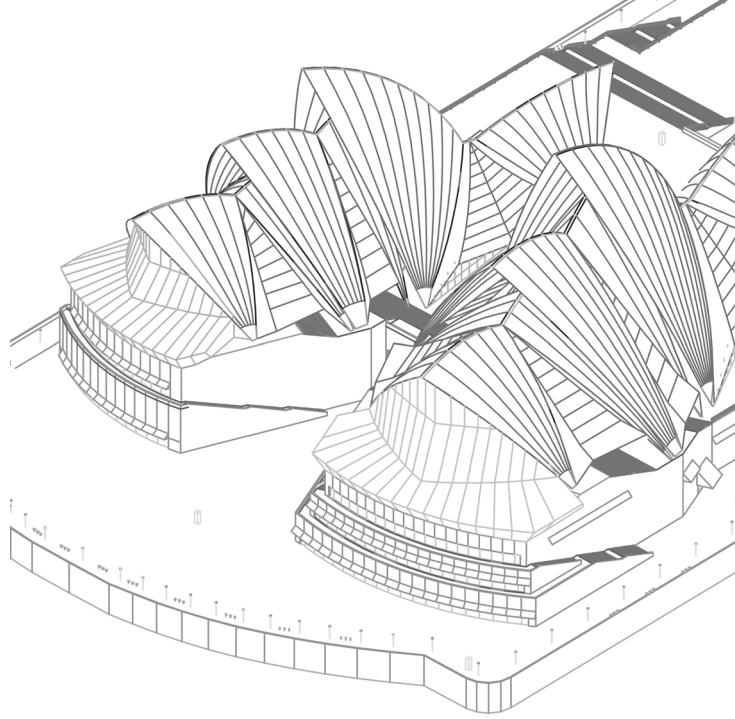


Chapter 3

Controlling the AutoCAD 2002 Drawing Environment

In Chapter 2, “Starting a Drawing in AutoCAD 2002,” you learned how to control drawing settings using the Today page, the Drawing Units dialog box, and Drafting



Settings dialog box. In addition to the features controlled by these dialog boxes, AutoCAD also allows you to control many other features through its Options dialog box (formerly known as the Preferences dialog box in Release 14). Through the Options dialog box, you control where AutoCAD searches for and saves files, how its display appears, as well as certain drafting features including AutoSnap, AutoTracking, and object selection methods.

This chapter covers the following topics:

- Defining support paths
- Controlling AutoCAD's display
- Configuring plotters
- Setting user preferences
- Defining profiles

In this chapter, you review the Options dialog box, and work through exercises that help you master its many powerful features.

Specifying Search Paths and Filenames

When you start AutoCAD, it determines where certain files are that may be used during the drawing session. These items include support files and device drivers, which are located in various folders on your computer system. AutoCAD also determines where to store certain file information, like temporary and backup files. In the Files tab, you specify where to find all the files needed, and where to save temporary and backup files.

The Files tab is located in the Options dialog box, which is accessed from the Tools menu by choosing Options (see Figure 3.1). The Files tab identifies all necessary files and their locations in several folders. The folders are used to organize and display the information into a list of logical groups. As you select each folder in the list, a description is displayed in the description field under the list. The yellow folder icons in the list specify where AutoCAD searches for support, driver, menu, and other files. The white papers icons specify optional, user-defined settings such as which dictionary to use for checking spelling.

By modifying the paths and files in the folders, and adding new information, you can control the files AutoCAD uses during its drawing session. In the following exercise, you add a new path to the Support File Search Path folder, which provides AutoCAD with another folder to look in for files it needs to use during a drawing session.

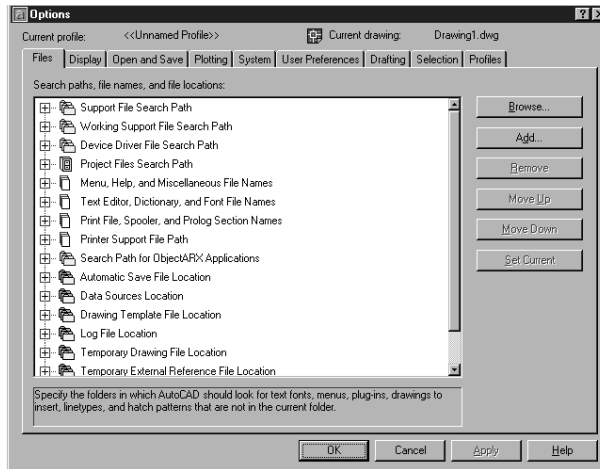


Figure 3.1 The Options dialog box controls many of AutoCAD's features.

Exercise 3.1 Adding a New Search Path

1. With AutoCAD running, from the Tools menu, choose Options.
2. Choose the Files tab if it is not already displayed.
3. Double-click on the Support File Search Path folder to display its contents. You can also expand a folder by selecting the plus (+) sign. If the sign is minus (-) then the folder is already expanded.
4. Click the Add button to add a new search path.
5. Click the Browse button to display the Browse for Folder dialog box.
6. In the Browse for Folder dialog box, scroll through the list, and choose Local Disk (C:), and then click OK.

AutoCAD adds the new path to the Support File Search Path folder, as shown in Figure 3.2. With this new path added, AutoCAD will now search the root of drive C: for any files it needs. However, because you probably don't keep AutoCAD files at the root, let's remove the path from the folder.

7. Choose the path you just created to highlight it.
8. Click the Remove button to remove the highlighted path from the folder.



Warning

AutoCAD has default locations for all search paths. Although you can change these locations, caution should be used. If you modify a location, AutoCAD probably will not be able to find the files it needs to run properly.

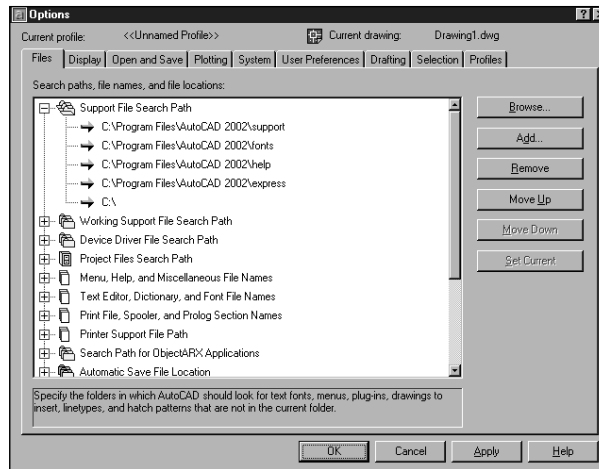


Figure 3.2 A new path is added to the Support File Search Path folder.



Note

Third-party products will frequently place their own menus and LISP routines in separate directories created during installation. If you find that your third-party software is not performing properly, make sure the Support File Search Path and Device Driver File Search Path in the Files tab contain the proper path references.

As you just learned, adding and removing paths is very simple. It's also very simple to redefine the files AutoCAD uses during the editing session. To demonstrate this, in the following exercise, you replace the current alternate font file setting, Simplex, with Arial.

Exercise 3.2 Replacing the Default Alternate Font File

1. Continuing from the previous exercise, click the plus sign (+) in front of the Text Editor, Dictionary, and Font File Names item to expand its list.
2. Click the plus sign (+) in front of the Alternate Font File item to display the current setting of simplex.shx, and then select the Simplex.shx listed.
3. Click the Browse button to display the Alternate Font dialog box.
4. In the Alternate Font dialog box, scroll to the top of the Font Name list, choose the Arial font, then click OK.

AutoCAD replaces the Simplex Alternate Font File with Arial, as shown in Figure 3.3. If you are satisfied with the changes to the paths and files, you can click the Apply button. However, if you do not want to apply the modified settings, click Cancel.

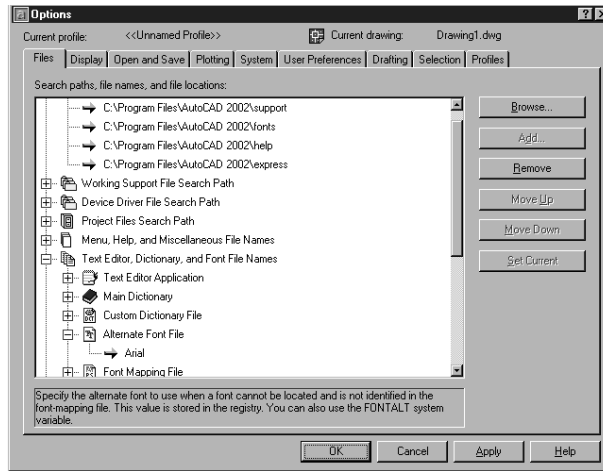


Figure 3.3 The Alternate Font File is changed to Arial.

As you just learned, modifying the default paths and files AutoCAD uses is easy. Next, you learn about customizing AutoCAD's display.

Options for Display

AutoCAD's display represents the look of your drawing session. By editing the settings found in the Display tab, you can control how AutoCAD looks, how layouts appear, and even increase performance.

The Display tab is organized into six areas, as shown in Figure 3.4. The six areas are as follows:

- **Window Elements.** This area controls different display settings in the AutoCAD Window, including the number of lines in the command-line window and the screen's background color.
- **Layout elements.** This area controls the appearance of paper space layouts.
- **Crosshair size.** This area controls the size of the cursor's crosshairs.
- **Display resolution.** This area controls the appearance of objects onscreen.
- **Display performance.** This area controls the display settings that affect AutoCAD's performance.
- **Reference Editing fading intensity.** This area specifies how much background objects fade during in-place reference editing.

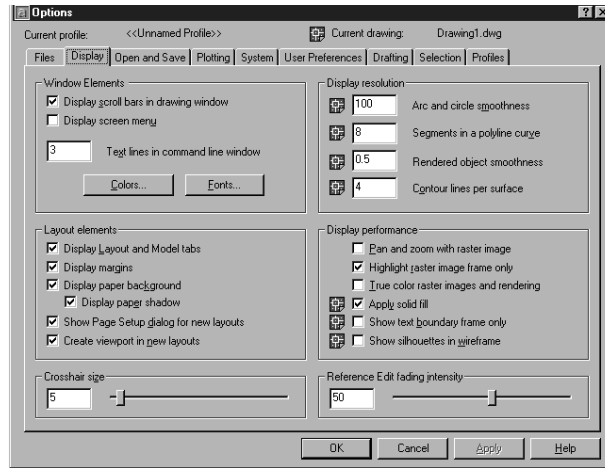


Figure 3.4 The Display tab in the Options dialog box controls AutoCAD's screen appearance.

Window Elements

In the Window Elements area, you can turn on or off the scrollbars that appear in each drawing window. The scrollbars allow you to pan the current view by sliding the buttons along the scrollbar. You can also depress the arrow keys at either end of the scrollbars, or click in the bar itself to pan the view. A handy feature of the scrollbars is that you can pan to a new view during a command.

The Window Elements area also allows you to control the display of the screen menu, which is a leftover relic from much earlier AutoCAD versions. The screen menu was used before pull-down menus were available, and well before toolbars were developed. The screen menu appears on the right side of the screen, and it's still available for those who have been using AutoCAD for many years and prefer it as the main interface with AutoCAD commands. Although it is perfectly acceptable to execute commands in AutoCAD using the screen menu, if you're new to AutoCAD, you should avoid using it since it is not as intuitive as the pull-down menus, nor as easy to use as the toolbars.

In the Window Elements area, you can also control the number of lines that appear in the command-line window at the bottom of AutoCAD's screen. The default number of lines is three, and you can enter a new value in the text box. A value of three will show the previous two prompts, plus, provide another line for the active command-line prompt. You can also modify the number of lines on screen without using the Options dialog box by dragging the top of the command-line window up or down.

The Window Elements area also enables you to control the font that appears in the command-line window. By clicking the Font button, AutoCAD displays the Command

Line Window Font dialog box, as shown in Figure 3.5. To change the font, choose the desired Font, Font Style, and Size, then click the Apply & Close button.

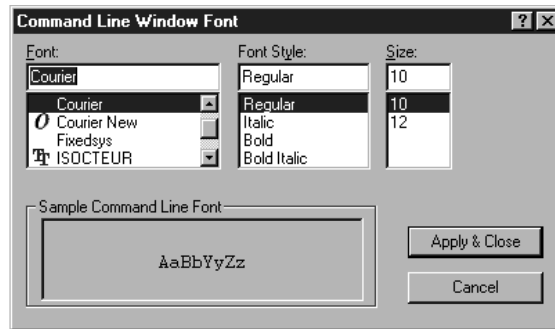


Figure 3.5 The Command Line Window Font dialog box controls the font that appears in the command-line window.

Finally, you can control AutoCAD's screen colors by clicking the Color button, which displays the AutoCAD Color Options dialog box, as shown in Figure 3.6. From this dialog box, you independently control the background screen color of model space, paper space layouts, and the command-line window. You can also change the color of the crosshairs, and AutoCAD's AutoTracking vectors.

By modifying the colors of the various elements, you can adjust the display of your drawings to make viewing more comfortable, and place less strain on your eyes, which is a real advantage if you spend eight hours a day or more working with AutoCAD.

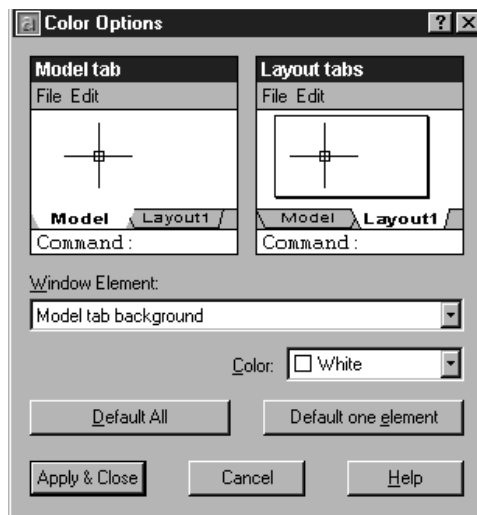
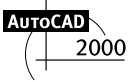


Figure 3.6 The AutoCAD Color Options dialog box controls the color of AutoCAD's screen.

After you have modified the screen's colors, you can easily set them back to their original color scheme. By clicking the Default All button, you change all color settings back to their original mode. By clicking the Default One Element button, you change the currently selected item back to its original color.

Layout Elements



In the Layout Elements area, you control options for existing and new layouts. A layout is an individual paper space environment in which you set up drawings for plotting. The various options toggle features off or on. Paper space layouts are discussed in detail in Chapter 19, "Paper Space Layouts."

Crosshair Size

The Crosshair Size area controls the size of AutoCAD's crosshairs. The crosshairs appear on the cursor when you move the cursor into AutoCAD's drawing area. The valid range is from 1% to 100% of the total screen. At 100%, the ends of the crosshairs extend to the edges of the drawing window. When the size is decreased to 99% or below, the crosshairs have a finite size, and the ends of the crosshairs are visible when situated at the edge of the drawing area. The default size is 5%. Some users find it helpful to set the size to 100% when visually aligning points using the cursor display.

Display Resolution

The Display Resolution area controls the number of segments AutoCAD uses when displaying curved objects or curved areas. When AutoCAD draws curved objects, it actually simulates the shape of the curve by drawing short, straight line segments. By using a high number of line segments, AutoCAD enhances the appearance of the curved object. The smaller the number, the fewer line segments used by AutoCAD, and the poorer the simulation of the curve. The advantage of using smaller numbers for the values is that regen times are shorter, and AutoCAD displays objects quicker. For example, Figure 3.7 shows the effect of changing the Arc and Circle Smoothness value. The circle on the left simulates the effect of a value of 100; the circle on the right simulates the effect of a value of 4. By setting the value to 100, the onscreen appearance of the circle is smooth.



Note

Because of the high speed of today's processors, you may not experience much degradation in AutoCAD's performance when setting high smoothness values.

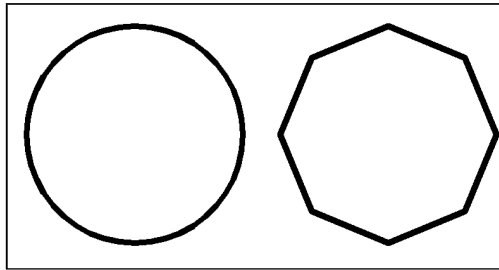


Figure 3.7 A Display Resolution setting of 100 generates the smoother circle on the left, while the one generated with a setting of 4 is on the right.



Note

The number of line segments used by AutoCAD to display objects on screen does not affect the accuracy AutoCAD uses when creating or plotting the objects. The values in the Display Resolution area only affect how objects appear onscreen.

Display Performance

The Display Performance options control how AutoCAD deals with raster images (bitmaps) when panning or zooming, when editing them, and when displaying them in true color. By toggling these options off or on, you can dramatically affect your system's performance. For example, by toggling off the Pan and Zoom with Raster Image option, AutoCAD displays only an outline of the raster image when you pan or zoom, thereby improving display performance. Otherwise, when this option is toggled on, as you pan or zoom, AutoCAD continuously redraws the image.

Similarly, by toggling on the Highlight Raster Image Frame Only option, you increase your system's performance because it highlights only the image's frame when you select it for editing. Otherwise, when this option is off, AutoCAD highlights the image's frame and the entire area of the image.

You also affect display performance by toggling off the True Color Raster Images and Rendering option. When this option is off, you increase performance because AutoCAD does not use 16.7 million colors to display the image, but uses 256 colors instead. Although the number of colors is significantly reduced with this option toggled off, it is usually adequate for display purposes.

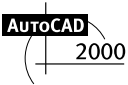
Other options include the Apply Solid Fill and Show Silhouettes in Wireframe options. The Apply Solid Fill option controls whether solid fills are displayed in objects like arrowheads on dimension lines, and in polylines in which a width greater than zero is

assigned. By toggling off this feature, only a wireframe representation of the object is displayed. The Show Silhouettes in Wireframe option controls whether silhouette curves of 3D solid objects are displayed as wireframes. It also controls whether the wire mesh is drawn or suppressed when a 3D solid object is hidden. To increase performance, toggle off these two options. Silhouettes are discussed in Chapter 29, “Surfacing in 3D.”

One final option is the Show Text Boundary Frame Only option, which displays a box representing the location of text objects instead of displaying the text. If you have a drawing with numerous text objects, and you notice your system is performing slowly, toggle on this option. AutoCAD will then replace all text objects with rectangular outlines representing the limits of the text objects. When this feature is toggled off, the rectangular outlines are removed, and the original text reappears.

Reference Edit Fading Intensity

AutoCAD 2000 introduced a feature called In-Place Reference Editing. This feature allows you to edit blocks and external references from the drawing they’re inserted in, and save the changes back to their original location. The fading intensity value controls the visibility of objects that are not being edited, and displays them at a lesser display intensity than objects being edited. This makes focusing on the object(s) being edited much easier. The valid range is 0% through 90%. The default setting is 50%. This feature is discussed in detail in Chapter 14, “Working with Drawings and External References Productively.”



Open and Save Settings

The Open and Save tab controls a variety of features associated with opening and saving files. By editing the features, you can control the format AutoCAD saves files as, whether AutoCAD automatically saves files, and whether AutoCAD makes a backup copy when it saves a file. These, and other related features, are discussed in this section.

The Open and Save tab is organized into five areas, as shown in Figure 3.8. The five areas are as follows:

- **File Save.** Controls various features associated with saving files.
- **File Safety Precautions.** Controls elements dealing with automatically saving backup files.
- **File Open.** Controls number of recently used drawing files to list and full path display in the title bar area of the drawing.

- **External References (Xrefs).** Controls several features associated with external references.
- **ObjectARX Applications.** Controls several features associated with AutoCAD's Runtime Extension (ARX) files.

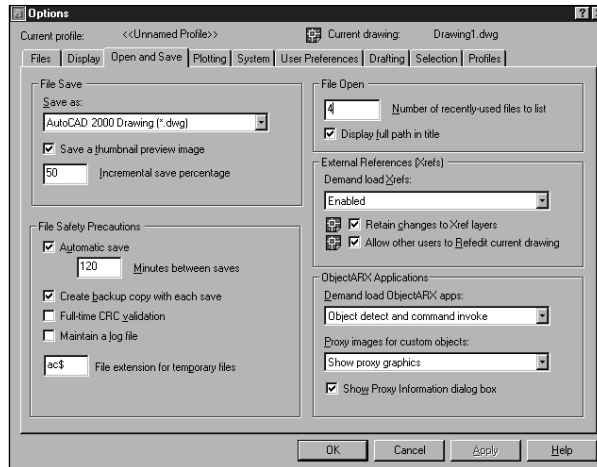


Figure 3.8 The Open and Save tab in the Options dialog box controls how AutoCAD handles files.

File Save

In the File Save area, you control the type of file AutoCAD saves the current drawing as, whether a thumbnail image is saved with the drawing, and AutoCAD's incremental save percentage.

AutoCAD provides several different file types to save the current drawing as. These file types represent the default file types and can be overridden using the Save As command from the File menu. The file types include .DWG formats for AutoCAD 2000, and for Release 14 and 13, AutoCAD's Drawing Template Format (.DWT), and .DXF formats for AutoCAD 2000, as well as Releases 14, 13, and 12.

You also control whether AutoCAD saves a thumbnail image with the current drawing. By toggling on this option, AutoCAD snaps an image of the current drawing's display, and saves it with the drawing. When opening an existing drawing, the image appears in the Select File dialog box when you select the drawing's filename. This feature is useful for visually identifying a drawing without opening it. This thumbnail image is not saved in .DXF format files.

Finally, you can set the percent value for AutoCAD's Incremental Save Percentage feature. This feature controls the frequency at which AutoCAD performs a full save when saving a file. Performing a full save removes wasted space from the drawing's database, which reduces a drawing's file size. The percent value refers to the amount of wasted space that is allowed in the drawing's database. After the percentage of allowable wasted space is reached, AutoCAD performs a full save, removing the wasted space.

The advantage of this feature is that if you make small modifications to your drawing and frequently save the drawing, you do not spend a lot of time waiting for AutoCAD to finish a full save. The disadvantage is that because AutoCAD does not perform a full save each time it saves a drawing, the drawing's file size is larger than necessary because the wasted space is not removed. Generally speaking, the default value of 50% is adequate for most users' needs. However, if your drawing's file size is too large and consuming too much disk space, reduce the number to 25% to make file sizes smaller. Reducing the number to below 20% optimizes drawing file sizes, but degrades performance when saving drawings because full saves are performed much more frequently.

**Note**

The Incremental Save Percentage feature does not affect how much data is saved. AutoCAD always saves all data, including edits, during an incremental save. What AutoCAD does not do during an incremental save is remove wasted space, which makes the .DWG file as small as possible. Therefore, if AutoCAD crashes, even though your last save was an incremental save, all data is retained. The only data lost is the new edits performed since your last save.

File Safety Precautions

In the File Safety Precautions area, AutoCAD provides tools for helping you avoid data loss and for detecting errors in drawings. The following list gives you an overview of these features:

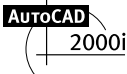
- **Automatic Save.** Controls whether AutoCAD saves the current drawing automatically, and how frequently it does so. Enter the Save Frequency value in minutes and AutoCAD will automatically save the current drawing when the time limit is reached, after which it starts tracking the time from zero.
- **Create Backup Copy with Each Save.** When this feature is on, AutoCAD saves the current drawing, then makes a backup copy (.BAK). Generally, it's a good idea to let AutoCAD save a backup copy of your drawing. However, bear in mind that the backup file is just as large as the drawing file, which can consume a lot of disk space.

- **Full-Time CRC Validation.** This option specifies whether a cyclic redundancy check (CRC) should be performed each time an object is read into the drawing. CRC is an error-checking mechanism. If your drawings are being corrupted and you suspect a hardware problem or AutoCAD error, turn on this option.
- **Maintain a Log File.** Controls whether AutoCAD saves the contents of the text window to a log file. This feature is useful if you need to retrace the command performed during an editing session. This file can also get very large.
- **File Extension for Temporary Files.** This feature controls the file extension AutoCAD uses for the temporary files it creates during an editing session. The default extension is .ac\$, and generally is adequate. When an AutoCAD editing session is ended improperly, AutoCAD does not have the opportunity to remove temporary files. Consequently, you must search your system for files ending with the designated extension, and remove them.

**Note**

You define the location where AutoCAD stores temporary files in the Files tab, in the Temporary Drawing File Location folder.

File Open



The File Open is a feature added in AutoCAD 2000i and contains only two controls. First is for the number of recently used drawing files to list in the File pull-down menu. The default setting is 4 but you will find increasing this to be very helpful. The other control is for whether or not to display the full file path for drawings, along with their name, in the title area. This is especially useful if you work in an environment with many projects but similar drawing names. See Figure 3.8 for where this is located.

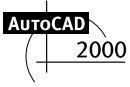
External References (Xrefs)

In the External References (Xrefs) area, AutoCAD enables you to control demand loading, retain modifications to xref-dependent layers, and allow the current drawing to be edited from another drawing.

The Demand Load Xrefs feature allows you to disable demand loading, enable demand loading, or enable demand loading with copy. Demand loading is discussed in detail in Chapter 14.

The Retain Changes to Xref Layers option allows you to save the current state of xref-dependent layers in the current drawing. Layer states such as Freeze/Thaw and On/Off can be changed in the current drawing for xref-dependent layers. By toggling on this

option, changes made to the layer states are saved, and retained when the drawing is opened again.



The Allow Other Users to Refedit Current Drawing option controls whether the current drawing can be edited when it is attached as an xref. This toggles off or on the command inline reference editing feature introduced in AutoCAD 2000, and is discussed in detail in Chapter 14, “Working with Drawings and External Drawings Productively.”

ObjectARX Applications

The ObjectARX Applications area allows you to control settings that relate to AutoCAD Runtime Extension (ARX) applications and proxy graphics.

The Demand Load ARX Apps feature specifies if and when AutoCAD demand-loads a third-party application if a drawing contains custom objects created in that application. Demand loading means AutoCAD loads the application in the current drawing session in order to display the custom object(s). This feature has four options:

- **Disable Load on Demand.** Turns off demand loading.
- **Custom Object Detect.** Demand-loads the source application when you open a drawing that contains custom objects. This setting does not demand-load the application when you invoke one of the application’s commands.
- **Command Invoke.** Demand-loads the source application when you invoke one of the application’s commands. This setting does not demand-load the application when you open a drawing that contains custom objects.
- **Object Detect and Command Invoke.** Demand-loads the source application when you open a drawing that contains custom objects or when you invoke one of the application’s commands.

The Proxy Images for Custom Objects feature controls the display of custom objects in drawings. Proxy images are created when you open a drawing that contains custom objects, but you do not have access to the application that created the objects. Because AutoCAD cannot properly display the objects with the application, it creates a placeholder called a Proxy Object. This feature has three options:

- **Do Not Show Proxy Graphics.** Specifies to not display proxy objects in drawings.
- **Show Proxy Graphics.** Specifies to display proxy objects in drawings.
- **Show Proxy Bounding Box.** Specifies to show a box in place of custom objects in drawings.

The Show Proxy Information Dialog Box option specifies whether AutoCAD displays a warning when you open a drawing that contains custom objects. The dialog box provides the total number of proxy objects in the drawing (both graphical and non-graphical), the name of the missing application, and additional information about the proxy object type and display state.

Setting Plotting Options

The Plotting tab controls a variety of features associated with plotting. By editing the features, you can control default plotting settings, the general plotting environment, and plot style behavior in all drawings.

The Plotting tab is organized into three areas, as shown in Figure 3.9. The three areas are as follows:

- **Default plot settings for new drawings.** Controls settings that relate to the default plotting settings.
- **General plot options.** Controls options that relate to the general plot system environment.
- **Default plot style behavior for new drawings.** Controls options related to plot style behavior in all drawings.

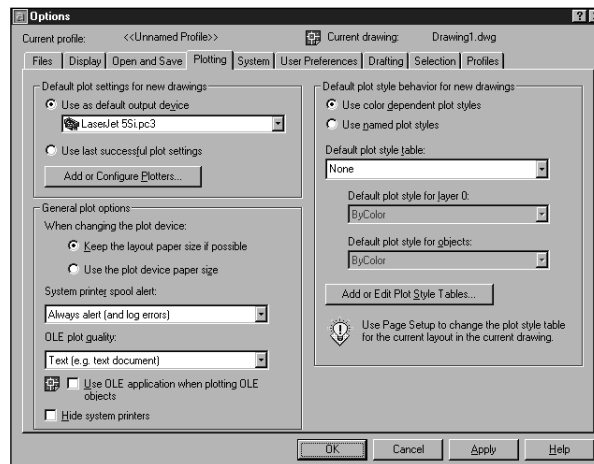


Figure 3.9 The Plotting tab in the Options dialog box controls how AutoCAD handles plotting features.

Default Plot Settings for New Drawings

The Default Plot Settings area allows you to control various settings that relate to the default plotting settings. These include settings such as the default output device used for new layouts and model space, the plotting settings based on the settings of the last successful plot, and the Autodesk Plotter Manager (a Windows system window). These features are discussed in detail in Chapter 20, “Productive Plotting.”

General Plot Options

The General Plot Options area allows you to control options that relate to the general plotting environment, including paper size settings, system printer alert behavior, OLE objects plot quality and how to plot them, and a toggle to hide system printers from being listed. These features are discussed in detail in Chapter 20.

Default Plot Style Behavior for New Drawings

The Default Plot Style Behavior area controls options related to plot style behavior in all new drawings. A plot style is a collection of property settings defined in a plot style table and applied when the drawing is plotted. These features are discussed in detail in Chapter 20.

Configuring the System

The System tab controls AutoCAD’s system settings. These settings control the current 3D graphics display, options relating to the current pointing device, options relating to database connectivity, and other general options.

The System tab is organized into six areas, as shown in Figure 3.10. The six areas are as follows:

- **Current 3D Graphics Display.** Controls settings that relate to system properties and configuration of the 3D graphics display system.
- **Current Pointing Device.** Controls options that relate to the pointing device.
- **Layout Regen Options.** Controls display methods for when using layouts.
- **dbConnect Options.** Controls options that relate to database connectivity.
- **General Options.** Controls general options that relate to system settings.
- **Live Enabler Options.** Controls frequency of Live Enabler updates.

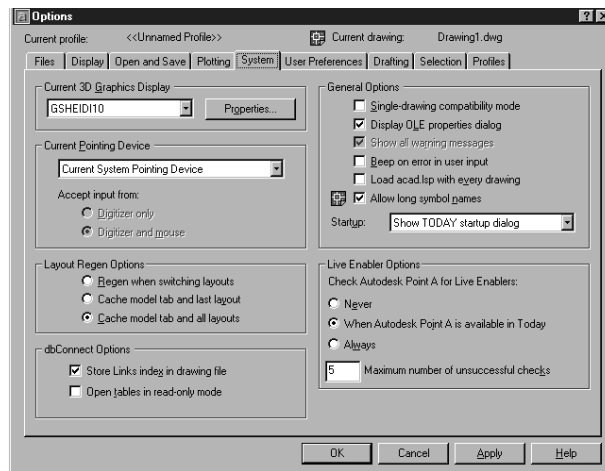


Figure 3.10 The System tab in the Options dialog box controls AutoCAD’s system settings.

Current 3D Graphics Display

The Current 3D Graphics Display area has two features. The first allows you to select from the list of available 3D graphics display systems. The second displays the 3D Graphics System Configuration dialog box.

These two features work in conjunction with each other. For example, when you select a 3D graphics display system from the drop-down list, the Properties button displays the 3D Graphics System Configuration dialog box set for the current 3D graphics display system.

The default 3D graphics display system is the Heidi 3D graphics display system (GSHEIDI10). When this system is highlighted, select the Properties button and the 3D Graphics System Configuration dialog box display appears as shown in Figure 3.11. If you are using a different graphics display system, the options on the 3D Graphics System Configuration dialog box will be different from the ones shown here. You will need to refer to AutoCAD’s documentation for more information.

Current Pointing Device

The Current Pointing Device area controls options that relate to the pointing device. In this area, you can select the desired pointing device from a drop-down list, which displays the available pointing devices.

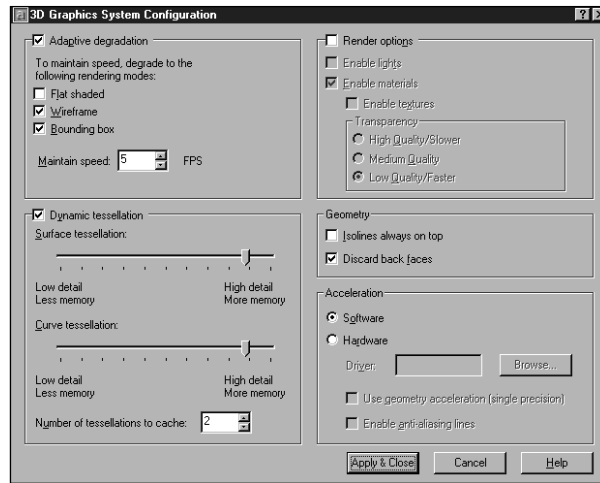


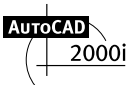
Figure 3.11 The 3D Graphics System Configuration dialog box.

AutoCAD comes installed with two pointing device options. The first is the Current System Pointing Device option, which sets the current Windows pointing device (typically your mouse) as the AutoCAD pointing device. The second is the Wintab Compatible Digitizer option, which sets the Wintab Compatible Digitizer as current. (This option is only available if you have a Wintab compatible digitizer installed on your system.) If you choose the Digitizer option, you can specify whether AutoCAD accepts input from both a mouse and a digitizer, or ignores mouse input and accepts only digitizer input.

Layout Regen Options

The Layout Regen Options control how model and layout tabs should cache their display for improved performance. There are three options, described as follows:

- Regen when switching layouts.** This toggle is the slowest of the three options and was the effective type for AutoCAD 2000. Every tab switch will initiate a full regeneration of the display.
- Cache model tab and last layout.** The most economical for memory usage, this setting will cache model space display and the last layout used. Switching between layout tabs will initiate full regenerations of the display.
- Cache model tab and all layouts.** The default setting in AutoCAD 2002 will cache all tabs for optimal display performance. Switching the display between tabs will be immediate. This option does use the most memory but today's systems are plenty sufficient for the added benefit.



The Layout Regen Options are discussed in detail in Chapter 19, “Paper Space Layouts.”

dbConnect Options

The dbConnect Options area allows you to control two features that deal with connecting to external databases. The features are described as follows:

- **Store Links Index in Drawing File.** This feature stores the database index within the AutoCAD drawing file. Select this option to enhance performance during SQL queries. Clear this option to decrease drawing file size and to enhance the opening process for drawings with database information.
- **Open Tables in Read-Only Mode.** Specifies whether to open database tables in Read-only mode within the AutoCAD drawing file. Select this option to open tables in read-only mode, preventing unwanted edits. Clear this option to allow the table to be edited.

The dbConnect Options are discussed in detail in Chapter 24, “Using External Databases.”

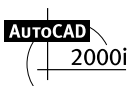
General Options

The General Options area allows you to control such features as whether you can open multiple drawings in a single AutoCAD session, whether the Startup dialog box displays when you launch AutoCAD, or whether you can use long symbol names. There are seven features you can control in this area, described as follows:

- **Single-drawing compatibility mode.** This toggle specifies whether a Single-Drawing Interface (SDI) or a Multi-Drawing Interface (MDI) is enabled in AutoCAD. If you select this option, AutoCAD opens only one drawing at a time. If you clear this option, AutoCAD can open multiple drawings.
- **Display OLE properties dialog.** This toggle controls the display of the OLE Properties dialog box when inserting OLE objects into AutoCAD drawings. OLE objects are discussed in detail in Chapter 23, “Effective Applications for OLE Objects in AutoCAD 2002.”
- **Show all warning messages.** This toggle controls whether all dialog boxes that include a Don’t Display This Warning Again option will appear. If you select this option, AutoCAD displays all dialog boxes with warning options, regardless of previous settings specific to each dialog box. If you clear this option, dialog boxes with the Don’t Display This Warning Again option toggled on will not appear.

- **Beep on error in user input.** This toggle controls whether AutoCAD sounds an alarm beep when it detects an invalid entry.
- **Load acad.lsp with every drawing.** This toggle specifies whether AutoCAD loads your acad.lsp file into every drawing. If this option is cleared, only your acadoc.lsp file is loaded into all drawing files. Clear this option if you do not want to run certain LISP routines in specific drawing files. The acad.lsp and acadoc.lsp files are discussed in Chapter 22, “Introduction to AutoLISP Programming.”
- **Allow long symbol names.** Named objects can include up to 255 characters. Names can include letters, numbers, blank spaces, and any special characters not used by Windows and AutoCAD for other purposes. When this option is enabled, long names can be used for layers, dimension styles, blocks, linetypes, text styles, layouts, UCS names, views, and viewport configurations. This option is saved in the drawing.
- **Startup.** This drop-down list controls what is displayed at AutoCAD’s initial opening. The default is the Today startup, providing quick access to a wealth of information. Other options include the traditional Startup dialog box or a command-line version of the OPEN command.

Live Enabler Options



The Live Enabler Options area permits AutoCAD 2002 to help manage itself as new systems become available. Through a connection to the Internet, your system can maintain updates to the software, download bug fixes, and update information content like the Help system. The features are described as follows:

- **Check Autodesk Point A for Live Enablers.** This controls when AutoCAD should look for updated items. If you do not have an Internet connection, setting this to Never is appropriate. Have this option set to Always is obviously excessive. Set this option to When you have a live Internet connection, Autodesk Point A is available and your system spends a minimal amount of time checking for new items, but enough to keep you completely up-to-date.
- **Maximum number of unsuccessful checks.** In some circumstances your system might lose its Internet connection. If so this option will keep it from bogging down with repetitive attempts to check for new items.

Setting User Preferences

The User Preferences tab controls various features within AutoCAD. These features include the behavior of your pointing device when you right-click, how AutoCAD responds to input of coordinate data, and how AutoCAD sorts objects during certain functions, as well as other features. Also a control for the new Associative Dimensioning feature of AutoCAD 2002 is found here.

The User Preferences tab is organized into six areas, as shown in Figure 3.12. The six areas are as follows:

- **Windows Standard Behavior.** This area controls whether Windows behavior is applied when working in AutoCAD.
- **AutoCAD DesignCenter.** This area allows you to control settings that relate to the new AutoCAD DesignCenter (ADC).
- **Hyperlink.** You control settings that relate to the display properties of hyperlinks.
- **Priority for Coordinate Data Entry.** This area controls how AutoCAD responds to coordinate data input.
- **Object Sorting Methods.** This area provides options that determine the sort order of objects during specified AutoCAD functions.
- **Associative Dimensioning.** This controls if new dimensions that are created are Associative Dimensions (linked to their objects) or legacy type dimensions.

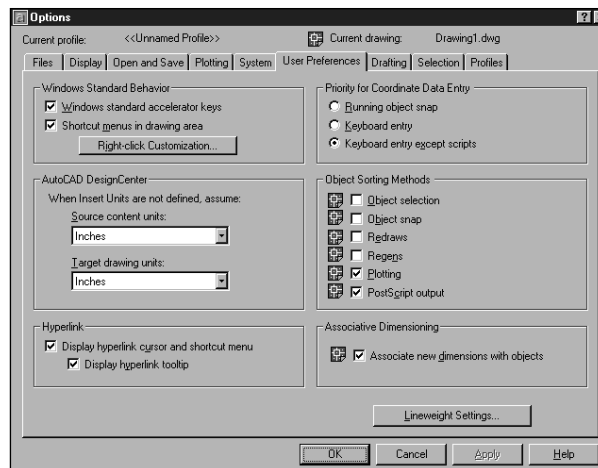


Figure 3.12 The User Preferences tab in the Options dialog box controls certain aspects of AutoCAD's behavior.

Windows Standard Behavior

The Windows Standard Behavior area allows you to control such features as whether AutoCAD accelerator keys adhere to Windows standards, and how your pointing device functions when right-clicking. There are three features you can control in this area, described as follows:

- **Windows standard accelerator keys.** This option controls whether AutoCAD follows Windows standards in interpreting keyboard accelerators (for example, Ctrl+C equals COPYCLIP). If this option is cleared, AutoCAD interprets keyboard accelerators by using AutoCAD standards rather than Windows standards (for example, Ctrl+C equals Cancel, and Ctrl+V toggles among the viewports).
- **Shortcut menus in drawing area.** This option controls various things such as whether your pointing device displays a shortcut menu or responds as though you've pressed Enter when you right-click in the drawing area.
- **Right-Click Customization.** This button displays the Right-Click Customization dialog box shown in Figure 3.13. This dialog box allows you to control how the right-click feature functions under certain conditions. You can determine whether the right-click repeats the last command, acts the same as though you'd pressed Enter, or displays the shortcut menu. You can also specify the behavior when you right-click under different circumstances, such as when no objects are selected, when one or more objects are selected, or when a command is in progress.

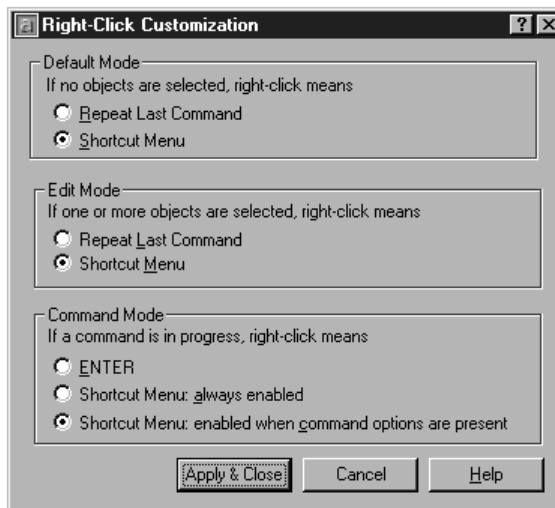


Figure 3.13 The Right-Click Customization dialog box controls how your pointing device behaves when you right-click.

AutoCAD DesignCenter

The AutoCAD DesignCenter area allows you to control how blocks are scaled when inserted in the current drawing. To scale blocks properly when they are inserted from another drawing, there are two units to consider. The first is the units used in the source drawing, and the second is the units used in the target (current) drawing. There are two features that allow you to control how AutoCAD deals with the units of the source drawing and the target drawing when no units are specified. They are described as follows:

- **Source Content Units.** Sets which units to automatically use for an object being inserted from another drawing into the current drawing when no insert units are specified with the `INSUNITS` system variable.
- **Target Drawing Units.** Sets which units to automatically use in the current drawing when no insert units are specified with the `INSUNITS` system variable.

The available unit settings for both options include Unspecified-Unitless, Inches, Feet, Miles, Millimeters, Centimeters, Meters, Kilometers, Microinches, Mils, Yards, Angstroms, Nanometers, Microns, Decimeters, Decameters, Hectometers, Gigameters, Astronomical Units, Light Years, and Parsecs. If Unspecified-Unitless is selected, the object is not scaled when inserted. AutoCAD DesignCenter (ADC) is discussed in detail in Chapter 12, “Applications for AutoCAD DesignCenter.”

Hyperlink

The Hyperlink area allows you to control two options that deal with how your cursor reacts when it moves over a hyperlink in a drawing, and is described as follows:

- **Display Hyperlink Cursor and Shortcut Menu.** This option controls the display of the hyperlink cursor and shortcut menu. Select this option to have the hyperlink cursor appear whenever the pointing device moves over a hyperlink, and to make the shortcut menu available. The hyperlink shortcut menu provides additional options when you right-click over a hyperlink in a drawing. If this option is cleared, the hyperlink cursor never displays, and the shortcut menu is not available.
- **Display Hyperlink Tooltip.** This option controls the display of the Hyperlink tooltip. Select this option to have a hyperlink tooltip display when the pointing device moves over an object that contains a hyperlink.

Hyperlinks are discussed in Chapter 25, “Publishing on the Web.”

Priority for Coordinate Data Entry

The Priority for Coordinate Data Entry area allows you to set one of three options that control whether running object snaps take precedence over coordinates entered from the keyboard, described as follows:

- **Running Object Snap.** Select this option to have running object snaps override keyboard-entered coordinates at all times.
- **Keyboard Entry.** Select this option to have keyboard-entered coordinates override running object snaps at all times.
- **Keyboard Entry Except Scripts.** Select this option to have keyboard-entered coordinates override running object snaps at all times, except when running scripts.

Running object snaps are discussed in Chapter 6, “Accuracy in Creating Drawings with AutoCAD 2002.”

Object Sorting Methods

When you create an object, AutoCAD adds it to the current drawing’s database. As subsequent objects are created, they are added to the end of the database, in the order in which they are created. Therefore, objects are stored in the drawing’s database in the order in which they are created.

When AutoCAD sorts through a drawing’s database, it can do so by sorting in the order in which the objects are created, or by random selection of objects. The advantage of this sorting order is that you have predictability as to how an object is drawn or selected. For example, when plotting objects in the order in which they are created, you know objects created first will lie under objects created last. The disadvantage of this sorting order is it usually takes AutoCAD longer to sort through objects in the order in which they are created than to sort randomly.

The Object Sorting Methods area allows you to control how AutoCAD sorts through objects in certain situations. By toggling off or on options, you control the order in which AutoCAD deals with an object. If an option is selected (toggled on), AutoCAD sorts objects in the order of those created first to those created last. If an option is cleared (toggled off), AutoCAD sorts objects randomly. There are six options you can set to control object sort methods, described as follows:

- **Object Selection.** If this option is selected, the order in which AutoCAD selects objects is affected. For example, if two overlapping objects are chosen during object selection, AutoCAD recognizes the newest object as the selected object.

- **Object Snap.** If this option is selected, the order in which AutoCAD selects an object to snap to is affected. For example, if two overlapping objects are chosen when using object snap, AutoCAD recognizes the newest object as the object to snap to.
- **Redraws.** If this option is selected, when you use either the REDRAW or REDRAWALL command, AutoCAD redraws objects onscreen in the order in which they were created.
- **Regens.** If this option is selected, when you use either the REGEN or REGENALL command, AutoCAD regenerates objects onscreen in the order in which they were created.
- **Plotting.** If this option is selected, when you plot a drawing, AutoCAD plots objects in the order in which they were created.
- **PostScript Output.** If this option is selected, AutoCAD exports objects in the order in which they were created.

To demonstrate the effect of the options in the Object Sorting Methods area, review the two rectangles shown in Figure 3.14. The dashed rectangle on the right was drawn first, and the solid rectangle on the left was drawn second. When a regen is executed, with the Regens option in the Object Sorting Methods area toggled off, AutoCAD randomly selects objects. In this particular case, AutoCAD draws the solid rectangle on the left first, then draws the dashed rectangle on top of the solid rectangle. However, with the Regens option in the Object Sorting Methods area toggled on, AutoCAD is forced to sort objects in the order in which they were created. Consequently, AutoCAD draws the dashed rectangle first, and then draws the solid rectangle on top of the dashed rectangle, as shown in Figure 3.15.

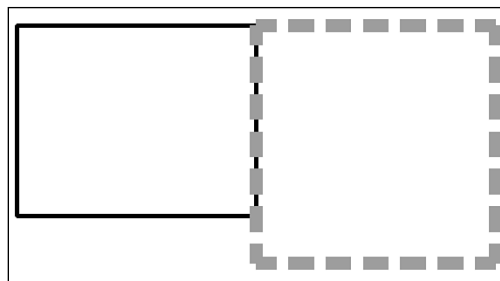


Figure 3.14 Even though the dashed rectangle was created first, with Object Sorting turned off for regens, AutoCAD randomly selects objects and regenerates the dashed rectangle second and on top of the solid rectangle.

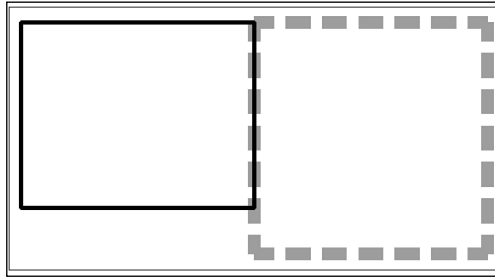
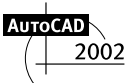


Figure 3.15 With Object Sorting turned on for regens, AutoCAD selects objects in the order in which they were created, and regenerates the solid rectangle second and on top of the dashed rectangle.

Associative Dimensioning



A new feature of AutoCAD 2002 is Associative Dimensioning. Now you can link a dimension object to the entities you are trying to dimension, such as a box. The method to control if these new intelligent dimensions are made when you place dimensions is toggled here or through the system variable DIMASSOC.

The new Associative Dimensioning is discussed further in Chapter 18, “Advanced Dimensioning.”

Lineweight Settings

The User Preferences tab also includes a Lineweight Settings button. This button displays the Lineweight Settings dialog box, which sets lineweight options, such as display properties and defaults, and also sets the current lineweight. You learn how to use lineweights in Chapter 5, “Using Linetypes and Lineweights Effectively.”

Choosing Drafting Options

The Drafting tab controls settings that relate to object snaps, AutoTracking, and the AutoSnap marker. You can also control how AutoCAD displays alignment vectors, and the display size for the aperture (the square in the center of the crosshairs).

The Drafting tab is organized into five areas, as shown in Figure 3.16. The five areas are as follows:

- **AutoSnap Settings.** Controls settings that relate to object snaps.

- **AutoSnap Marker Size.** Sets the display size for the AutoSnap Marker. The Marker is a geometric symbol that displays the object snap location when the crosshairs move over a snap point on an object. By dragging the button left or right, you increase or decrease the size of the AutoSnap Marker.
- **AutoTrack Settings.** Controls the settings that relate to AutoTracking behavior.
- **Alignment Point Acquisition.** Controls the method of displaying alignment vectors in a drawing.
- **Aperture Size.** Sets the display size for the aperture. The aperture box is the box that appears inside the crosshairs when you select an object snap. By dragging the button left or right, you increase or decrease the size of the aperture.

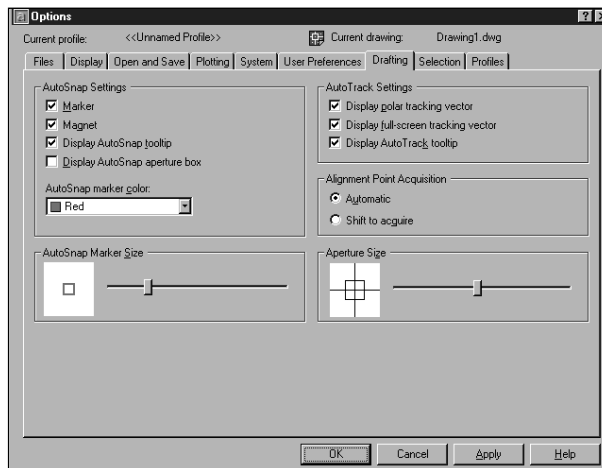


Figure 3.16 The Drafting tab in the Options dialog box controls various snapping features.

AutoSnap Settings

The AutoSnap Settings area allows you to control settings that affect the display and behavior of the crosshairs when using object snaps. There are five features you can control, described as follows:

- **Marker.** Controls the display of the AutoSnap Marker. When you move over an object, a geometric symbol appears, indicating the type of snap.
- **Magnet.** This option turns the AutoSnap magnet on or off. The magnet is an automatic movement of the crosshairs that locks the crosshairs onto the nearest snap point. The magnet is affected by the size of the AutoSnap Marker. With this

option selected, when AutoCAD displays a marker, and the center of the crosshairs enters the marker symbol, AutoCAD snaps the crosshairs to the center of the Marker.

- **Display AutoSnap Tooltip.** This option controls the display of the AutoSnap tooltip. A tooltip is a text flag that describes which object snap is active.
- **Display AutoSnap Aperture Box.** This option controls the display of the AutoSnap aperture box. The aperture box is a box that appears inside the crosshairs when you select an object snap. When AutoSnap is activated, the AutoSnap markers appear only on objects that cross or lie within the aperture box.
- **AutoSnap Marker Color.** This option allows you to specify the color of the AutoSnap marker to make viewing the AutoSnap Marker easier.

AutoSnaps and object snaps are discussed in detail in Chapter 6, “Accuracy in Creating Drawings with AutoCAD 2002.”

AutoTrack Settings

The AutoTrack Settings area allows you to control settings that affect the display and behavior of AutoCAD’s Polar Tracking feature. There are three features you can control from this area, described as follows:

- **Display Polar Tracking Vector.** This option turns Polar Tracking on or off. When selected, this feature allows you to draw lines based on predefined angles. These predefined angles, known as Tracking Vectors, cause AutoCAD to snap to the Tracking Vector as you move the cursor during a drawing command.
- **Display Full-Screen Tracking Vector.** This option controls the display of tracking vectors. By selecting this option, AutoCAD displays Tracking Vectors as infinite construction lines, extending through the snap point and the cursor and crossing the width of the screen. By clearing this option, the Tracking Vectors extend as rays from the snap point through the cursor to the edge of the screen.
- **Display AutoTracking Tooltip.** This option controls the display of the AutoTracking tooltip. When selected, this option displays the AutoTracking ToolTip.

Alignment Point Acquisition

The Alignment Point Acquisition area allows you to set the method used to display Polar Tracking alignment vectors in a drawing, either automatically or manually, and is described as follows:

- **Automatic.** If this option is selected, AutoCAD displays tracking vectors automatically when the aperture pauses over an object snap.
- **Shift to Acquire.** If this option is selected, AutoCAD displays tracking vectors only when you press the Shift key and move the crosshairs over an object snap.

When a Tracking Vector is set, a small X appears in the center of the object snap. The Polar Tracking feature was introduced in AutoCAD 2000. For detailed information about this feature, see Chapter 7, “Creating Elementary Objects.”

Controlling Selection Methods

The Selection tab controls settings that relate to object selection methods, display size for the pickbox, and AutoCAD’s grips. The Selection tab is organized into four areas, as shown in Figure 3.17. The four areas are as follows:

- **Selection Modes.** Controls settings that relate to object selection methods.
- **Pickbox Size.** Controls the display size of the AutoCAD pickbox. The pickbox is the box that appears inside the crosshairs, and is used to select objects. By dragging the button left or right, you increase or decrease the size of the pickbox.
- **Grips.** Controls the settings that relate to grips. Grips are small squares displayed on an object after it has been selected.
- **Grip Size.** Controls the display size of AutoCAD grips. By dragging the button left or right, you increase or decrease the size of the grips.

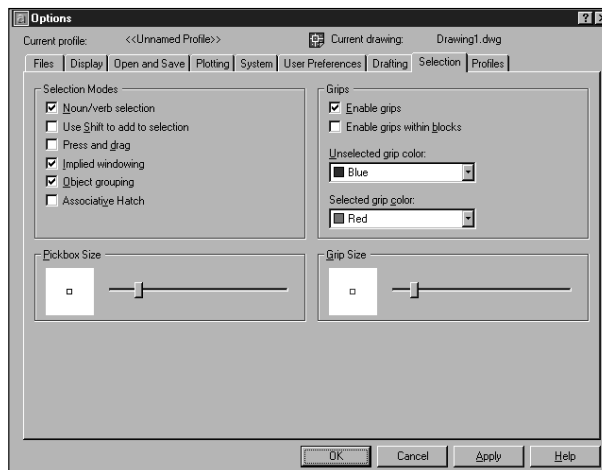


Figure 3.17 The Selection tab in the Options dialog box controls object selection methods and various grip features.

Selection Modes

The Selection Modes area allows you to control settings that affect AutoCAD's behavior when selecting objects. There are six features you can control, described as follows:

- **Noun/Verb Selection.** When selected, this option allows you to select an object to edit before invoking a command. You can also select multiple objects to edit before invoking the command. When cleared, you can still select multiple objects, but invoking a command clears the current selection set and prompts you to create a new selection set.
- **Use Shift to Add to Selection.** This option controls how multiple objects are added to a selection set during the selection process. When selected, you must press the Shift key to add selected objects to the selection set. When cleared, AutoCAD automatically adds multiple objects to the selection set as you select them.
- **Press and Drag.** When this feature is on, you can draw a selection window by clicking a start point and dragging the pointing device to the end point. If this option is cleared, the dragging feature is disabled, and you must draw a selection window by clicking a start point, and then clicking the end point.
- **Implied Windowing.** When this feature is on, a selection window is automatically initiated by avoiding objects when picking onscreen, and picking a blank area instead. After a blank area is picked, the selection window is invoked, and dragging the selection window from left to right initiates a window selection, which selects only those objects within the window's boundaries. Dragging from right to left initiates a crossing window selection, which selects objects within and crossing the window's boundaries. When cleared, you must invoke a selection window during a command by typing **W** to initiate a window selection, or by typing **C** to initiate a crossing window selection.
- **Object Grouping.** When this feature is on, an entire object group is selected when you select one object in that group. When cleared, selecting an object that is in a group selects only that object. For detailed information about object grouping, see Chapter 11, "Advanced Geometry Editing."
- **Associative Hatch.** When this feature is on, an associative hatch's boundary objects are selected along with the associative hatch. When cleared, selecting an associative hatch selects only the associative hatch, not its boundary elements. For detailed information about associative hatches, see Chapter 16, "Drawing Hatch Patterns."

Grips

The Grips area allows you to control settings that affect AutoCAD's grips. Grips are small squares displayed on an object after it has been selected. There are four features you can control, described as follows:

- **Enable Grips.** When selected, this option controls whether grips are displayed on an object after you select it. You can edit an object with grips by selecting a grip to make it "hot." When the grip is hot, you may move the grip, or you can invoke the shortcut menu to select a command. When you clear this option, you disable grips.
- **Enable Grips within Blocks.** This option controls how grips are displayed on a block after you select it. If this option is selected, AutoCAD displays all grips for each object in the block. You can edit an object with grips by selecting a grip to make it hot. When the grip is hot, you may move the object by the grip, or you can invoke the shortcut menu to select a command. If this option is cleared, AutoCAD displays one grip located at the insertion point of the block.
- **Unselected Grip Color.** You determine the color of an unselected grip from this drop-down list. AutoCAD displays an unselected grip as the outline of a small square.
- **Selected Grip Color.** You determine the color of a selected grip from this drop-down list. AutoCAD displays a selected grip as a small, filled square.

For detailed information about using grips, see Chapter 10, "Basic Object Editing," and Chapter 11, "Advanced Geometry Editing."

Saving the Options to a Profile

So far, you have dedicated quite a bit of time to reviewing the numerous features in the Options dialog box. As you may have noticed, there are well over 100 different settings you can control. Although having over 100 different settings provides you with the ability to set up your drawing environment exactly the way you want, it doesn't necessarily help if you must work on a different computer temporarily, one that doesn't have your custom setup. A worse situation occurs when someone else works on your computer while you're gone, and wipes out your custom settings with their own custom settings. Not only is it frustrating to be forced to redefine your custom settings, it may be impossible to completely restore them if you can't remember what your settings were.

Fortunately, the Options dialog box provides a simple method for saving and restoring your custom settings. By saving your custom settings in a Profile, not only can you restore settings if they are accidentally lost, but you can even copy your custom settings to another computer.

In the following exercise, you create two profiles and use them to restore default and custom settings in the Options dialog box.

Exercise 3.3 Creating Profiles

1. Launch AutoCAD, and start a new drawing from scratch.
2. From the Tools menu, choose Options, then choose the Profiles tab.

The Profiles tab appears in the Options dialog box, as shown in Figure 3.18. If no one has added any profiles, the only profile that displays in the Available profiles list is the <<Unnamed Profile>>, which is AutoCAD's default profile.

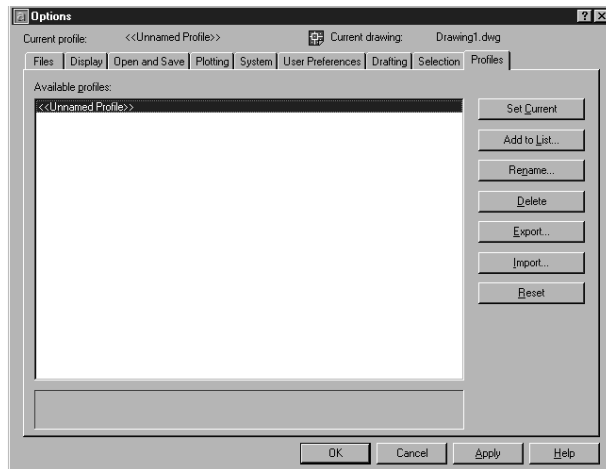


Figure 3.18 AutoCAD's default profile, the <<Unnamed Profile>>, is the current profile.

Notice that the current profile is listed at the top of the Options dialog box, and in Figure 3.18, the <<Unnamed Profile>> is the current profile. When you make changes in the Options dialog box, it is very important to note which profile is current because those changes are immediately saved to the current profile.

Next, you create two new profiles that contain the current default settings.

3. Click the Add to List button to display the Add Profile dialog box (see Figure 3.19).
4. In the Profile name text box, type **Default Profile**.
5. In the Description text box, type **This is AutoCAD's Default Profile**, as shown in Figure 3.19.

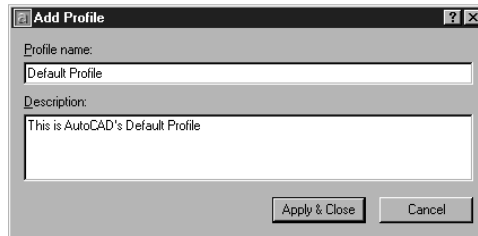


Figure 3.19 The Add Profile dialog box with the proper settings for the Default Profile.

6. Click the Apply & Close button.
7. Click the Add to List button again to create another profile.
8. In the Profile name text box, type **My Profile**.
9. In the Description text box, type **This is my Custom Profile**, as shown in Figure 3.20.
10. Click the Apply & Close button.

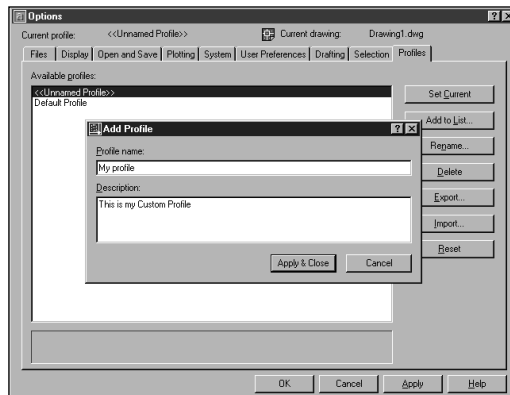


Figure 3.20 The Add Profile dialog box with the proper settings for My Profile.

Two new profiles appear in the Available profiles list, as shown in Figure 3.21. The two new profiles you created currently have the same settings as the current profile. For this exercise, you will only modify settings in the newly created My Profile.

Modifying the settings in a profile is simple. To do so, make the profile you wish to modify the current profile. Then, make the desired changes to the settings.

11. In the Available Profiles list, select My Profile, then click the Set Current button. From this point on, any changes that you make to settings in the Options dialog box are saved to My Profile.

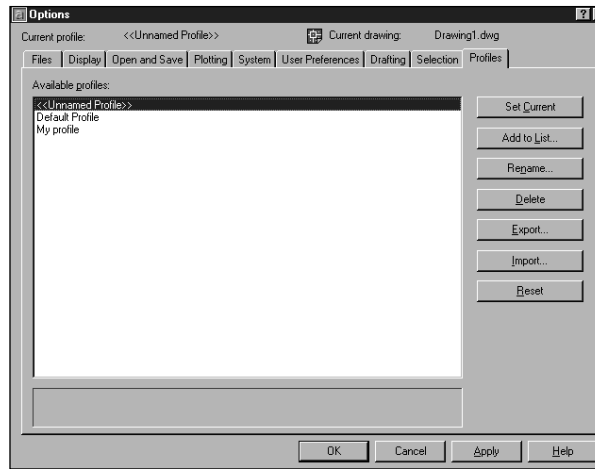


Figure 3.21 Two new profiles appear in the Available Profiles list.

12. Choose the Display tab.
13. In the Window Elements area, set the Text Lines in Command Line Window value to 6.
14. In the Crosshair Size area, set the value to 25, as shown in Figure 3.22.
15. Click the Apply button, then click OK.

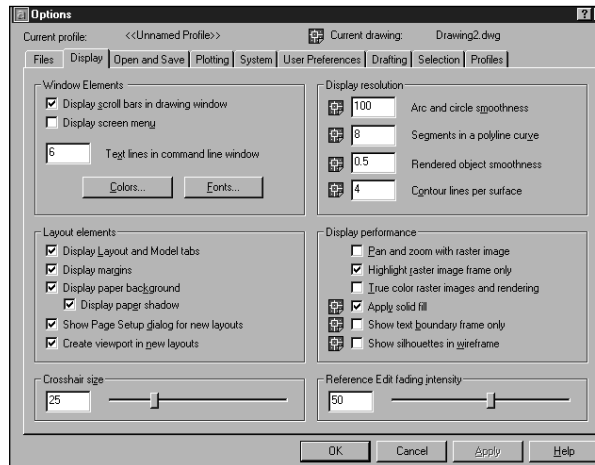


Figure 3.22 The new values are entered in the Display tab.

The new values are saved to the current profile, and AutoCAD resets the drawing environment based on the new values, as shown in Figure 3.23. Notice that the crosshairs are much larger than the default size (originally set to 5), and the command-line window can now display six lines of text rather than the three lines displayed when you first launched AutoCAD.

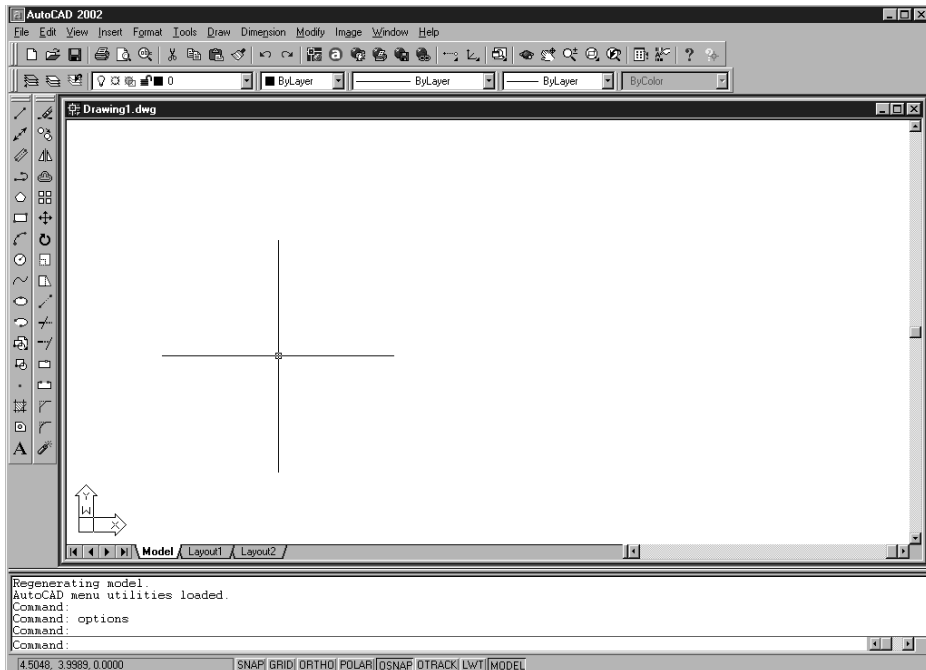


Figure 3.23 The new values are saved to the current profile, and AutoCAD implements the changes.

In addition to storing settings of the Options dialog box, Profiles can also save the display and position of toolbars. In the next exercise, you add a toolbar to My Profile.

Exercise 3.4 Adding Toolbars to the Current Profile

1. Continuing from the previous exercise, move your pointer over any existing toolbar, and right-click.
2. From the shortcut menu, choose Customize to display the Customize dialog box (see Figure 3.24). If needed, select the Toolbars tab to make it active.

If you select an empty box next to a toolbar name, AutoCAD adds the toolbar to the screen. For this exercise, be sure the ACAD menu is selected from the Menu Group drop-down list.

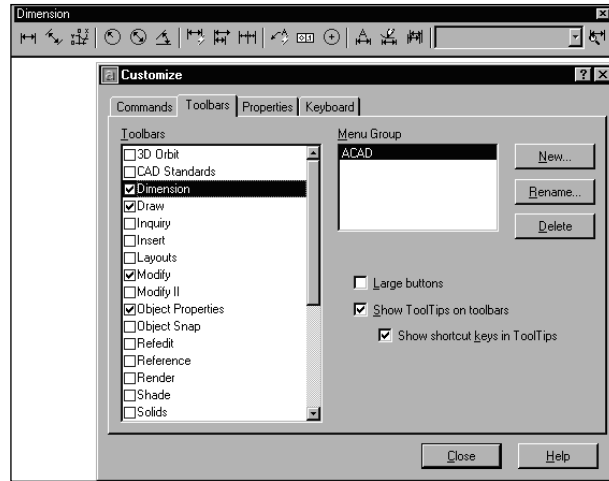


Figure 3.24 Toolbar settings can be saved with the current profile.

3. Scroll to the top of the Toolbars list, then check the box next to Dimension to display the Dimension toolbar shown in Figure 3.24.

The profile named My Profile now contains the information necessary to display the Dimension toolbar, and to restore it to its current position onscreen. To demonstrate this, continue with the exercise and change the current profile to Default Profile, which restores AutoCAD's original settings and removes the Dimension toolbar.

4. Click the Close button to dismiss the Customize dialog box.
5. From the Tools menu, choose Options, then choose the Profiles tab.
6. In the Available Profiles list, choose Default Profile, then click the Set Current button, then click OK.

When you set Default Profile as the current profile, AutoCAD restores its settings, closing the Dimension toolbar, and setting the crosshairs and the command-line window back to their original sizes. To restore the Dimension toolbar, and increase the sizes of the crosshairs and the command-line window, make My Profile the current profile.

The Profile tab has several commands that allow you to manage profiles. You can rename a profile by highlighting it in the Available Profiles list and clicking the Rename button. Similarly, you can delete unwanted profiles by highlighting them in the Available Profiles list and clicking the Delete button. (AutoCAD allows you to highlight only one profile at a time.)

You can also import and export profiles. To export a profile, highlight it in the Available Profiles list and click the Export button. When you export a profile, AutoCAD saves it as an .ARG file in the folder you select. After a profile is saved as an .ARG file, you can import it by clicking the Import button.

Finally, if you want to set a profile back to AutoCAD's original default settings, highlight the profile in the Available Profiles list and click the Reset button.

**Note**

As you adjust your system it is a good idea to save your profile to a file for safekeeping. In some cases you can also create profiles and load them on other machines to help them match your system. When loading an ARG from one machine to another, you must be sure that your installation paths and operating system are identical. The ARG will be imported into the Registry and change where AutoCAD thinks its files are located as well as how to work with the operating system. This can cause serious problems if the systems do not match.

Summary

This chapter covered a great deal of information regarding AutoCAD's drawing environment. You learned about the Options dialog box and its more than 100 settings. In addition to the many features, you learned how to define support paths and how to control AutoCAD's display. You saw how to configure plotters and how to set your own user preferences. Most importantly, you practiced setting and saving those options as profiles.

By mastering the topics discussed in this chapter, you not only increased your knowledge on how to work with AutoCAD efficiently, but you gained a fundamental understanding of AutoCAD 2002 at a level few users possess.