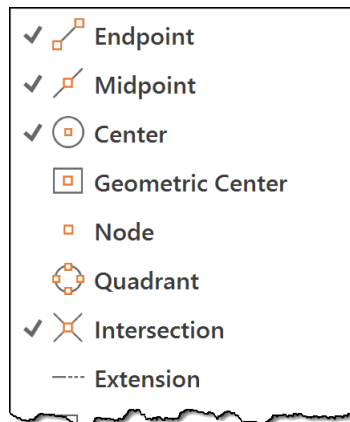
In this exercise, let's investigate how to control the use of our running OSNAPs to better control which OSNAP method is applied. Do you know all the shortcuts available to simplify your daily use of OSNAPs?

Before we begin these next few examples, we need to verify which OSNAPs are currently running.

1. Open the 1-6 OSNAP Cycling.dwg file.



2. Using the Status Bar, **left-click** on the OSNAP icon and verify that you have the following OSNAPs turned ON:



**Figure 1.11: Running OSNAPS**



3. For this example, we need to turn OFF the DYNAMIC INPUT setting located in the Status Bar. The DYNAMIC INPUT functionality prevents this method from working.
4. Select the **LINE** command and **HOVER** the mouse over the **Center** point of the circle.
5. Use the **Tab** key to toggle between the various running OSNAPS. Each object and OSNAP mode will display and highlight to confirm which snappable point is identified. Issue a **left-click** when the correct snappable point and object is displayed.

In this exercise, you learned how to control your OBJECT and OSNAP cycling to gain more control over your drawing and editing processes.

## File Cycling

In this exercise, let's look at the alternative options available to switch between open files in an AutoCAD session. If screen real estate is a problem, you can turn off the File Tabs and use the **Ctrl + Tab** shortcut to cycle between open files.

First, how do you turn off File Tabs? Use the following FILETABCLOSE and FILETAB commands to control the display of File Tabs.

FILETABCLOSE FILETAB	Command Locations
Ribbon	View   Interface   File Tabs
Command Line	FILETABCLOSE, FILETAB

**To the PD: Please convert this table into an image.**

Open the `1-7_File Cycling 1.dwg` and `1-7_File Cycling 2.dwg` files.

You can use the `Ctrl + Tab`, `Ctrl + Shift + Tab`, and `Ctrl + Home` shortcuts to navigate through the File Tabs. Let's look at these commands in detail:

- `Ctrl + Tab`: Use the `Ctrl + Tab` keys to cycle to the next open File Tab.
- `Ctrl + Shift + Tab`: Use the `Ctrl + Shift + Tab` to cycle to the previous open File Tab.
- `Ctrl + Shift + Home`: Use the `Ctrl + Shift + Home` to cycle to the starting File Tab.

#### Note

Use the FILETAB command to turn the display of the File Tabs on again.

Using these keyboard shortcuts will simplify your navigation of open files and eliminate the need to display File Tabs, letting you save that screen real estate.

## Viewport Cycling

Have you ever been stuck in a viewport that was erroneously or intentionally created inside of another viewport, creating a "nested" viewport? How do you access a "nested" viewport?

1. Open the `1-8_Visual Styles Cycling.dwg` file.
2. **Double left-click** in the larger viewport to activate that viewport.

If you try to **double-left-click** to activate the smaller viewport, it doesn't work.

However, if you use the `Ctrl + R` shortcut, you can toggle between all

viewports, including the embedded viewport, to gain the ability to activate any viewport in this paper space.

3. Use the **Ctrl + R** shortcut to activate the smaller viewport that is embedded in the larger viewport.
4. Keep using **Ctrl + R** to toggle between both viewports in this layout.

In this exercise, you learned how to control your FILE and VIEWPORT cycling to gain more control over your drawing and editing process.

## Hidden in the ViewCube

Not everyone uses the ViewCube in AutoCAD, but even if you do, there are some hidden features that you may not be aware of. Most users use the ViewCube for 3D work, but did you know you can use it for 2D as well?

Let me demonstrate how you can take advantage of those hidden features found in the ViewCube, even in 2D.

### Zoom to Selected Objects

Do you know how to get AutoCAD to perform a ZOOM EXTENTS to a selection only? Using the ViewCube, you can ZOOM EXTENTS to just the selected objects.

1. Open the **1-9\_ViewCube 2D.dwg** file.
2. Using the **Lasso** selection method, select **Lots 9-15** between **RAY BLVD** and **HAYDEN DR**.

#### Note

If you are not familiar with the LASSO selection option, **left-click and drag** the cursor around the objects to select. Release the **left-click** when the bounding selection box is complete.

3. *Double-click* the mouse wheel to access the **ZOOM EXTENTS** command. As anticipated, it disregards the selected items and zooms out to show the entire drawing's contents.
4. Repeat the previous selection command, and using the ViewCube, select the **TOP** edge. This time, the selected objects are recognized and the view zooms to just those objects.

#### Note

Disable the ZOOM EXTENTS functionality using the ViewCube settings in the next section.

## Save View as Home

In this exercise, we will learn how to save a common view of a drawing so that it can be easily recalled. Yes, we could use Saved Views, but there is also another method for saving common views.

Let's begin by discovering how to use the ViewCube to create a Home view quickly.

1. Continue using the `1-9_ViewCube 2D.dwg` file.
2. Using the mouse, *double-click* the wheel to access the **ZOOM EXTENTS** command and fit the entire drawing contents in the current view.
3. Using the **ZOOM WINDOW** command, zoom in on **Lots 8-13** between **HAYDEN DR** and **STRATTON DR**.





**Figure 1.12: Zoom window results**

4. **Hover** the mouse over the ViewCube until you see the **Home** icon, then **left-click** to select it. By default, it will rotate to an isometric view, which would be great if we were working in a 3D file.
5. Use the **UNDO** command (**Ctrl + Z**) to return the view to the previous flat view.
6. Again, **Hover** over the ViewCube and **right-click** on the **HOME** icon. Select the **Set Current View As Home** command.
7. **Double-click** the mouse wheel to access the ZOOM EXTENTS command.
8. Use the new HOME icon definition to set the current view to your preferred Home view.

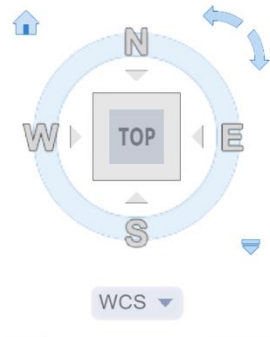
Now, we can take a look at the remaining ViewCube settings that are customizable to suit your preferences.

## ViewCube Settings

Use the **ViewCube Settings** to control the display and functionality of the ViewCube.

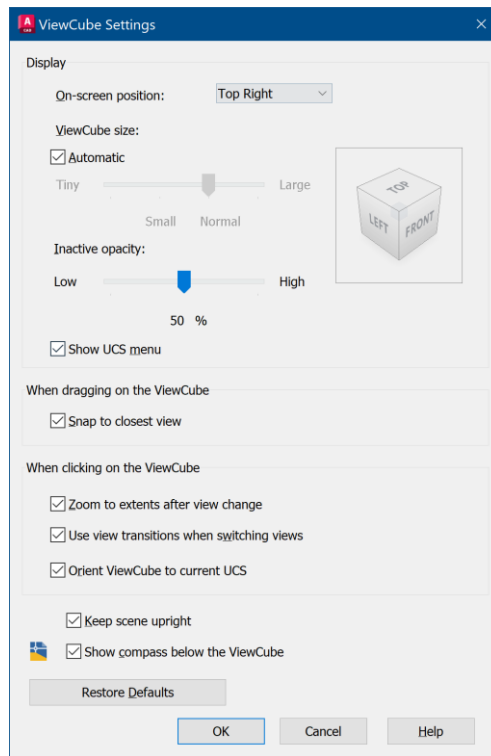
1. Continue using the **1-9\_ViewCube 2D.dwg** file.

2. **Hover** the mouse over the ViewCube and **right-click** to access the **ViewCube Settings** command.



**Figure 1.13: Default ViewCube**

3. Using the **ViewCube Settings** dialog, use the following settings to change the functionality of the ViewCube:
4. Use the **On-screen position** to control where the ViewCube is displayed. The **Top Right** location may not be best for your use.
5. Use the **ViewCube Size** to change the overall size of the ViewCube in your view window.
6. Use the **Show UCS Menu** to turn off the UCS drop-down list if you do not use the User Coordinate System.



**Figure 1.14: ViewCube Settings dialog**

In this section, you learned how to take advantage of the hidden features and settings in the ViewCube.

In the next section, we will look at how you can change the appearance of AutoCAD using the **Options** command.

## Understanding the Options settings

Do you need to use AutoCAD for presentations at work? There are several controls that use the OPTIONS settings that you can use to improve the visibility of your cursor and command prompts to make those presentations easier to follow for your audience.

## Colors and Sizes

First, let's look at the options for the size and color of the Command Line and Dynamic Prompts.

### Command Line Font and Size

To modify the font and size of the Command Line, follow these steps:

1. Open the `1-10_Options.dwg` file.
2. Place the cursor in the middle of the view window and **right-click** to access the **Options** command.
3. Using the **Options** dialog, select the **Display** tab, then select the **Fonts...** button.
4. Using the **Command Line Window Font** dialog, set the **Font Style** and **Size** options as needed.
5. Click **Apply & Close** to save your changes.
6. Click **OK** to close the dialog and review the changes to your Command Line.

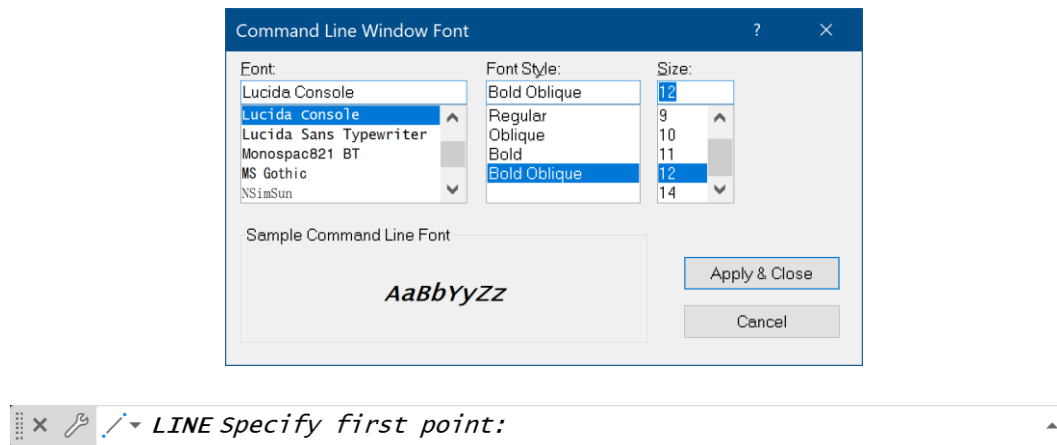
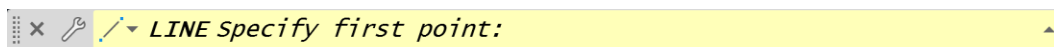


Figure 1.16: Command Line Window Font

### Command Line Color

To modify the color of the Command Line, follow these steps:

1. Continue using the `1-10_Options.dwg` file.
2. Using the **Options** dialog, select the **Display** tab, then select the **Colors...** button.
3. Using the **Context:** section, select **Command Line**, and using the **Interface Element** section, select **active prompt background** (this is white by default). Change this background color to a color that stands out as needed. I will change it to a yellow highlight color.
4. Using the **Color:** drop-down list, select the **Select Color...** option, and choose your preferred color. Select a base color and use the **True Color** tab to modify the actual color using R,G,B values. I used `255, 255, 185` for this example.



**Figure 1.18: Command line highlight color**

5. Click **OK** to close the dialog.
6. Click **Apply & Close** and **OK** to save your changes.

Next, let's modify the size and color of your Dynamic Input appearance.

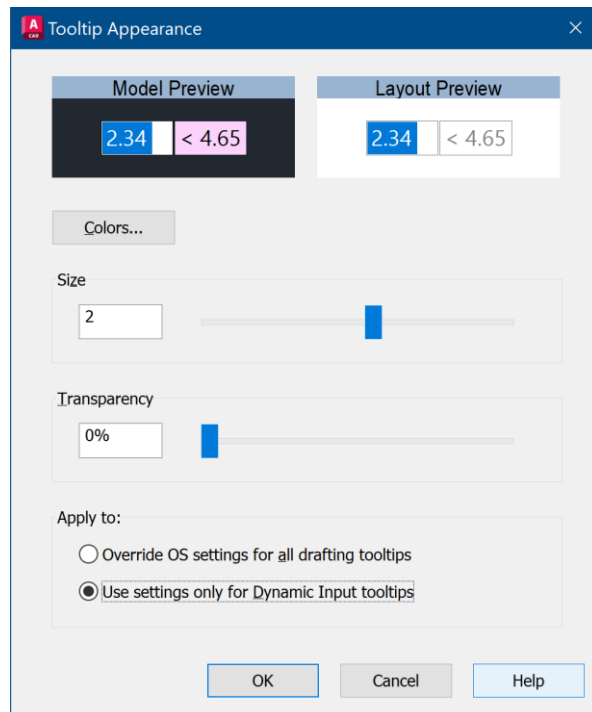
### Dynamic Input size and color

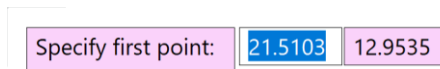
I recommend changing the color of your **Dynamic Input** as well as the Command Line:

1. Continue using the `1-10_Options.dwg` file.
2. Using the Status Bar, **right-click** on the Dynamic Input icon and select the **Dynamic Input Settings** command.
3. Using the **Drafting Settings** dialog, select the **Drafting Tooltip Appearance** button.



4. Select the **Colors...** button, and using the **Drawing Windows Color** dialog, select the **Context | 2D model space** and **Interface element | Drafting tooltip background**.
5. Using the **Color:** drop-down list, use the **Select Color...** option, and choose your preferred color. Select the base color and use the **True Color** tab to tweak the actual color using R,G,B values. I used **250, 210, 250** for this example.
6. Click **Apply & Close** to save your changes.
7. Use the **Size** setting to increase the size of the text used for the Dynamic Input prompts.
8. Modify these settings to apply to the **Dynamic Input tooltips** only.
9. Click **OK** to save these changes and close the dialog, then **OK** again to complete the changes.





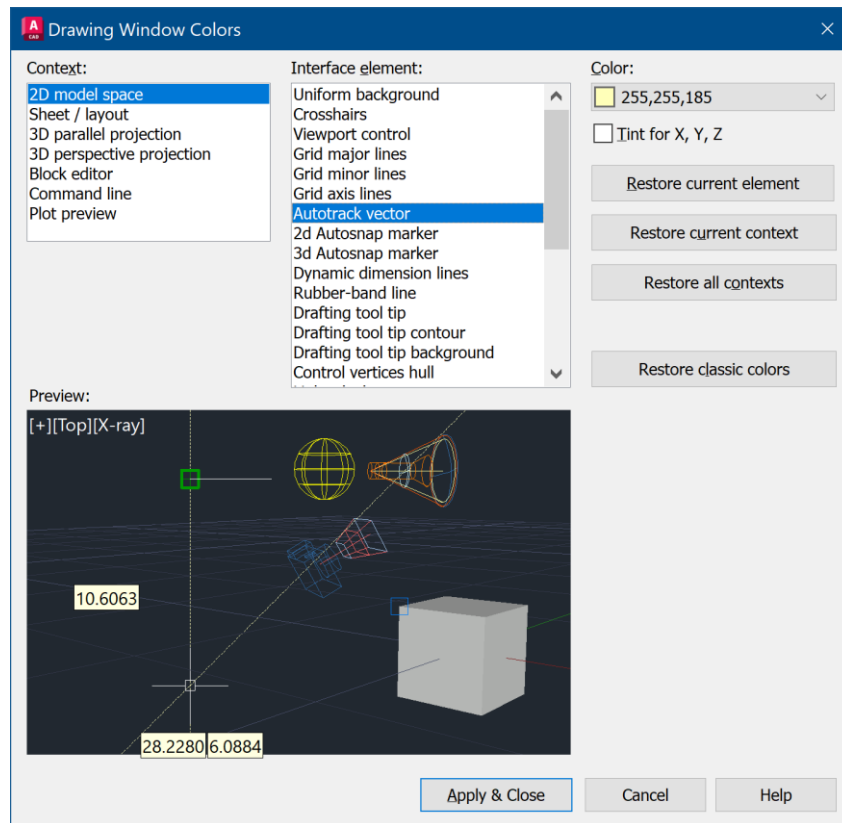
**Figure 1.19: Dynamic Input color and size**

Next, we will modify the color of the polar tracking and auto-tracking lines so they are easier to see with a dark background.

## **Polar tracking and auto-tracking lines color**

In this exercise, we will modify the color of the polar tracking and auto-tracking lines as needed to make them more visible against your background:

1. Continue using the `1-10_Options.dwg` file.
2. Using the **Options** dialog, select the **Display Tab** and select the **Colors...** button.
3. Using the **Context** section, select **2D Model Space**. Then, using the **Interface Element** section, select **Autotrack vector**. Change the background color to a color that stands out against your background view color (1,152,1 is the default). I will change it to a yellow-highlight color that stands out nicely against the default background.
4. Using the **Colors...** drop-down list, select the **Select Color...** option, and choose your preferred color. Select the base color and use the **True Color** tab to tweak the actual color using R,G,B values. I used `255, 255, 185` for this example.



**Figure 1.20: Polar and Autotrack Color**

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**Figure 1.22: AutoCAD title bar**

### Note

You should also consider modifying the 2D and 3D Autosnap markers. It's worth exploring all the options available.

In this exercise, you learned to modify your AutoCAD display options to improve your presentations and possibly your daily work environment by changing the size and color of many aspects of the interface.



## Using File Tabs

In this exercise, you will learn to use all the features of the file tabs to reduce the number of clicks required and to save time.

### Close All and Close All Other Drawings

When working on a project, it's common to find you have more files open than you intended. Here's how to solve that problem quickly:

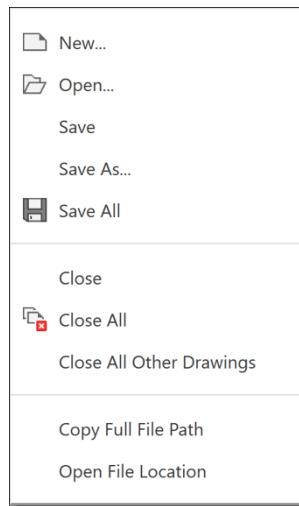
1. Open the `1-12_Using Tabs 1.dwg` and `1-12_Using Tabs 2.dwg` files.
2. *Right-click* on any drawing **File Tab**, and select **Close All** or **Close All Other Drawings** to quickly close the files you are finished working with.

Another command located under the **File Tab** that is easily overlooked is the **Save All** command.

### Save All

Use the **Save All** command to quickly save all open drawings:

1. Open the `1-12_Using Tabs 1.dwg` and `1-12_Using Tabs 2.dwg` files.
2. *Right-click* on any drawing **File Tab**, and select **Save All** to save all open files.



**Figure 1.23: File tab commands**

Another command located under the File Tab is the Open File Location command.

## Open File Location

Use the **Open File Location** command in the **Open Windows Explorer** command. This will open a new Windows Explorer dialog in the project file location:

1. Continue using the **1-12\_Using Tabs 1.dwg** and **1-12\_Using Tabs 2.dwg** files.
2. **Right-click** on any drawing **File Tab** and select **Open File Location** to open a Windows Explorer dialog in that file's location.

Another command under the **File Tab** is the **Copy Full Path** command.

## Copy Full Path

Use the **Copy Full Path** command to copy the drawing file path to the clipboard, which can then be used in documentation or other Windows dialogs:

1. Continue using the **1-12\_Using Tabs 1.dwg** and **1-12\_Using Tabs 2.dwg** files.

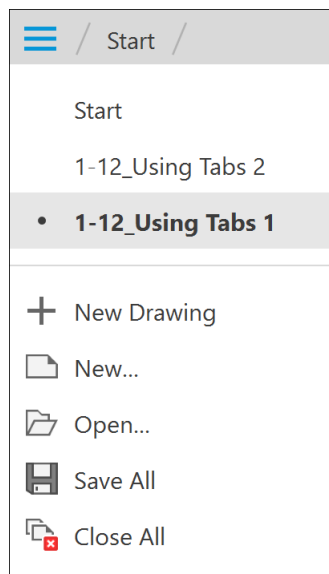
2. **Right-click** on any drawing **File Tab**, and select **Copy Full Path** to capture the drawing file location to the clipboard.

You can also use the new **File Tab menu** in AutoCAD 2024 to access the various file commands.

## File Tab menu

The new **File Tab menu** can be used to switch between open drawings and create, open, save all, or close drawing files:

1. Continue using the **1-12\_Using Tabs 1.dwg** and **1-12\_Using Tabs 2.dwg** files.
2. **Left-click** on the “hamburger” icon tab to access the new file tab menu.



**Figure 1.24: New file tabs menu**

By using these file commands, you get access to updated and more efficient options for managing frequently used file commands.

In the next section, we will learn to fully use layout tabs.

## Using layout tabs

In this section, we will discover new options for controlling the appearance of the layout tabs. Are you using all the features of your layout tabs? Using these features can save you considerable clicks.

### Dock above Status Bar

Use the **Dock above Status Bar** option to separate the layout tabs from the Status Bar. If your project files contain multiple layouts and you need more space to display them all, separate the layout tabs from the Status Bar.

### Dock Inline with Status Bar

To save screen space and have both the layout tabs and Status Bar share the same screen space, use **Dock Inline with Status Bar**:

1. Open the `1-12_Using Layout Tabs.dwg` file.
2. **Right-click** on any layout tab, and select **Dock above Status Bar**.

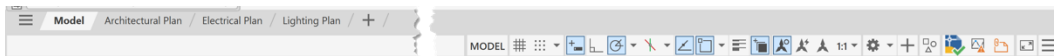


Figure 1.28: Layouts docked above status bar

Instead, you can also select **Dock Inline with Status Bar**.



Figure 1.27: Layouts docked inline with the status bar

In the next section, we will learn to use some of the “hidden” features of the selection tools.

## Bonus commands

In this section, you will look at how to control some of the more obscure aspects of the interface, such as the Status Bar, using the **Quick Properties** dialog to easily edit some

of those hard-to-find dimension settings, and how to minimize the appearance of the AutoCAD tooltips.

First, let's look at how to control the "blinky" Status Bar and what causes this problem.

## Blinky Status Bar?

When working in AutoCAD, do you ever experience a "blinky" Status Bar? Yes, it can be very distracting and needs to be addressed when it occurs. This problem is caused by the display of the **COORDINATES** in the Status Bar when the Status Bar is too full of other icons and settings.

To avoid this problem, turn off the COORDINATES display in the Status Bar:

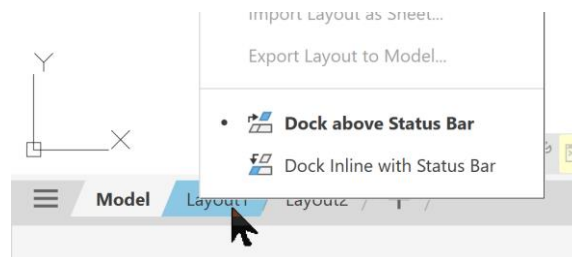
1. Open the **1-16\_QUICK\_PROPERTIES.DWG** file.
2. Using the Status Bar, **left-click** on the "hamburger" icon and select the **Coordinates** setting to turn OFF this option in the Status Bar.

By default, the COORDINATES are turned ON in the Status Bar. Depending on each individual user's Status Bar and screen width, having the COORDINATES turned ON may exceed the minimum width and cause this small display issue. If you need the COORDINATES to display, use the **Dock above Status Bar** layout setting to gain more display space for your Status Bar.

27.3091, 17.9362, 0.0000

**Figure 1.29: Default coordinates display**

3. **Right-click** on any layout tab and select **Dock above Status Bar** to separate the display of the Status Bar and layout tabs.





**Figure 1.34: Status bar and layout tabs control**

In the next exercise, we will learn how to use the “hidden” **Quick Properties** dialog.

## Quick Properties

Users are always asking me how to improve the availability of object properties for those objects that need to be edited on a regular basis. When I ask if they are using **Quick Properties**, many users do not know what I am talking about.

Here are a couple of quick examples that demonstrate how you can use **Quick Properties** to simplify your daily drafting workflow:

1. Continue using the `1-16_QUICK_PROPERTIES.DWG` file.
-  2. Using the Status Bar, **left-click** on the “hamburger” icon and select **Quick Properties**.
-  3. This will turn ON the **Quick Properties** icon in the Status Bar.
4. With Quick Properties enabled, **“hover”** on the new icon and **right-click** to access the **Quick Properties Settings**.
5. Using the **Drafting Settings** dialog, review the settings to control what properties are displayed and where in the **Quick Properties** dialog.
6. Click **CANCEL** to retain the default settings.
7. Select the DIMENSION object and notice the new **Properties** dialog that displays to the top-right of the cursor.
8. This dialog may not display all the commonly used properties you need to review and modify, so let’s change it to provide the properties we need for a TOLERANCE DIMENSION object.



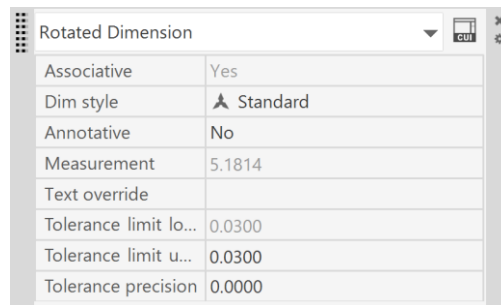
**Figure 1.31: Default Quick Properties dialog**

## Tolerance Dimensions

So, let's say you need to edit the tolerance value in an existing dimension. When you **double left-click** on the dimension text, the entire text value is highlighted, which prevents you from just editing the tolerance values.

We need to add the **Tolerance limits** and **Tolerance precision** properties to the Quick Properties dialog:

1. Continue using the **1-16\_QUICK\_PROPERTIES.DWG** file.
2. Run the **CUI** command.
3. Using the **Customize User Interface** dialog, select the **(current)** workspace from the top-left **All Customization Files** panel.
4. Select the **Quick Properties** item in the list. This changes the display of the right panel in the dialog.
5. Using the right panel, select the **Rotated Dimension** object type and turn ON the **Tolerance limits** and **Tolerance precision** properties.
6. Click **APPLY** and **OK** to save our changes and close the dialog.
7. Select the DIMENSION object, and using the Quick Properties dialog, modify the **Tolerance limit** values as needed.



**Figure 1.32: Modified Quick Properties dialog**

In the next exercise, we will learn how to change the display of the default tooltips.

## Dynamic tooltips

Use the **TOOLTIPMERGE** system variable to merge the “dynamic” tooltips together into a single tooltip. They are smaller and easier to read, and you won’t see all those tooltips flying around your cursor!

### **TOOLTIPMERGE**

Combines drafting tooltips into a single tooltip.

Type: Integer

Saved In: Registry

Initial Value: 0

0 Drafting tooltips are separate

1 Drafting tooltips are merged

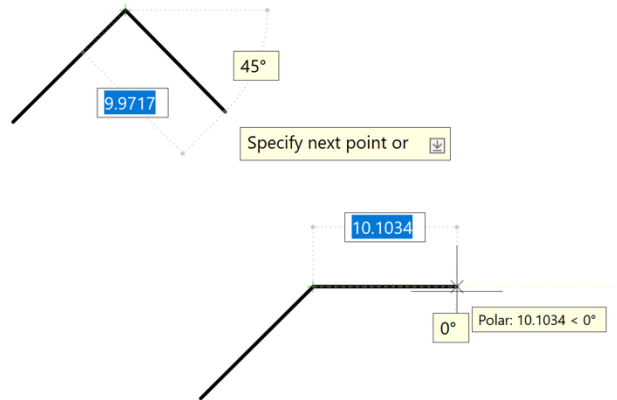
**To the PD: Please convert this table into an image.**

///

1. Open the **1-1 TOOLTIPS.DWG** file.
2. Run the LINE command and **left-click** in the view window to start the LINE object.
3. By default, the tooltips are all separated as shown below.

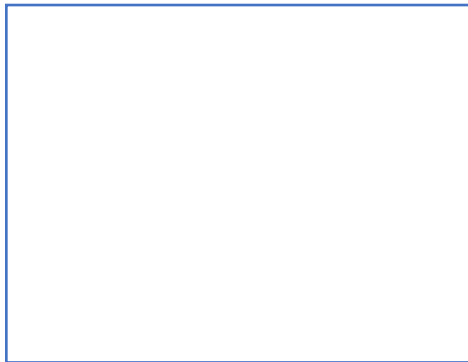


- Using the Command Line, key in **TOOLTIPMERGE** and **Enter**. Key in the value of **1** to turn ON the merge effect.
- Run the LINE command again and **left-click** in the view window to start the LINE object.



**Figure 1.33: Default tooltip merge**

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**Figure 1.34: Merged dynamic tooltips**

In these exercises, you learned some of the lesser-known interface options to customize your interface using the Status Bar, the Quick Properties dialog, and the Dynamic Input tooltips.

## Summary

In this chapter, we examined how to use the newest features of the AutoCAD interface, including the new floating windows and customizing the command-line appearance and location. We learned how to use Dynamic Input more efficiently using key-ins that are not known to the majority of users. We reviewed how to use some useful keyboard shortcuts to simplify our daily workflow, and how to assign custom keyboard shortcuts when needed. We learned how to make the most out of our selection commands, and how to use more mouse controls, such as *drag and drop* for working with files.

Finally, we finished the chapter by reviewing some of the more obscure interface commands such as Quick Properties and customized tooltips.

In the next chapter, we will look at how to take advantage of some of the advanced annotation features including full control of text editing in the Mtext editor, controlling the appearance of our text objects, using fields for “smarter” text objects, and more controls for using annotation scale on objects.