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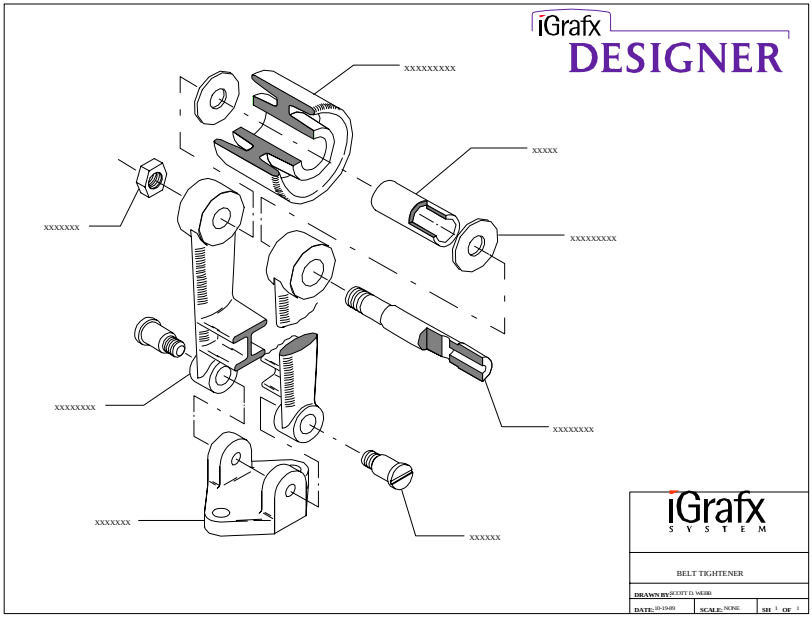
Introducing Designer

Welcome to Designer

Meet the all new Designer from Micrografx, with a next-generation interface that works the way you do. Designer anticipates your next move, using context sensitivity to give you the tools you need at the moment you need them. Designer is extremely customizable.

Whether you need a simple circle, a series of rotated overlapping images, custom-warped text, or a complex technical illustration, you can do it with Designer. And the results will show in the highest resolution of your display, printer, or imaging device.

Designer gives Windows users a whole new level of accuracy and precision in technical illustration. It delivers sophisticated object creation and editing features, impressive text handling, and more. Yet it's all surprisingly easy to learn and use.



New Features

Designer gives Windows users a whole new level of accuracy and precision in technical illustration. It delivers sophisticated object creation and editing features, impressive text handling, and more. Yet it's all surprisingly easy to learn

- Enhanced Web output—Export a Designer project to a Java Applet.
- Dynamic Dimensioning—Powerful dimension lines now include angular and radial dimension lines.
- Area, Volume, and Perimeter calculation
- Associative Dimensioning—Link a dimension line to the vertex points on an item being measured.
- Digitizer support—Lets you use a digitizer tablet and puck as an input device.
- Text searches
- Magnification effect—Lets you use an object as a viewing lens.
- Object Explorer—Shows all objects by their names. Lets you drag objects to move them between groups and layers.
- DRW File Format Support—Open DRW files created in Micrografx Window's Draw or iGrafx business Graphics directly into Designer.
- Enhanced Display view—Shows a smooth view of a Designer file.
- Trimming functions—Trim objects accurately against other objects.
- Extend - Extends one or both lines of a selected object to meet a second object.
- Active Snap—Dynamically creates snap points over existing objects.
- Sticky Lines—Attach at the ends to other existing objects. A sticky line remains attached to its mated object even if you move the object.
- Drag an object from one layer directly onto another layer.
- Variable Transparency—Lets you set an object's transparency.
- Enhanced Shortcut Menus—Click the right mouse button to pop up a context-sensitive set of commands for quick drawing and editing.

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For more information about Micrografx's licensing policies, please call Micrografx Customer Service at 972-234-1769, or write: Micrografx Customer Sales and Service, 1303 Arapaho Rd., Richardson, TX 75081, USA.

Revised 12/97

License Agreement Frequently Asked Questions

What is the significance of the Micrografx software license agreement?

The license agreement is the document under which Micrografx grants you, the end user, the right to use the software product. In addition to the end user license agreement, your use is governed by the U.S. Copyright Act.

How has Micrografx changed its end user licensing policy?

Micrografx has changed its end user license agreement to simplify how its products are licensed for home, portables, and laptop use.

What does the license say?

The underlying principle of Micrografx's licensing policy is that each use of a Micrografx product requires a license. Each license grants you the right to use one copy of the software product on your computer. In addition, the license sets out the rules by which you may use the product on a computer network.

What defines "in use"?

1. Loaded on the hard disk.
2. A single computer accessing the product from a server.

How do I determine how many licenses I need for my company to comply with the Micrografx license agreement?

Starting with the principle that you need one license for each computer that uses the product, there are two basic rules that you need to follow in counting the number of "licenses" in your company. First, each copy of the product that is installed on a hard disk or other storage device of a computer is a "use" that requires one license. Second, if you plan to use the product on a computer network, and you have fewer licenses than the total number of workstations, then you need to determine the maximum number of computers that will use the product. The total number of "uses, " arrived at by adding the number of copies that you will have installed on hard disk plus the maximum number of uses on a network, determines the number of licenses you need.

How do I determine the "maximum number of users" in my company's computer network?

To comply with the Micrografx license agreement, you must have adequate controls and mechanisms in place to ensure that you have at least as many licenses as you have users of the network. While there is no single method that Micrografx requires or prescribes, you must have electronic or manual controls or procedures to justify your calculation of the number of licenses. For example, there are electronic devices and software programs that limit access to particular products running off a network server that would comply with this requirement (see the next question about "electronic token" technologies).

If I load the product on the hard disk of every workstation on the network, can I still count the number of users so I don't have to purchase a license for every workstation? Is the answer different if I use the so-called "electronic token" technology to limit the actual number of users?

No. And no. Loading the product onto the hard disk or other storage device of a network workstation is a "use" that requires a license. It makes no difference if you have an "electronic token" system to regulate use. Of course, if you transfer or "download" the product from the server to a workstation's hard disk, which requires one license, you may later completely delete the product off that hard disk to free up that one license for use elsewhere.

Do I need a separate license for the copy of the product on the server?

No. You need not count the server as one "use, " provided that the server copy is merely accessed by the workstations connected to it and not used separately.

If I have a Micrografx application loaded into the temporary memory (RAM) of my network, but it is iconized and not actively in use, is a license required?

Yes. We consider that you are "using" one of our products whenever it is loaded on your hard disk or in RAM. Thus, a program that is iconized requires a license because it was first loaded into memory, or RAM.

Does Micrografx continue to allow end users to make a second copy of its application for home and laptop use?

Yes. If you have a Micrografx product loaded on the hard disk or other storage device of your computer, then you may make a second copy for home and laptop use so long as the Software is not used on both computers at the same time. The principle here is to allow you to use the Micrografx product even when you are away from work, either at home or while traveling. However, this does not apply to products that are loaded on the network server. (Some companies have their own restrictions on home software use, so you may need to check with your systems administrator on this topic.)

Is this Micrografx license a site license? If not, how does it differ?

This Micrografx end user license is not a site license because each use requires a separate license.

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Getting Started with Designer

Getting assistance as you work

If you are new to iGrafx Designer

Open the View menu, click Toolbars, and make sure that the Show Tool Tips option is checked and the Hints toolbar is turned on.

- Tool Tips, displayed near the mouse pointer when you pause on a tool or button, help you relate the tool's image to its name.
- The Hint toolbar gives a brief description of the tool, button, or menu item you are pointing to. The Hint toolbar also displays "Action Hints" as you draw and edit objects Action Hints guide you step-by-step through Designer procedures.
- If you are not sure what your options are while editing an object, click the right mouse button. A shortcut menu appears, containing commands that are available for the current object.

When you want more detailed information

- To see more information about a tool or button, point to it and press the Help key (**F1**). A popup message tells you how to use the tool or button. To close the message, click inside it or press the **Esc** key.
- For quick information about a menu item, press the Help key (**F1**) while the item is highlighted. A popup message gives you assistance.To close the message, click inside it or press the **Esc** key.

When you are using a dialog box, click the "**?**" button in the dialog box.

When you are viewing Designer's Help windows, the large Designer Help window contains two "browse" buttons (<< and >>). Click those buttons to page backward or forward through a set of closely related topics. (If you prefer using the keyboard, press the **<** and **>** keys.)

The Designer Steps window appears on the right-hand side of the screen. It displays numbered steps for a specific procedure. This window stays in front of other windows so you can perform each step without Designer's window covering up the remaining steps.

Tip

To copy the text from a Help window to the Clipboard, drag across the text, and then press **CTRL+C**.

To close any active Help window, press the **ESC** key.

Installing Designer

Installing Designer on your computer's hard drive is easy with the iGrafx Installer. This installation program lets you install options now, or you can add them later by running the Installer again.

You must use the iGrafx Installer to install any part of the Designer package, including fonts and import and export translators provided (as compressed files) with Designer. The installation program automatically decompresses the program files as it installs them onto your hard disk.

If you later want to install additional fonts or translators, run the Installer again and choose Custom Installation in the Installer menu.

The Installer checks your hard drive for free disk space and lets you know how much space is needed, as well as how much space is free.

To install Designer from CD-ROM

1. Start Windows. The Program Manager opens.
2. Insert the Designer CD-ROM in your CD-ROM drive.
3. Open the File menu and choose Run. The Run dialog box opens.
4. Type x:\setup (where x is the drive letter for your CD-ROM drive) and press enter.
5. Follow the instructions on your screen.

Installing Designer on a Network

Instructions for installing Designer on a network are included in *The iGrafx Network Installation Guide*.

Uninstalling Designer

In the event that you need to remove Designer from your hard drive, the iGrafx Installer can delete the program and related files, plus it removes all references to Designer in initialization (INI) files and the registry.

To remove Designer

1. Click Start and select Settings.
2. From the Settings submenu, select Control Panel.
3. From the Control Panel, select Add/Remove programs.
4. Click the Install/Uninstall tab.
5. Select iGrafx System Uninstaller and click the Add/Remove button.
6. Follow the instructions on the screen.

Starting Designer

Now you are ready to begin using Designer. The iGrafx Installer creates an application group for you during the installation process.

To start Designer

- Click Start, select Programs. Select iGrafx from the submenu. Then select Designer.

Displaying the Welcome Screen

The welcome screen automatically displays when opening Designer. Deselect this option to prevent the dialog box from appearing the next time you start Designer.

Getting Around in Designer

The Designer Window

Think of the Designer main window as an electronic drawing board. There are certain areas of the window that always display the same information or options. For example, the left side of the window always shows the toolbox, and the top of the window always shows the menus.

If you are new to Designer, use this section to help identify the major areas of the Designer window.

The toolbox, found at the left of the main Designer window, contains tools that let you create and edit drawings. There is also a View tool that lets you view your drawing at different sizes.

When you click a tool in the toolbox, the ribbon at the top of the window usually changes to show buttons that let you specify how you want to use the tool. For example, if you want to draw a rectangle, you click the Draw tool in the toolbox, and then click the Rectangle button in the ribbon.

Menu Commands

The menus are found in the menu bar at the top of the window (under the title bar). These menus generally contain commands and options that let you perform a variety of actions.

The menus are grouped by category. For example, the Effects menu contains commands that change the appearance of your drawing.

Hints

Designer provides several kinds of hints to help you in your work. As you point to a button, command, or tool, a hint provides a brief description of that particular element. A keyboard shortcut is often included.

You can show or hide the various types of hints. You can also undock, move, resize, and reshape the floating hint window to keep it visible but out of your way.

To show or hide tool tips

- Open the View menu and select Toolbars. Select Show Tool Tips in the dialog box. When Tool Tips is selected, pointing for one second to a tool or button with the mouse pointer displays the name of the tool or button.

To show or hide longer hints

1. Open the Display menu and choose Hint Line. A submenu opens.

2 Select Window to display the floating hint window.

Tip

You can move, resize, or shape the floating hint window to keep it visible but out of your way. To change the size of the displayed text in the window, open the Control menu in the floating hint window, choose the Font Size command, and then choose Small, Medium, or Large.

Drawing Windows

Different documents appear in separate windows within the Designer main window. You can display many windows at a time, but only the active drawing window receives the action. For example, when you save a drawing, only the one in the active window is saved.

Rulers and Grid

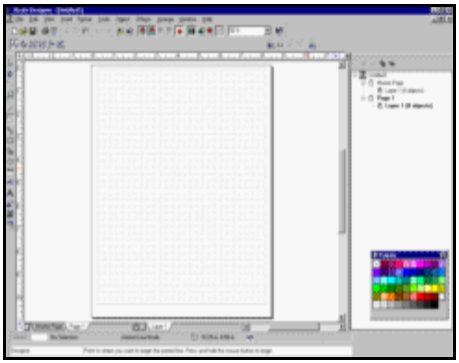
The rulers and grid points appear for each open document to help you measure and position the components of your drawing. You can set Designer's preferences to show or hide the rulers and grid, change the unit of measure for the rulers, and change the spacing of the grid points.

Creating a New Designer Window

When you want to create a new drawing, use the New command in the File menu.

To create a new drawing

- Open the File menu and choose New. Designer opens a new window containing an untitled document.



To give the new file a name, open the File menu and choose the Save or Save As command. The Save As dialog box opens. Type a name in the File Name text box and press enter.

Designer lets you have as many files open at one time as your computer's memory will allow, each in its own drawing window. The title bar of a new window displays "Untitled1" until you save the file with a specific filename. If you have more than one unsaved document, they are named Untitled1, Untitled2, and so forth.

In addition, you can open multiple windows for the same document to view a different page in each window. You can even view the same page in two different windows.

Designer offers a context-sensitive, on-line help system that is a complete source of information about features, commands, and dialog boxes.

On-line help messages give detailed information about commands, dialog boxes, buttons, and tools; techniques for drawing and editing; and additional concepts related to Designer and the Windows environment. Using on-line help is as easy as pressing the F1 key.

Accessing On-line Help

You can access help in one of several ways. One way is to point to any tool or button, or select any command or dialog box, and then press F1 to access "context-sensitive" help. When you press F1, you receive a help message specific to the tool, button, command, or dialog box that you are currently pointing to or using.

To use context-sensitive help

1. Highlight a command, open a dialog box, or point to a tool or button.
2. Press F1. A context-sensitive message appears in the help window.

Another way to access help involves using the Help menu. The Help menu lets you access information about Designer commands, terms and phrases, error messages and solutions, shortcut keys, and topics related to Designer and the Windows environment.

Technical Support

Micrografx has developed a comprehensive support program that will enable customers to choose the support option that best meets their presale and post-sale requirements. our staff of experienced technical support advocates are specialists in the critical areas and applications important to you, delivering fast, flexible, and comprehensive service for the Micrografx business and professional products you own.

Complimentary support

Web Based Support:

The following support options are available free of charge through the Micrografx Website 24 hours a day, 7 days a week at

http://www.micrografx.com/frames.asp?s=8

Xpert Knowledgebase:

Search the knowledge base of product specific technical issues, top issues, how-to questions and suggestions, at your convenience.

Users Forum:

View user to user discussions or post a question for peer-to-peer support.

Downloadable Files:

Download available product updates, patches, and problem fixes.

Phone Support:

Registered users are entitled to 30 days free support beginning from the date of your first call by dialing (972) 234-2694, Monday through Friday, 7:00 a.m. to 7:00 p.m. CST.

Continued Support Options

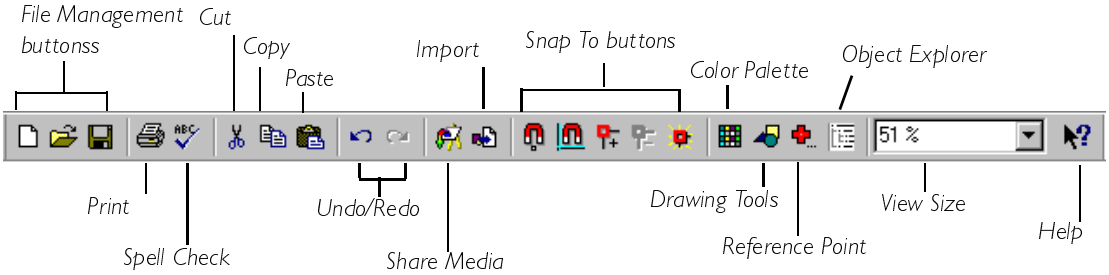
Micrografx offers several options to continue support after the initial 30 days of complimentary support that allows customers to choose the service that best fits their needs. Support on Demand options are on a per incident basis. In addition, annual support contract options are available providing toll-free priority phone support.

For more information or to purchase support, call Customer Care at (800) 664-6957.

Tool and Button Summary

The Standard Toolbar

The Standard Toolbar contains Designer's most frequently used buttons.

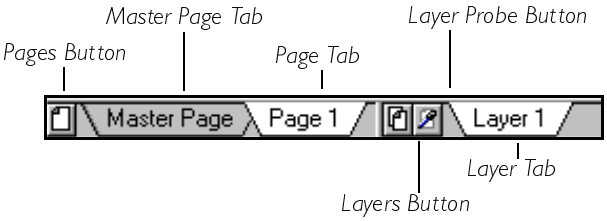


Tool	Name	Description
	File Management Buttons	Use the File Management buttons to create, open, or save to diskette a new or existing document.
	Print	Use the Print button to open the Print dialog.
	Spell Check	Use the Spell Check button to check the spelling on the current page.

	Cut, Copy, Paste	Use these buttons to cut, copy, and/or paste selected objects or blocks of text.
	Undo/Redo	Use the Undo button to undo the last performed task. Use the Redo button to reapply the last performed task.
	Share Media	Use the Share Media button to access clip art and other media files.
	Import	Use the Import button to import a file into the current document.
	Snap To Rulers	Use the Snap To Rulers button to turn on or off the snap to rulers option.
	Snap To Guide Lines	Use the Snap to Guide Lines button to turn on or off the snap to guide lines option.
	Add/Remove Snap Points	The Add/Remove Snap Points buttons to add or remove snap points on a selected object.
	Dynamic Snap	Use the Dynamic Snap button to enable the dynamic snap points option.
	Color Palette	Use the Color Palette button to show or hide the active color palette.
	Drawing Tools	Use the Drawing Tools button to open the drawing tools ribbon at the bottom of your Designer window.
	Reference Point	Use the Reference Point button to show or hide the Reference Point toolbar.
56 %	View Size Box	Use the View Size box to control the zoom factor of a particular page.

	Help	Use the Help button to open Designer's online help.

Permanent Project Buttons/ Tabs



Tool	Name	Description
	Pages Button	Use the Pages Button to add pages, update the master page, move to a different page, or open the Pages dialog box to name, add, and delete pages.
Master Page	Master Page Tab	Click the Master Page tab to add a master page to your document. Items and features, such as headers, footers, logos, and other graphics that are placed on the master page will appear on every page of your Designer document.
Page 1	Page Tab	The Page tab lets you add new pages to your document and go to a different page.
	Layers Button	Use the Layers button to add layers, move to a different layer, or open the Layers dialog box to name, add, delete, rearrange, color, hide or show, and lock or unlock layers.
	Layer Probe	Use the Layer Probe button to select an object when you are uncertain of which layer to choose.

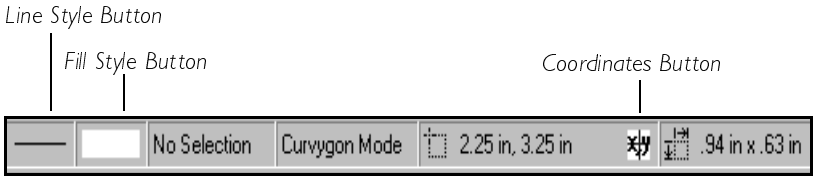
Layer 1	Layer Tab	The Layer tab lets you add new layers to your drawing and move to a different layer.

Note

On the Master Page, Page 1, and Layer 1 tabs, left click the tab to make the page active; right click to display the menu.

Status Bar Buttons

The status bar at the bottom of the Designer window contains current information about your drawing, including line style, interior fill, type of object selected, zoom level, and coordinates. You also can click the Coordinates button to open the Coordinates menu. The status bar can be a single line or a double line.



Tool	Name	Description
	Line Style	The Line Style button shows the line style and weight of the currently selected object. If no object is selected, the Line button shows the default line style and weight. Click to open the Object Format/Line Fill dialog.
	Fill Style	The Fill Style button shows the fill of the currently selected object. If no object is selected, the Fill button shows the default fill. Click the Fill Style button to open the Object Format/Interior Fill dialog box where you can select colors and the type of fill.
	Coordinates	The Coordinates button (keyboard shortcut **CTRL**+Q) opens a dialog that lets you change the coordinate system. You can also open a dialog box that lets you use numeric coordinates to control editing and drawing actions that usually require the mouse.

Constraint Buttons

The constraint buttons let you apply restrictions on how objects can be drawn. A selected button remains on until you click it again to turn it off.

Tool	Name	Description
	Angle Constraint	The Angle Constraint button forces objects to draw in 15-degree increments.
	Proportional Constraint	The Proportional Constraint button forces rectangles to draw as squares and ellipses to draw as circles.
	Reverse Direction	The Reverse Direction button reverses the direction Designer normally draws objects that are drawn from a single side.
	From Center	The From Center button forces objects to draw from a center point outward.

Select Tool

The Select tool lets you select objects in a document.

Rotate/ Skew Tool

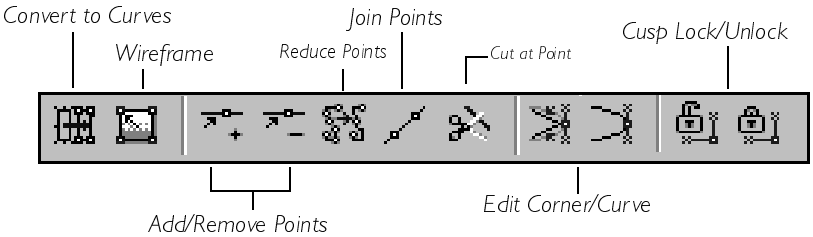
The Rotate/Skew tool allows you to rotate and/or skew, or twist, a selected object. You can rotate an object by clicking and dragging a corner handle; and you can skew an object by clicking and dragging a side handle.

Edit Tool

The Edit tool lets you extrude, warp, and reshape objects in a document. When you click the Edit tool, the ribbon displays a set of buttons specific to this tool. Click the Edit tool to view a menu of the ways to edit a selected object.

Reshape Buttons

The Reshape buttons display an object's anchor points and puts the object in Point Reshape mode. In point reshape mode, you can reshape the object by dragging its anchor points.

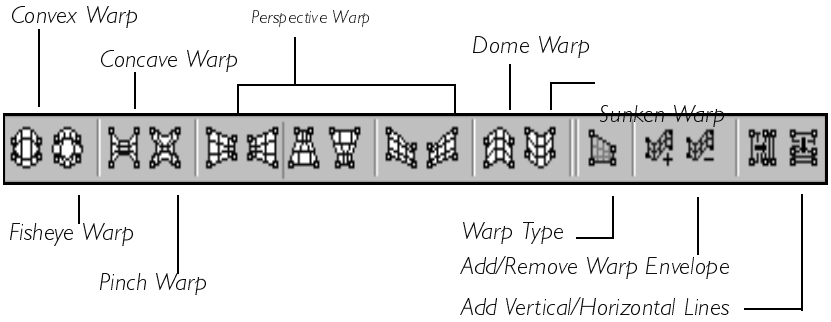


Tool	Name	Description
	Convert to Curves	The To Curves button (keyboard shortcut **CTRL**+r) converts an object such as text, a rectangle, or an ellipse into a conventional object. This lets you reshape the object by dragging its anchor points. It also converts dimension lines to groups, and converts Windows metafiles to Designer objects.
	Wireframe	The Wireframe button toggles between editing the object with and without fills. Editing with a fill shows the exact results, but editing without a fill is faster.
	Add/Remove Points	The Add Point button places an anchor point where you click on an object. The Remove Point button removes highlighted anchor points.
	Reduce Points	The Remove Points button enables you to remove some of the points in the graphic.
	Join Points	The Join Points button connects two highlighted anchor points with a straight line.
	Cut at Point	The Cut at Point button cuts through a line creating two separate anchor points with a small empty space between them.

	Edit Corner/Curves	The Corner button (keyboard shortcut **CTRL**+5) converts the lines connected to a selected anchor point into straight lines. If applied to two selected anchor points that are adjacent, the Corner button converts the line between the two points into a straight line. The Symmetrical Curve button (keyboard shortcut **CTRL**+7) converts lines connected to selected anchor points into symmetrically curved lines.
	Cusp Lock/Unlock	The Unlocked Cusp button (keyboard shortcut **CTRL**+6) unlocks an anchor's Bézier control points so you can move the points independently. By moving one point at a time, you can create shapes such as a curving wedge (that is, a cusp). The Locked Cusp button (keyboard shortcut **CTRL**+4) locks the angular relationship between Bézier control points so that when you drag one of the points, the opposite moves also as required to keep the angle between the two points the same.

Warp Buttons

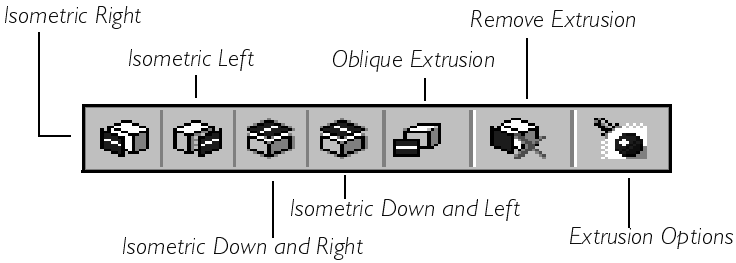
The Warp buttons are used to twist or skew selected objects. Use any of the predefined warp buttons to quickly warp a selected object. The non-predefined warp buttons are described below.



Tool	Name	Description
	Warp Type	Use the Warp Type button to edit a selected object as a line, curve, or Bézier.
	Add/Remove Warp Envelope	Use the Add/Remove Warp Envelope buttons to add or remove the warp envelope, or grid, around a selected object.
	Add Vertical/ Horizontal Lines	Use the Add Vertical/Horizontal Lines buttons to add vertical or horizontal lines to a warp envelope.

Extrude Buttons

Extrude buttons are used to pull selected objects.

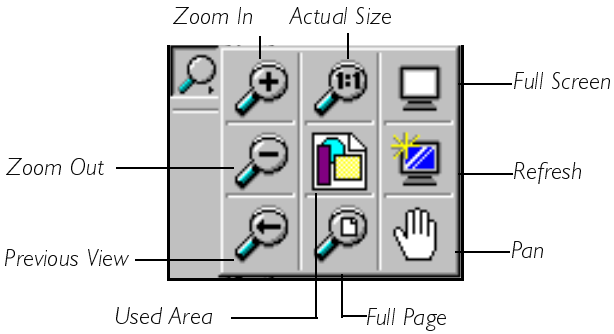


Tool	Name	Description
	Isometric Right	Use the Isometric Right button to extrude an object to the right.
	Isometric Left	Use the Isometric Left button to extrude an object to the left.
	Isometric Down and Right	Use the Isometric Down and Right button to extrude an object downward and to the right.
	Isometric Down and Left	Use the Isometric Down and Left button to extrude an object downward and to the left.
	Oblique Extrusion	Use the Oblique Extrusion button to extrude an object forward while leaving the original shape intact.
	Remove Extrusion	Use the Remove Extrusion button to remove the extrusion effects of a selected object.
	Extrusion Options	Use the Extrusion Options button to open the Extrusion Options dialog box.

View Tool

Designer provides many ways for you to view your work. You can quickly change from one view to another as needed.

When you click the View tool, a set of tools opens to let you choose various views and functions. The view tools are gray if there are no open documents or if you click the Page Manager tool.



Tool	Name	Description
	Zoom In	Use the Zoom In button (keyboard shortcut F6) to see and edit objects in fine detail. You can drag a rectangle to define the zoom area for the objects you want to magnify, or you can click on the drawing to magnify by two times.
	Zoom Out	Use the Zoom Out button (keyboard shortcut **CTRL**+**SHIFT**+F6) to change from a close-up, detailed view to a broader, overall view of the page. Clicking on this tool zooms out two magnification levels.

	Previous View	Use the Previous View button (keyboard shortcut **CTRL**+F3) to return to the view used just prior to the current view, up to the last 16 views. This tool is gray if there are no previous views.
	Actual Size	Use the Actual Size button (keyboard shortcut **SHIFT**+F8) to view objects at the same size they print. You can also select an object and click the Actual Size tool to center the selected object in the active window
	Used Area	Use the Used Area button (keyboard shortcut **CTRL**+**SHIFT**+F3) to zoom in on the portion of the current page that contains objects.
	Full Page	Use the Full Page button (keyboard shortcut **SHIFT**+F6) to view all of the objects on the current page. Designer fits the current page in the window.
	Full Screen	Use the Full Screen button (keyboard shortcut F4) to view just your work, without menus, title bar, or any other part of the Designer window. Press **ESC** or click anywhere with the mouse to return to the previous view.
	Refresh	Use the Refresh button (keyboard shortcut F3) to clear the screen of unwanted fragments that occasionally result from manipulating objects.
	Pan	Use the Pan button to move the desired section of your drawing into view.

Simple Line Tool

The Simple Line tool (keyboard shortcut **CTRL**+d) lets you draw lines, curves, rectangles, polygons, and ellipses using a variety of methods.

Tool	Name	Description
	Line Segment	Use the Line Segment button to draw straight line segments.
	Line Segment from Center	Use the Line Segment from Center button to draw a line segment starting from the center and extending an equal distance in both directions.
	Parallel Line	Use the Parallel button to draw lines that are parallel to line segments, or tangent to arcs and ellipses.
	Perpendicular Line	Use the Perpendicular button to draw lines that are at right angles to line segments, arcs, and ellipses.
	Quarter Arc Line	Use the Quarter Arc button to draw an arc that is one quarter of an ellipse.
	Reverse Quarter Arc	Use the Reverse Quarter Arc button to draw an inverted arc.
	Parabola	Use the Parabola button to draw parabolic shapes.
	Parabola from Center	Use the Parabola from Center button to draw a parabolic shape from the center outward.

Compound Line Tool

The Compound Line Tool lets you draw linear and curving shapes that contain multiple points.

Tool	Name	Description
	Isometric Right	Use the Isometric Right button to extrude an object to the right.
	Isometric Left	Use the Isometric Left button to extrude an object to the left.
	Jointed Line	Use the Jointed Line button to draw shapes that are a "chain" of connected straight lines.
	Curved Line	Use the Curved Line button to draw objects that are a "chain" of connected, curved lines.
	B-Spline	Use the B-Spline button lets you draw Bézier spline curves. A B-Spline is a curve drawn inside a wedge created by two construction lines. For example, "V" shaped construction lines would create a "U" shaped object.
	Bézier Curve	Use the Bézier Curve button to draw and edit Bézier curves at the same time.
	Freehand Line	Use the Freehand button to draw freeform objects.
	Irregular Polygon	Use the Irregular Polygon button to draw closed objects with multiple sides.

Sticky Line Tool

Create diagramming lines with ends and points that automatically attach, or stick, to the ends and points of other lines.

Tool	Name	Description
	Sticky Line Segment	Use the Sticky Line Segment button to draw a single sticky line.
	Sticky Quarter Arc	Use the Sticky Quarter Arc button to draw a sticky arc that is one quarter of an ellipse.
	Sticky Jointed Line	Use the Sticky Jointed Line button to draw a sticky line composed of connected, straight lines.
	Sticky Curved Line	Use the Sticky Curved Line button to draw a sticky line composed of connected, curved lines.
	Sticky Freehand Line	Use the Sticky Freehand Line button to draw a freeform line that sticks to other objects.
	Sticky Right-angle Lines	Use the Sticky Right-angle Lines button to draw sticky lines that follow right-angle paths between one or two objects.
	Sticky Bézier Lines	Use the Sticky Bézier Lines button to draw sticky lines that follow right-angle paths, with Bézier curved corners, between one or two objects.

Rectangle Tool

The Rectangle tool lets you draw rectangles, squares, and rounded rectangles.

Tool	Name	Description
	Diagonal Rectangle	Use the Diagonal Rectangle button to draw rectangles by dragging from one corner to its opposite.
	Diagonal from Center	Use the Diagonal from Center button to draw rectangles by dragging from the center to the corner.
	Height/Width	Use the Height/Width button to draw rectangles by drawing the height and then the width.
	From Center Line	Use the From Center Line button to draw rectangles from the center to the side.
	Diagonal Square	Use the Diagonal Square button to draw squares from one corner to the diagonally opposite corner.
	Diagonal Square from Center	Use the Diagonal Square from Center button to draw squares from the center to the corner.
	Single Side	Use the Single Side button to draw squares by dragging only one side.
	Rounded Rectangle	Use the Rounded Rectangle button to draw rectangles with rounded corners. The rounding radius is determined by the setting in the Rounding box.

.25 in	Rounding Box	The Rounding box shows the current curvature radius. You can click the box and type a value, or use the arrows next to the box to select a value. A larger radius increases the curvature, a smaller radius decreases it.

Polygon Tool

The Polygon button lets you draw polygon and star shapes.

Tool	Name	Description
	Triangle To Corner	Use the Triangle to Corner button to draw a triangle from the center to the corner.
	Triangle To Side	Use the Triangle to Side button to draw a triangle from the center of the triangle to the middle of the bottom side.
	Triangle Single Side	Use the Triangle Single Side button to draw a triangle from one side to the other.
	Hexagon To Corner	Use the Hexagon to Corner button to draw a hexagon from the center to a corner.
	Hexagon To Side	Use the Hexagon to Side button to draw a hexagon from the center to a side.
	Hexagon Single Side	Use the Hexagon Single Side button to draw a hexagon from one side to another.
	Octagon To Corner	Use the Octagon To Corner button to draw an octagon from the center to a corner.
	Octagon To Side	Use the Octagon To Side button to draw an octagon from the center to a side.
	Octagon Single Side	Use the Octagon Single Side button to draw an octagon from one side to another.

	To Corner	Use the To Corner button to draw a polygon from the center to a corner.
	To Side	Use the To Side button to draw a polygon from the center of the polygon to the middle of a side.
	Single Side	Use the Single Side button to draw a polygon by drawing just one side.
	To Point	Use the To Point button to draw a star from the center to a point.
	Point to Side	Use the Point to Side button to draw a star from the center to the middle of a side.
	Point to Point	Use the Point to Point button to draw a star by drawing the distance between points.
	Megagon	Use the Megagon button to draw a megagon by clicking and dragging outward, inward, or in a circular motion.
	Curvygon	Use the Curvygon button to draw a megagon with curved points by clicking and dragging outward, inward, or in a circular motion.
5	Number of Sides Box	Use the Number of Sides box to assign the number of sides to a polygon, megagon, or star.

Ellipse Tool

The Ellipse tool lets you draw ellipses, circles, arcs, and pies.

Tool	Name	Description
	Diagonal Ellipse	Use the Diagonal button to draw ellipses by dragging from one corner of the bounding box to its opposite.
	Ellipse From Center	Use the Ellipse from Center button to draw ellipses by dragging outward from the center.
	Height/Width	Use the Height/Width button to draw ellipses by dragging the height and then the width of the bounding box.
	Centerline Ellipse	Use the Centerline Ellipse to draw ellipses by dragging the center line to create the width of the ellipse, and then moving the cursor to size the height.
	Circle From Corner	Use the Circle From Corner button to draw circles by dragging from the center.
	Diameter	Use the Diameter button to draw a circle by dragging its diameter.
	Circle From Radius	Use the Circle From Radius button to draw circles by dragging in any direction.
	3-Point Circle	Use the 3-Point Circle button to draw a circle by specifying three points of its edge.

	3-Point Arc	Use the 3-Point Arc button to draw an arc by specifying two end points and an arching point.
	Pie	Use the Pie button to draw pies by modifying an existing ellipse.

Text Tool

The Text tool (keyboard shortcut **CTRL**+t) lets you enter and edit text.

Tool	Name	Description
	Text Mode	Use the Text Mode button to enter and edit text. You can click in the drawing area and enter freeform text, or you can drag a container and enter block text.
	Text Path	Use the Text Path button to enter text along the edge of a selected object.
	Fit Path	Use the Fit Path button to fit freeform text to a path or edit the arrangement of text already fit to a path. The Fit Path button displays a palette of "quick choice" text alignment buttons, and the Choose Position and Remove Curve buttons.
	Shape Text	Use the Shape Text button to enter text inside of a selected (closed) object.
	Font Recall	Use the Font Recall button to select from the last ten fonts used.
Arial	Font List Box	The Font List box displays the name of the current font or the font of the text that contains the text cursor. Use the down arrow next to the Font List box to display a list of available fonts and to choose a font.

	Font Size Box	The Font Size box shows the current point size or the point size of the text that contains the text cursor. You can use the arrows next to the Font Size box to change the size.
	Font Styles	Use the Font Styles buttons to choose text styles. The available text styles are bold (keyboard shortcut **CTRL**+b), italic (keyboard shortcut **CTRL**+i), underline (keyboard shortcut **CTRL**+u).
	Small Caps	Use the Small Caps button (keyboard shortcut **CTRL**+m) to convert all text to small capital letters.
	Horizontal/Vertical Alignment	The Horizontal Alignment button displays buttons that let you change the horizontal alignment of selected text. When you align freeform text, the text is aligned based on the point where you originally placed the text. For example, if you are aligning to the right and click to enter freeform text, the text extends to the left as you type. The Vertical Alignment button displays buttons that let you change the vertical alignment of selected text except in text that is not in a rectangular container.
	Text Attributes	The Text Attributes button (keyboard shortcut **CTRL**+**SHIFT**+t) opens the Text Attributes dialog box. This dialog box lets you change fonts, margins, spacing, and tab settings.

	Spell Check	The Spell Check button opens the Spelling dialog box if a misspelling is found.

Dimension Tool

The Dimension tool (keyboard shortcut **CTRL**+0 [zero]) lets you draw dimension lines and set dimension options.

Tool	Name	Description
	Aligned Dimension	Use the Aligned Dimension button to draw dimension lines to show the diagonal distance between two points.
	Horizontal Dimension	Use the Horizontal Dimension button to draw dimension lines to show the horizontal distance between two points.
	Vertical Dimension	Use the Vertical Dimension button to draw dimension lines to show the vertical distance between two points.
	Dimension Options	Use the Dimension Options button to set dimension options, including whether units of measurement and extension lines are shown.
	Angular Dimension	Use the Angular Dimension button to create a new, angular dimension line.
	Radial Dimension	Use the Radial Dimension button to create a new, radial dimension line.
	Displayed Precision Box	The Displayed Precision box shows the current decimal precision of the dimension units of measure. You can use the down arrow next to the list box to select a new precision level.
	Units	The Units button lets you select the units of measure used by a dimension line.

	Text Attributes	The Text Attributes button (keyboard shortcut **CTRL**+**SHIFT**+t) opens the Text Attributes dialog box. This dialog box lets you change fonts, margins, spacing, and tab settings.
	Line Ends	The Line Ends button opens a menu that lets you choose the type and placement of dimension line ends.

Callout Tool

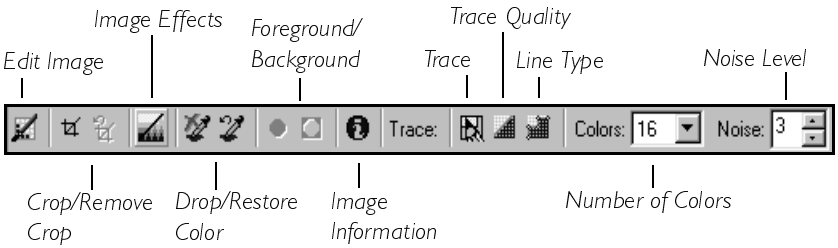
The Callout tool lets you create callout lines and text. You can also set callout options.

Tool	Name	Description
	One-Segment Callout	Use the One-Segment Callout button to create a callout with one leg.
	Two-Segment Callout	Use the Two-Segment Callout button to create a callout with two legs.
	Three-Segment Callout	Use the Three-Segment Callout button to create a callout with three legs.
	Reshape Callout	Use the Reshape Callout button to reshape selected dimension or callout lines.
	Text Attributes	The Text Attributes button (keyboard shortcut **CTRL**+**SHIFT**+t) opens the Text Attributes dialog box. This dialog box lets you change fonts, margins, spacing, and tab settings.
	Line Ends	The Line Ends button opens a menu that lets you choose the type and placement of dimension line ends.
	Callout Options	Use the Callout Options button to display the Dimensions dialog. From this dialog, you can set general options, text orientation, text position, radial options, callout options, and tolerance.

	Callout Text Box	Use the Callout Text box to select or enter callout text.

Image Tool

The Image tool (keyboard shortcut **CTRL**+w) lets you trace and crop bitmap images. You can also open your selected bitmap editor in the Image Tool ribbon.



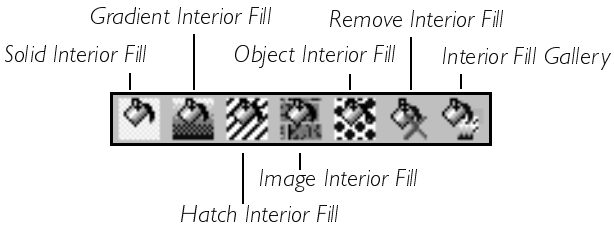
Tool	Name	Description
	Edit Image	The Edit Image button opens your selected bitmap editor, such as Picture Publisher. You can change the default bitmap editor in the General panel of the Preferences dialog box.
	Crop/Remove Crop	The Crop button lets you specify a rectangular area of a selected image to show. The rest of the image is hidden. The Remove Crop button restores a previously cropped image.
	Image Effects	The Image Effect button opens the Micrografx Effects Browser. Use the Effects Browser to apply a special image effect to a selected object.
	Drop/Restore Color	Use the Drop Color button to select a color that you want to become transparent. Use the Restore Color button to remove the transparency from the image.

	Foreground / Background	The Foreground and Background buttons open a palette from which you can choose foreground and background colors for a monochrome bitmap image. The appearance of these buttons changes to reflect the current selection.
	Image Information	The Image Information button shows file and display size information about a selected bitmap image.
	Trace	Use the Trace button to create a vector "tracing" of the bitmap image that is placed on top of the image.
	Trace Quality	The Trace Quality button opens a menu that lets you adjust how accurately and smoothly Designer traces a bitmap image.
	Line Type	The Line Type button opens a menu that lets you choose whether Designer uses lines or curves to create the tracing.
16	Number of Colors Box	In the Number of Colors box, select the number of colors you want to use when tracing an image. You can assign up to 256 colors.
3	Noise Level Box	Use the Noise Level box to select the noise level to use when tracing an image.

Format Tool

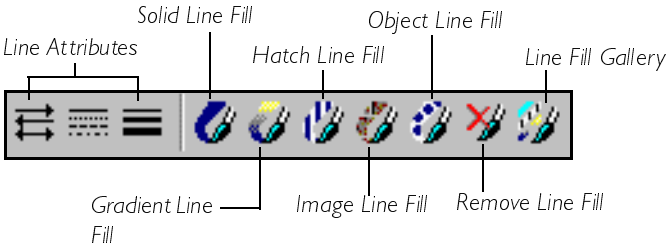
The Format tool (keyboard shortcut **CTRL**+y) lets you select colors, line thickness, gradient types, and other styles for objects.

Format Ribbon - Interior



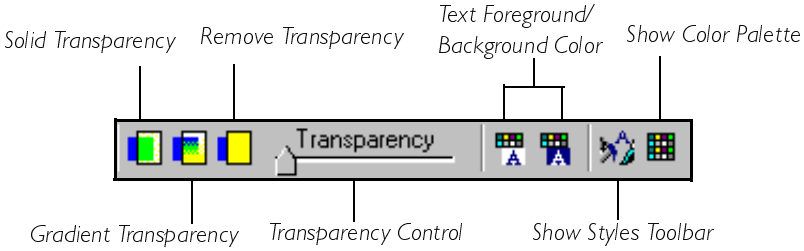
Tool	Name	Description
	Solid Interior Fill	Use the Solid Interior Fill button to select an interior fill color.
	Gradient Interior Fill	Use the Gradient Interior Fill button to select a gradient interior fill color.
	Hatch Interior Fill	Use the Hatch Interior Fill button to select a hatch, or line pattern, interior fill.
	Image Interior Fill	Use the Image Interior Fill button to select an image to use as an interior fill.
	Object Interior Fill	Use the Object Interior Fill to select an object to use as an interior fill.
	Remove Interior Fill	Use the Remove Interior Fill button to remove any type of fill currently assigned to an object.
	Interior Fill Gallery	Use the Interior Fill Gallery button to select an interior fill from a pictorial list of the most recently applied fill styles.

Format Ribbon - Line



Tool	Name	Description
	Line Attributes	Use the Line Attributes button to choose a line's ends, style, and thickness.
	Solid Line Fill	Use the Solid Line Fill button to select a line's fill color.
	Gradient Line Fill	Use the Gradient Line Fill button to select a gradient line fill color.
	Hatch Line Fill	Use the Hatch Line Fill button to select a hatch, or pattern, line fill.
	Image Line Fill	Use the Image Line Fill button to select an image to use as a line's fill.
	Object Line Fill	Use the Object Line Fill button to select an object to use as a line's fill.
	Remove Line Fill	Use the Remove Line Fill button to remove any type of fill currently assigned to a line.
	Line Fill Gallery	Use the Line Fill Gallery button to select an interior line fill from a pictorial list of the most recently applied line fill styles.

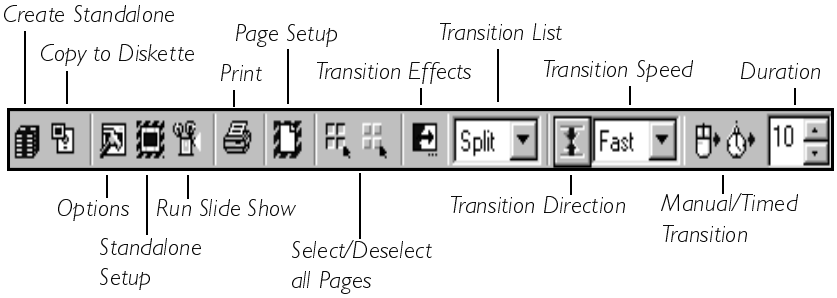
Format Ribbon - Other Settings



Tool	Name	Description
	Solid Transparency	Use the Solid Transparency button to set the transparency of the selected object.
	Gradient Transparency	Use the Gradient Transparency button to set the transparency and gradient of the selected object.
	Remove Transparency	Use the Remove Transparency button to undo the transparency settings on the selected object.
	Transparency Control	Use the sliding Transparency Control to adjust the amount of transparency for the selected object.
	Text Foreground / Background Color	Use the Text Foreground/ Background Color buttons to select the foreground and background colors for any selected text.
	Show Styles Toolbar	Use the Show Styles Toolbar button to either show or hide the Styles Toolbar.
	Show Color Palette	Use the Show Color Palette button to either show or hide the color palette.

Page Manager Tool

The Page Manager tool (keyboard shortcut **CTRL**+**G**) lets you view, move, and print pages in Designer. It also lets you create slide shows using each page as a slide.



Tool	Name	Description
	Create Standalone	Use the Create Standalone button to save a presentation as an executable program (.EXE).
	Copy to Diskette	Use the Copy to Diskette button to copy a standalone side show to one or more diskettes.
	Options	Use the Preferences button to choose a pointer style and to set transition preferences.
	Standalone Setup	Use the Standalone Setup button to select the number of colors and the screen resolution.
	Run Slide Show	Use the Run Slide Show button to begin a slideshow, consisting of all slides in the document or only a selected range of slides.

	Print	The Print button opens a dialog box that lets you select the pages to print along with other printing options.
	Page Setup	The Page Setup button lets you select the page size and orientation. You can also change margins, page color, and subdivide the page (by tiling) here.
	Select/Deselect all Pages	Use the Select All Pages button to select all pages in the document. Use the Deselect All Pages button deselects all selected pages in the document.
	Transition Effects	The Transition button opens a dialog box that lets you choose transition effects for slides.
Split	Transition List Box	The Transition list box lets you choose a transition for selected slides.
	Transition Direction	The Directions button is available when the transition direction can be changed. Use this button to change the direction of the selected transition. The appearance of this button changes to reflect the selected direction.
Fast	Transition Speed Box	The Speed list box lets you change the transition speed for the selected slide.
	Manual/Timed Transition	Use the Manual button to advance to the next slide with the mouse or keyboard. Use the Timed button to advance automatically to the next slide at a timed interval.

	Duration Box	The Duration box lets you enter a duration in seconds for selected slides.

Setting Designer Options

Getting Started

Designer lets you customize your working environment by setting your preferences for many aspects of Designer. Your preferences can be saved in a profile or start-up file so that they apply every time you run Designer, or you can restrict preferences to your current work session by not saving them. If you want to maintain different sets of preferences, you can define two or more profile files. Certain preferences, such as ruler units, are saved with the document so that you do not have to reset them each time you open the document. To set your preferences, click Options from the Tools menu.

The Preferences command displays a submenu that lets you set many different categories of preferences.

The categories include general preferences, customizing the toolbox, ruler and snap options, rotation options, input (primarily mouse) options, settings for INI (initialization files), and changing your profile (collection of your personal preferences).

Using the Status Bar

The status bar provides current information about your drawing and quick access to various commands such as line thickness, object fill, and coordinates.

Choose Status Bar on the View menu and choose Single to display the single-line status bar. Choose Double from the Status Bar submenu to display the double-line status bar.

Note

The Status Bar options on the View menu are available only when the Status toolbar is visible. To show or hide the Status Bar, click Toolbars in the View menu.

Setting the Preview (on the View menu)

The Preview command on the View menu affects all fills and patterns (solid, gradient, image, object fill, and hatch fill). You can use the three options (Proof, Draft, or Wireframe) in the Preview submenu to control the display for all of these types of fills at once. If you set Preview to Proof, you can use the individual commands for gradient, image, object fill, and hatch fills to control their display individually.

Generally, the Preview command overrides your selections with the individual commands. For example, if you select Draft in the Preview submenu, gradients are automatically set to none, and other commands are grayed

Command	Display
Preview Proof	Full Preview—all colors and fills are displayed; you can limit gradient, image, object, and hatch fills with individual commands.
Preview Draft	Solid fills are normal; gradients, hatch fills, and object fills are solid (first color only). Image fills and masked objects are solid; bitmap images are a rectangle with an X. All lines are displayed as hairlines.
Preview Wireframe	No fills or line ends are displayed; all lines are displayed as hairlines.

Command	Display
Show Gradients Smooth	Best gradient display, with all colors and smooth gradations from one color to the next.
Show Gradients Average	All colors are shown, but gradations are not as smooth.
Show Gradients Coarse	Fewer colors, with banding.
Show Gradients None	Only the first color is displayed.
Show Images (selected)	All colors and gray scales in the bitmap are displayed.
Show Images (deselected)	Rectangle with an X on it to show position only.
Show Object Fills (selected)	Object fills displayed.
Show Object Fills (deselected)	Only the foreground color is displayed.
Show Hatch Fills (selected)	Hatch fills displayed.
Show Hatch Fills (deselected)	Only the foreground color is displayed.
Show Image Fills (selected)	Image fills displayed.
Show Image Fills (deselected)	Only the foreground color is displayed.

You set viewing options on the View menu. View options affect all open documents, not just the active window.

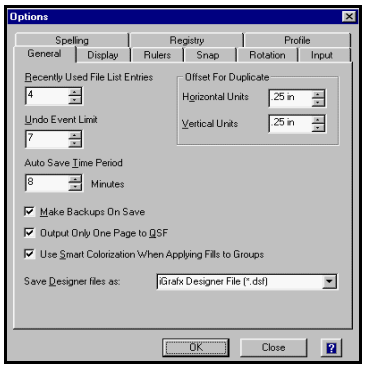
From the Workspace submenu, you can either select or deselect to show or hide the following from the display.

- Grid
- Guides
- Crosshairs (keyboard shortcut **CTRL+H**)

- Printer Page Tiles (non-printing guidelines that indicate that the page is larger than the target printer's paper size)
- Rulers
- Ruler position (the colored marks in the rulers that indicate the position of the mouse pointer)

General Options

The General panel of the Options dialog box lets you set a variety of high-level preferences. Click Options from the Tools menu to open the Options dialog box.



Setting the Recently Used File List

You can specify how many recently used files you want Designer to remember. The default value is 4.

The Open menu lists the most recently used files according to the number specified here. Set the number to included the maximum number of files you want displayed from the Open menu.

Setting the Undo Event Limit

By default, the Undo and Redo commands on the Edit menu reverse (Undo) or reverse the reversal (Redo) of the most recent five actions. The Options dialog box lets you specify that Designer remember from 0 to 100 undo and redo steps since the last save.

Setting a higher number of steps gives you the freedom to try multiple changes and the capability to undo those changes if desired, but takes up memory.

If you do not want a confirmation message to appear each time you delete files (such as with the Delete command with the File Options button), you can deselect this option. If you turn off the confirmation message, files are deleted as soon as you issue the command.

Setting the Auto Save Time Period

Use the Make Backups option to retain a copy of the previous version of all document files. Designer appends the extension BAK to the filename. When the Make Backups option is selected, you have two copies of the document on disk—the current version and the previously saved version.

The backup version is overwritten each time you save the document.

Setting the Make Backups on Save

Select this option to automatically back up files every time you save a document.

Setting the Output to QSF

The Output to QSF option is ideal for outputting documents for publishing on the Internet. Select this option to output only one page when using the QSF format.

Using Smart Colorization

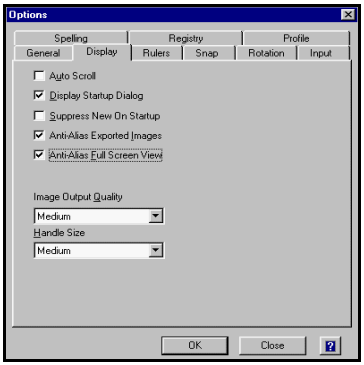
Smart colorization automatically adjusts the hue of grouped objects when changing the color of the group of objects.

Saving Designer Files

There are many formats in which to save your Designer files. Click the arrow button to reveal a list of all the available formats.

Setting Display Options

You set display preferences in the Display panel of the Options dialog box. Display preferences affect all open documents, not just the active window. Click Options from the Tools menu to open the Options dialog box.



Setting the Auto Scroll

When selected, Auto Scroll causes the window to automatically scroll when you drag an object beyond the window borders. This is especially useful when you have zoomed in for close work.

Suppressing New on Startup

If you do not want Designer to create a new file when you open it, select this option. Selecting this option makes Designer start faster.

Setting the Anti-Alias Options

The edges of many types of graphics can often appear fuzzy or blur into other objects. Select any of the anti-alias options to sharpen the outer edges of your Designer graphics.

Setting the Image Output Quality

Use the Image Output Quality box to adjust the output quality of all your Designer images. The output quality can be adjusted to high, medium, or low.

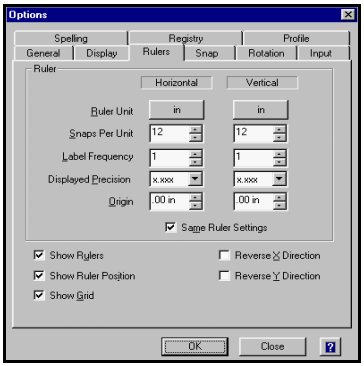
Defining the Handle Size

The Handle Size option lets you select small, medium, or large handles to suit your preference.

Setting Ruler Options

In the Rulers panel of the Options dialog box, the Horizontal and Vertical Ruler areas provide options affecting the two rulers. The rulers are independent, so you can have different options for each. The ruler settings are saved with the document.

For each ruler, you can choose a unit of measure, the number of snap divisions for each ruler unit, and how the ruler is labeled. Click Options from the Tools menu to open the Options dialog box.



Setting the Ruler Units

You can change the measurement units of a ruler by clicking its Units button and choosing the desired units.

Note

You can also set ruler units according to a specific scale by using the Scale Drawing Wizard. Simply click Scale Setup from the File menu and follow the screen prompts to define a scale on which to base your rulers.

Setting the Number of Snaps Per Unit

The Snaps per Unit setting sets the number of divisions per unit, which affects the number of grid dots that appear when the grid is displayed and also affects how objects snap to the rulers if Snap to Rulers is selected. The grid appears as a pattern of dotted lines that corresponds to divisions in your ruler settings. You can use the grid as a guide for aligning objects or measuring distances.

Note

To prevent the drawing area from becoming too cluttered, Designer limits the number of grid dots and ruler divisions that appear.

Setting the Label Frequency

This value specifies how frequently a number appears to label the ruler's units. This option prevents overcrowding the ruler when it is set to small units. For example, when a ruler is set to inches, you might use a value of 1, but when a ruler is set to millimeters, you might prefer a value of 10.

Setting Displayed Precision Coordinates

The Displayed Precision of Ruler Units value sets the decimal precision of the coordinates displayed in the status bar. The H list box sets the precision for the Horizontal and X coordinates. The V list box sets the precision for the Vertical and Y coordinates.

Changing the Ruler Origin

The ruler origin is the point, on or off the page, where the two rulers intersect at zero. The default position for the ruler origin is at the upper left corner of the page. You can also drag and drop the Ruler origin button to change the placement of the ruler origin.

To change the placement of the ruler origin

If you have selected Snap to Rulers in the Display menu, the new ruler origin also snaps to the rulers. This ensures that your grid remains the same. If you have deselected Snap to Rulers, the new ruler origin is placed at the exact point where you place it.

You can quickly reset the ruler origin to its default position at the corner of the page by double clicking the button at the intersection of the two rulers.

1. Make sure that rulers are displayed. On the View menu, click Rulers, and then click Show Rulers, if necessary.
2. Point to the button at the intersection of the two rulers and press and hold the left mouse button.
3. Drag the mouse pointer to the desired position.
4. Release the mouse button. The zero point on each ruler changes to reflect the new placement.

Tips

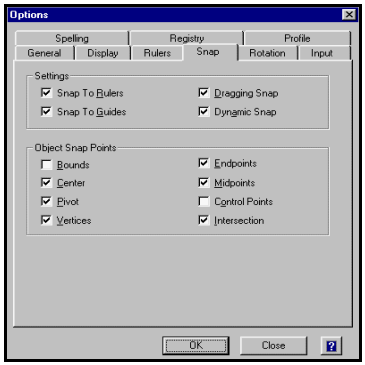
If you have selected Snap to Rulers on the Tools menu, the new ruler origin also snaps to the rulers. This ensures that your grid remains the same. If you have deselected Snap to Rulers, the new ruler origin is placed at the exact point where you place it.

You can quickly reset the ruler origin to its default position at the corner of the page by double clicking the button at the intersection of the two rulers.

Setting Snap Options

Snap options let you select or deselect where Designer places snap points on an object. Snapping is based on the ruler units: if you change the number of snaps per ruler unit, you also change the number of snap points and the appearance of the on-screen grid. By default, the number of snaps per unit is the same as the standard ruler divisions. For example, an inch has 16 snaps, and a centimeter has ten snaps.

The number of snaps per ruler unit can be changed in the Rulers panel of the Options dialog box. The rulers adjust to correspond to the number of snaps per unit. For example, a centimeter with five snaps per unit displays five unit marks in the ruler.



Snapping to the Ruler

Snapping to the ruler causes the mouse pointer to attract to the closest ruler intersection. If used in conjunction with Dragging Snap, an object's bounding box snaps to the closest ruler increment as you move it.

Snapping to Guides

Guides are nonprinting horizontal and vertical reference lines that you can drag from the ruler. By turning on Snap to Guides, you can make nearby guidelines attract the mouse pointer as you draw an object. if used in conjunction with Dragging Snap, an object's bounding box snaps to the closest guide line as you move it.

Setting a Dragging Snap

Select the Dragging Snap option to cause an object's bounding box, rather than the mouse pointer, to snap to the rulers or guides when you are moving (dragging) the object. When Dragging Snap is selected, the mouse pointer will continue to snap to rulers or guides when drawing an object (if Snap to Ruler or Snap to Guides is currently selected).

Dragging Snap has no effect on object movement if Snap to Ruler and/or Snap to Guides is off, one of these must be selected to activate the Dragging Snap functionality.

Setting the Dynamic Snap

Select the Dynamic Snap option to precisely align sticky lines, or to attach dimension lines to an object. When dimension lines are attached by setting the dynamic snap, the dimension lines are automatically recalculated when the object is resized.

To set the Dynamic Snap

1. On the Tools menu, click Snap.
2. Click Dynamic Snap on the submenu.
   or
   Click Options and then click the Snap tab. Click the Dynamic Snap check box.

Tip

Alternately, you can set the Dynamic Snap by right clicking on the ruler, selecting Rulers/Snap Options, clicking the Snap tab, and click the Dynamic Snap check box.

Note

You must be in Drawing mode for the dynamic snaps to display.

To add dynamic snaps

1. Select an object.
2. On the Tools menu, click Snap. Select Customize Dynamic Snaps from the submenu.
3. On the Customize Dynamic Snaps dialog box, click Add.
4. On the dialog box display, click where you want each additional snap point.
5. Click Apply and then click Close.

To delete dynamic snaps

1. Select an object.
2. On the Tools menu, click Snap. Select Customize Dynamic Snaps from the submenu.
3. On the Customize Dynamic Snaps dialog box, click the snap point you want to delete. To select more than one snap point, press the **SHIFT** key while making your selections.
4. Click Delete.
5. Click Apply and then click Close.

To move dynamic snaps

1. Select an object.
2. On the Tools menu, click Snap. Select Customize Dynamic Snaps from the submenu.
3. On the Customize Dynamic Snaps dialog box, click the snap point you want to move. To select more than one snap point, press the **SHIFT** key while making your selections.
4. Keep the left mouse button pressed and drag the snap point(s) to their new location. Release the mouse button.
5. Click Apply and then click Close.

Changing Snap Point Sensitivity

You can increase or decrease the sensitivity of snap points by changing the handle size. Choose a large handle size to increase the snap range; choose a smaller size to decrease the range.

To change snap point sensitivity

1. On the Tools menu, click Options.
2. Select a handle size. A large handle size increases the snap range; a smaller size decreases the range.

To toggle Snap to Rulers on or off

- On the Tools menu, point to Snap and click Snap to Rulers.

To toggle Snap to Guides on or off

- On the Tools menu, point to Snap and click Snap to Guides.

To toggle Dynamic Snap on or off

To toggle Dynamic Snap on or off

- On the Tools menu, point to Snap and click Dynamic Snap.

Choosing Where Snap Points Appear on an Object

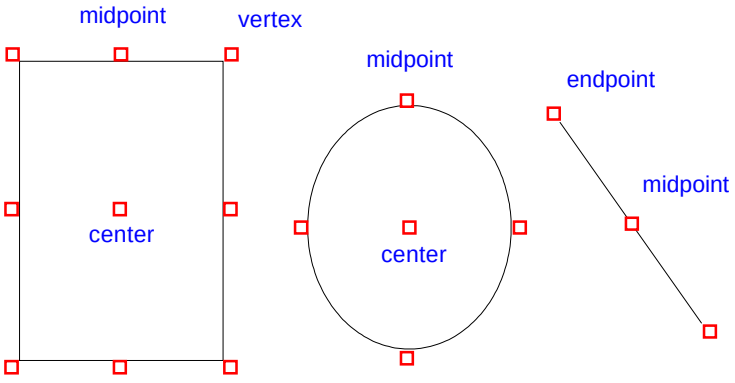
You can choose where Designer places snap points on an object. For example, you might want snap points to appear only at corners. You can change where snap points appear at any time.

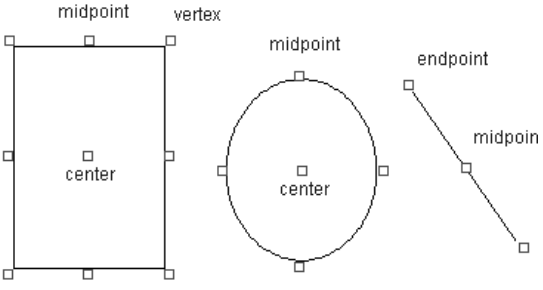
Object Snap Points

These options let you select or deselect where Designer places snap points. The options include:

- Bounds
- End Points
- Center Mid Point
- Pivot
- Control Points

- Vertices





To choose snap point placement

1. Open the Tools menu and click Options.
2. Click Snap to display the Snap panel.
3. Choose the locations where you want snap points to appear.
4. Click OK when you finish.

Changing the Number of Snaps

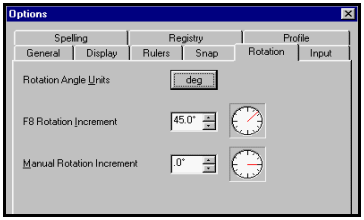
Snapping is based on the ruler units: if you change the number of snaps per ruler unit, you also change the number of snap points and the appearance of the on-screen grid. By default, the number of snaps per unit is the same as the standard ruler divisions. For example, an inch has 16 snaps, and a centimeter has ten snaps.

To change the number of snaps

1. On the Tools menu, click Options
2. Click the Ruler tab.
3. Change the number of snaps per ruler unit. The rulers redraw to correspond to the number of snaps per unit. For example, a centimeter with five snaps per unit displays five unit-marks on the ruler.

Setting Rotation Options

The Rotation panel lets you set the rotation angle increment for the F8 key and constrain rotations to angle increments for manual rotation. To change the rotation units setting (degrees or radians), click the Rotation Angle Units button and choose the new unit. Click Options from the Tools menu to open the Options dialog box.



Setting the F8 Rotation Increment

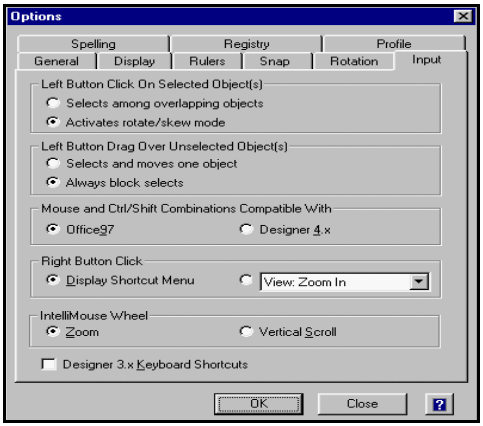
You can change the F8 rotation increment by clicking the arrows beside the F8 Rotation Increment box, entering a new value, or dragging the red needle in the dial control.

Setting a Manual Rotation Increment

Setting Manual Rotation Increment to a non-zero value, constrains manual rotation to increments of the specified value. For example, if you set the rotation angle to 12 degrees, an object rotates in increments of 12 degrees when you drag its corner rotation handles. To change the Manual Rotation Increment, enter a new value or drag the red needle in the dial control.

Setting Input Options

The Input panel lets you set preferences for your mouse buttons and select Designer shortcut keys. Click Options from the Tools menu to open the Options dialog box.



Setting the Left Button Click

By default, if you point to an object in your document and double click the left mouse button, you enter a reshape mode. (If you double click a bitmap or an embedded object, another program capable of editing the object is launched instead). If you press and hold the **ALT** key and then point and click the left mouse button, you can select overlapping objects in succession as in previous versions of Designer.

Tip

If you prefer, you can change the settings in the Input panel to reverse the use of the **ALT** key with these two functions.

Setting Combinations Compatibility

Select a mouse and **CTRL**/**SHIFT** compatibility with either Office97 or Designer 4.x.

Setting the Right Button Click

The default function of a single click of the right mouse button displays the mouse menu, which displays commands that give you quick access to functions that may not be displayed in the current ribbon. The default setting for **ALT**+right mouse button is an assigned command or tool similar to previous versions of Designer.

Setting the Intellimouse Wheel

Set the option to either zoom or scroll when you right-click over an unselected object or the white space of a current page.

Employing Designer 3.x Shortcuts

Select this option to use Designer 3.x shortcuts. If you are upgrading from Designer 3.x, you can use the same shortcuts.

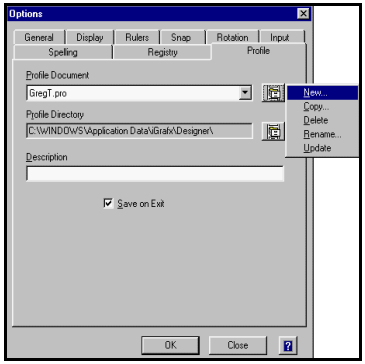
Setting Profile Options

You also can manage "preference profiles" (which are PRO file types that contain all of your personal preferences). When you change preferences, they are saved automatically to the Username.PRO file, which is the standard file that stores your preferences. Designer also lets you save your preferences to other profiles. Unlike with INI files, when you change to a different profile, the changes take effect immediately.

Profiles are a collection of all of your preferences. You may want to use a different profile for different kinds of work (such as graphic design or technical illustration). You may want to change preferences for one particular session or project, and then return to your normal preferences. If more than one person is running Designer from a file server or sharing a computer, each person can save and use his or her own preferences.

In addition, you can share preference files with others. System Administrators may want to use the same preference file for multiple computers to ensure consistency.

You can use the Profile panel of the Options dialog box to choose a different profile, elect to save that choice when you close Designer, and enter or edit a description of a profile. Click Options from the Tools menu to open the Options dialog box.



To change or select a different profile

1. On the Tools menu, click Options.
2. Click the Profile tab. The Profile panel opens.
3. Choose a different PRO file from the Profile Document list box.
4. Select Save on Exit if you want Designer to use the new profile the next time Designer is opened.
5. Click OK. Designer now uses the preferences in the profile to which you changed, and any changes to your preferences are stored there.

To create a new profile

1. On the Tools menu, click Options.
2. Choose Profile. The Profile panel opens.
3. Click the File Options button and choose New. The New Profile Document dialog box opens.
4. Type a filename for the new profile and press enter. The New Profile Document dialog box closes, and the new filename appears as the current Profile.

To copy a profile

1. On the Tools menu, click Options.
2. Click Profile. The Profile panel opens.
3. Click the File Options button and choose Copy. The Copy Profile Document dialog box opens.
4. Type a new filename and press enter. The Copy Profile Document dialog box closes. The new filename is listed as an option in the Profile Document list box.

To delete a profile

1. On the Tools menu, click Options.
2. Click Profile. The Profile panel opens.
3. Choose a file in the Profile Document list box that you want to delete.
4. Click the File Options button and choose Delete. You are asked to confirm that you want to delete the profile.
5. Click Yes to confirm the deletion.

To rename a profile

1. On the Tools menu, click Options.
2. Choose Profile. The Profile panel opens.
3. Click the File Options button and choose Rename. The Rename Profile Document dialog box opens.
4. Type a new filename and press enter. The Rename Profile Document dialog box closes, and the renamed profile appears as the current Profile Document.

To update a profile

1. On the Tools menu, click Options.
2. Choose Profile. The Profile panel opens.

3 Click the File Options button and choose Update. The current profile is updated with any preferences that have changed since the last time the profile was saved or updated.

Note

You can also click the File Options button to create a new profile, copy a profile, delete a profile, rename a profile, or update a profile.

Setting Registry Options

Windows 95 programs save status and other information in a file called the system registry. Changes in the registry are detected by the Windows operating system and programs that monitor the registry.

Most programs save status information in a file called the system registry. Changes in the registry are detected by the Windows operating system and programs that monitor the registry.

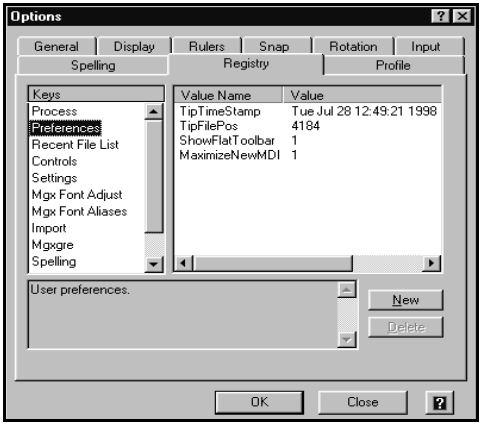
Normally, you do not have to change registry entries directly. When you first install Designer, settings are automatically made to the registry, and when you make changes via the Windows Control Panel, the new settings and preferences are made automatically to the registry as well.

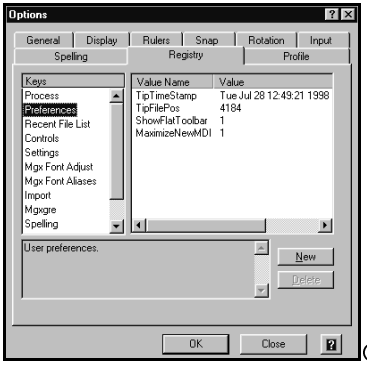
Normally, you do not have to change registry entries directly. For example:

- When you first install Designer, settings are automatically stored in the registry.
- When you change a setting in the Windows Control Panel, the setting is automatically stored in the registry.

The registry entries for Designer reflect your system's hardware and operating system specifications. Several entries are created by the Micrografx installer when you install Designer.

When necessary, you can use the Registry tab of the Options dialog box to edit those entries and to create new entries as needed.



1 
On the Tools menu, click Options.

2 Click the Registry tab.

3 Choose the key name from the Key list box.

4 In the Value Name list, click the name whose value you want to change.

5 Highlight the old value and type the new value over it.

6 Click OK to confirm the change and to close the Options dialog box.

To add a new value to a registry key

1 On the Tools menu, click Options.

2 Click the Registry tab.

3 Choose the key name from the Key list box.

4 Click the New Value button.

5 Type the name of the new value. If the value is numeric, click Numeric Value Type.

6 In the Value box, type the new value.

7 Click OK to confirm the addition and to close the Options dialog box.

To delete a value from a registry key

1 On the Tools menu, click Options.

2 Click the Registry tab.

3 Choose the key name from the Key list box.

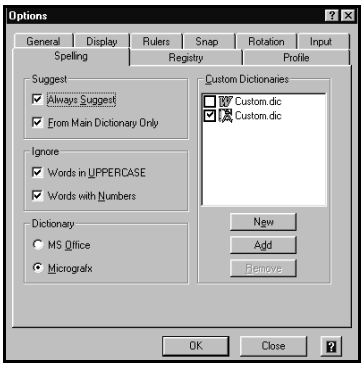
4 Choose a name from the Value Name list box.

5 Click the Delete Value button.

6 Click OK to confirm the deletion and to close the Options dialog box.

Setting Spelling Options

The Spelling Options dialog box allows you to customize the way you use the Designer Spell Check. Click Options from the Tools menu to open the Options dialog box.



Setting Guide Lines

A guide line is a horizontal or vertical line you can use for alignment or visual reference. Guide lines can help organize the layout of your drawing by guiding the placement of your objects. You can use guide lines as visual cues for where to place objects, or you can snap objects to guides for more exact placement. Guides appear on screen but do not print.

Adding Guide Lines

A guide line is a horizontal or vertical line you can use for alignment or visual reference. Guide lines can help organize the layout of your drawing by guiding the placement of your objects. You can use guide lines as visual cues for placing objects, or you can snap objects to guide lines for more exact placement. Guide lines appear on screen but do not print.

You can add as many guide lines as you need. You also can move guide lines by dragging them to new locations on the screen with the selection pointer.

To remove a guide line, just drag and drop it onto the ruler with the selection pointer.

To add a guide line

1. Move the selection pointer to the top or side ruler (for a horizontal or vertical guideline, respectively).
2. Press and hold the left mouse button, and drag a guide line to the desired position in the drawing area.
3. Release the left mouse button.

Setting Up Units of Measure

The units of measure in Designer are extremely flexible and can be set separately for every function that uses a measurement unit. For example, you can specify different measurement units for rulers, page size, line thickness, and dimension lines. The current units setting for a particular function appears on the Units button in the dialog box (or ribbon) for that function. For example, if the measurement unit for page size is inches, the Units button in the Page Setup dialog box reads "in."

When specifying the measurement units, you can choose from a set of standard units, another set of predefined units, or create your own custom units. You can also set a scale to relate one unit of measure to another.

The units settings that you use with a drawing are saved with the drawing so that you do not have to reset them each time you open the file.

Setting Standard Units

Units can be linear (to measure length) or radial (to measure angles). Linear units are used to measure spatial distances. Radial units are used to measure angular orientation or direction.

The standard linear units are inches, centimeters, millimeters, points, picas, picas and points, and ciceros. The standard radial units are degrees and radians.

Other predefined units include feet, feet and inches, kilometers, meters, miles, weeks and days, yards, and yards and feet.

Changing a Units Setting

The currently selected units setting for a particular function appears on the appropriate Units button for that function. The following steps apply specifically to changing the units setting of the Page Setup dialog box, but the procedure is virtually identical for other dialog boxes.

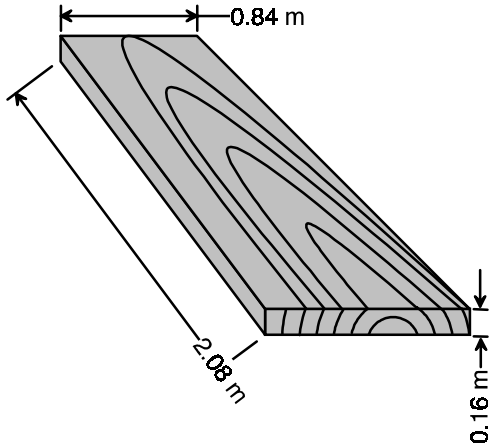
To change the units setting for the page size

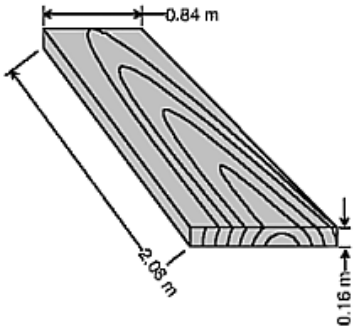
1. Open the File menu and choose Page Setup. The Page Setup dialog box opens.
2. Click the Units button (marked with an abbreviation for a standard unit, such as "in" or "cm"). A menu opens.
3. Choose the desired units setting from the menu.
4. The menu closes and the Units button in the Page Setup dialog box changes to reflect the new setting.
5. Click OK to close the Page Setup dialog box.

Defining Scale Units

If you do scale drawings, you can use the Custom Units dialog box to define a scale unit, which is a ratio of one unit of measure to another. For example, you could define a scale of 10 feet per inch and draw a landscape at that scale, or define a scale of 2 weeks per centimeter and draw a timeline chart at that scale.

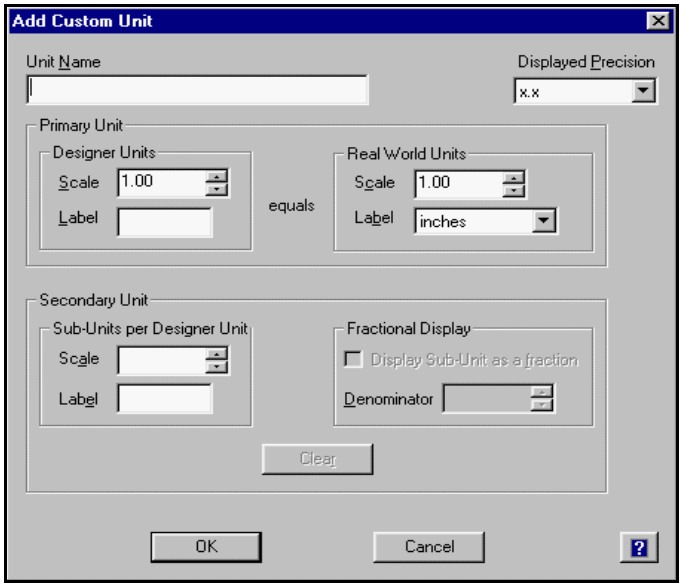
To show scaled distances in a drawing, use dimension lines with the dimension units set to the scale units. If you also want to see the scale used by the rulers, set the units for the rulers to the scale units. In the following example, the dimension units are set to 5 meters per centimeter.





You define new units using the Custom Units dialog box. You can open the Custom Units dialog box by choosing Custom Units in the Tools menu, or by clicking any Units button and choosing Custom Units.

After defining a new scale unit, you can add it to your current profile, or just save it to the current drawing. If you add it to your profile, the scale units are available in other drawings you make. New units that have been saved to a profile are designated by a plus sign in front of the unit's name in the Defined Units list box.



To define a scale unit of 2 feet per inch

1. Open the Tools menu and choose Custom Units. The Defined Custom Units dialog box opens.
2. Click Add Unit. The Add Custom Unit dialog opens.
3. Click in the Unit Name field and type the name Feet (scale 2).
4. In the Primary Unit section, enter 2 in the Scale field.
5. In the Label field, enter m.
6. In the Real World Units section, select Centimeters from the drop list.
7. Click OK.

Tip

The unit you entered above only defines a primary unit. If needed, you also can specify a secondary unit. Yards and feet, feet and inches, and weeks and days are all examples of definitions with primary and secondary units.

To apply scale units to a dimension line

1. Click the Dimension tool .

2 Click the Units button in the ribbon. A menu opens.

3 Choose More Units. The Available Units dialog box opens.

4 Highlight the scale units you want to use.

5 Click OK.

Defining Unscaled Units

Besides defining scaled units, the Custom Units dialog box lets you define new unscaled units of measure. The procedure for defining unscaled units is identical to that for defining scaled units (explained in the previous section) except that you do not specify a scaled ratio when you define the unit. Instead, you specify an accurate conversion ratio for the unit, such as 1000 meters per kilometer.

Updating Unit Settings

Designer gives you exceptional flexibility in defining scale units without causing unwanted changes. Note that changing a unit's values in the Custom Units dialog box does not automatically change the overall units definition for the rulers in the current drawing. To change the ruler unit settings, choose the setting again in the Rulers/Snap tab of the Options dialog box.

In addition, changing a unit's values in the Custom Units dialog box does not automatically change the overall units definition for any other drawings using that unit. This is because the various units set for different functions are saved with each Designer drawing.

For example, suppose that the rulers are set to a custom scale unit called Meters (Scaled), which defines a scale of 5 meters per centimeter. You open the Tools Menu, click Custom Units, and edit this scale unit by changing its scale to 10 meters per centimeter. The ruler unit settings do not change unless you open the Tools Menu, click Options and Rulers/Snap, and deliberately change the Ruler Unit to Meters (Scaled) again.

Defining Units with the Scale Drawing Wizard

Designer gives you exceptional flexibility in defining scale units without causing unwanted changes. The Scale Drawing Wizard allows you to set up scale units easily and accurately.

To set units with the Scale Drawing Wizard

1. On the File menu, click Scale Setup.
2. Click the appropriate measurement system, Imperial or Metric. Click Next.
3. If you selected Imperial, click the appropriate scale type, Architectural or Engineering. Click Next.
   or
   If you selected Metric, first select a base unit type. Next, enter how many units you want to be represented by one base unit on the drawing. Then you need to enter the label that will be associated with the units. Click Next.
4. Click the appropriate scale setting. Click Next.
5. Click the applicable Designer drawing.
6. Click Finish.

Deleting a Defined Unit

You can delete a defined unit from the list of available units by selecting it in the Defined Units list box and clicking Delete Unit button in the dialog. The defined unit is not deleted from other drawings using that unit. The deleted unit remains in use where you have applied it already, but you can not choose that unit for future uses.

Setting Up a Page

Use the Page Setup command on the File menu to change the size and orientation of the current page in the active window.

he Page Setup command in the File menu to change the size, margins, and orientation of the active window's on-screen page. You can change page settings before, during, or after creating a drawing.

Note

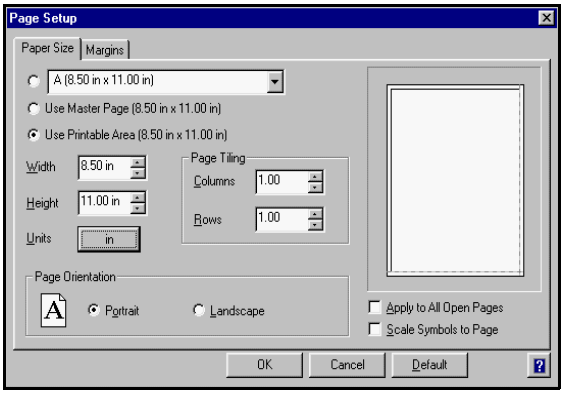
If you change the page setup, and you plan to print your work, you should change the printer setup to match. See the chapter "Printing Your Work" for information on changing your printer setup.

New page settings are applied immediately to the current page in the active window.

Individual pages in your document can have different sizes, orientations, and page fills, if desired. To apply the same size, orientation, and page fill to all pages in the document, select Apply to All Pages. This option, like Use Master Page, forces all pages to be uniform.

Setting Page Options

Click the Page Size tab to reveal the options settings dialog box.



Setting the Page Size

Use the Page Size list box to choose the size of the current page. You can choose from standard page sizes or choose Custom Size and create your own by adjusting the Width and Height measurements. If you enter dimensions for Width and Height that do not match one of the standard page sizes, the Page Size selection changes to Custom Size.

Using a Master Page

If you choose the Use Master Page option, the page matches the size, orientation, and page fill (if any) of the master page. To edit the master page, click the Page button (at the bottom left of the active window) and choose Master Page. (See the section "Using the Master Page" in this chapter for more information.)

Setting the Page Orientation

The Page Orientation options determine the page layout. Select Portrait to layout the page so that the vertical dimension is longer than the horizontal dimension. Select Landscape to layout the page so that the horizontal dimension is longer than the vertical dimension.

Using the Printable Area

Choose the Use Printable Area option to force the on-screen page to reflect your printer's page size and margins. For example, if your printer uses an 8.5" x 11" page with 1/2 inch margins, the on-screen page matches it.

Setting the Width/Height

The Width and Height boxes show the measurements for the current page size. You can create a custom page size by changing these settings. Click the arrows to change its setting.

Defining Units

The Units button shows the current page size measurement units. To change the units setting, click the Units button and choose the desired units.

Applying to All Open Pages

Individual pages in your document can have different sizes, orientations, and page fills, if desired. To apply the same size, orientation, and page fill to all pages in the document, select Apply to All Pages. This option, like Use Master Page, forces all pages to be uniform.

Page Tiling

Page Tiling shows the number of columns and rows of tiles used when the current page size is printed to the target printer. If the page size is set to use Printable Area and the Page Orientation matches the orientation of the target printer, no tiling is used, and the number for columns and rows are both set to 1.

If you enter new values for columns and rows, the page size changes to match. See the chapter "Printing Your Work" for an explanation of tiling. If you want to display tile lines on your screen as you work, open the View menu and choose Workspace, and then choose Show Printer Page Tiles from the Workspace submenu.

Setting Margins

Click the Margins tab to open the Margins panel of the Page Setup dialog box. It is here where you can specify your margins, display or hide crop marks, and choose a page fill color as though you were working on colored paper.

Using the Master Page

Every Designer document has a master page. You can use the master page to make all the pages in your document consistent in size, orientation, margins, and page fill. The size of the master page defaults to match the printable area of your target printer.

If you want certain graphic or text objects, such as a title or border, to appear on every page, you can place these objects on the master page. These repeated objects are called master items.

To set up and use the master page

1. Create a new document.
2. Click the Master Page tab at the bottom left of the window. The master page displays.
3. Click Page Setup on the File menu. The Page Setup dialog box opens.
4. Choose page size and orientation, and adjust the margins if necessary.
5. If you want a background color or fill, choose the Page Fill option, click the Page Fill button , and choose a fill style in the Fill dialog box.
6. Click OK to close the Page Setup dialog box.
7. Place any items on the master page that you want to appear on all your pages.
8. Use the Master Page as the Page Size for all other pages in your document.

Tips

You can create and edit objects on the master page as with other pages by clicking the Page button, choosing Master Page, and making your changes. However, you cannot select or change master items unless the master page is the current page; this protects the master items from accidental changes.

If you have a page in the document that you want to be different from the rest, you can display that page, choose the Page Setup command, and change the Page Size in the Page Setup dialog box to something other than Use Master Page. You can then make any changes you want to orientation, margins, and so forth. Master items do not appear on pages that are not set up to use the master page.

Using Multiple Pages

Designer lets you use as many pages as you need for your documents. Individual pages in a document can be of different sizes and orientations (portrait, landscape). Each page can be set up differently if needed.

You can use the Page Manager tool to select any number of pages in your document and set them up with the same size, orientation, margins, page fill, and so forth.

If you want to remove an object from a page temporarily, you can drag it off of the page onto the working area. The object remains there until you need it again. However, if you select another page, it is not visible.

Setting Up Multiple Pages

You can use the Page Manager tool to select any number of pages in your document and set them up with the same size, orientation, margins, page fill, and so forth.

To set up multiple pages

1. Open a document with multiple pages.
2. Click the Page Manager tool in the toolbox. Thumbnail images are displayed for each page in the document.
3. Press and hold **CTRL** and select each page you want to setup.
4. Click the Page Setup button in the ribbon. The Page Setup dialog box opens.
5. Choose the page size, orientation, margins, and so forth.

To select multiple pages

1. In Page Manager view, you can simply click the desired page to select it.Click the Page Manager tool . The drawing area changes to Page Manager view.
2. Click the first page you want to select.
3. Press and hold **SHIFT** and click the last page you want to select. Designer selects every page between the two pages you selected.

To select multiple pages that are not next to each other

1. Click the Page Manager tool . The drawing area changes to Page Manager view.
2. Click the first page you want to select.
3. Press and hold **CTRL** and click the other pages you want to select. Only the pages you click are selected.

To view a different page in the document

- Click the Page tab of the page you want to view. You may need to scroll.

  or

  Click the Pages button to open the Page dialog. Highlight the page you want to view and click or double-click Select.

Tip

You can easily move from page to page with the keyboard shortcuts **CTRL+PAGE UP**, **CTRL+PAGE DOWN**, **CTRL+HOME**, and **CTRL+END**. Press **CTRL+PAGE UP** to move to the next (higher-numbered) page. Press **CTRL+PAGE DOWN** to move to the previous (lower-numbered) page. Press **CTRL+HOME** to move to the first page. Press **CTRL+END** to move to the last page.

To sort pages in a document into a different order

1. Open a document with multiple pages.
2. Click the Page Manager tool . The drawing area changes to Page Manager view.

3 Select a page and drag it to the beginning, end, or middle of the sequence.

Tips

A vertical cursor bar displays as you drag the page to a different point in the sequence, indicating its position. As you sort pages, they are automatically renumbered.

If your document has more pages than fit on the screen, use the scroll bar to display the other pages.

To insert a page between two other pages, you can add a new page at the end of the document (in the normal single-page view) and then drag the new page into the correct sequence (in Page Manager view).

To rename a page

By default, Designer names the pages Page 1, Page 2, and so forth. You can change the default page names to give each page in your drawing a unique name.

1 Right-click the Page tab of the page you want to rename. The Page menu opens.

2 Click Rename Page.

3 Type in the page name and click Ok.

or

1 Click the Pages button in the lower left corner of the window. The Pages dialog opens.

2 Under Current Page, select the page you want to rename.

3 Point to the Page name text box and click the left mouse button.

4 Type a new page name and press **ENTER**.

To add a page

1 Click the Pages button at the bottom left of the active window. The Page dialog opens.

2 Click Add or right-click on a page tab and select Add Page from the menu.

Tip

You can also click the Add button in the Pages dialog box as another way to add a new page to the end of the document.

To delete a page

You can delete any page in your document except the current page or the master page. When you delete a page from your document, the entire contents of the page are deleted as well.

1 Click the Pages button at the bottom left of the active window.

2 The Pages dialog box opens.

3 Highlight a page name and click Delete to delete the specified page and its contents

or

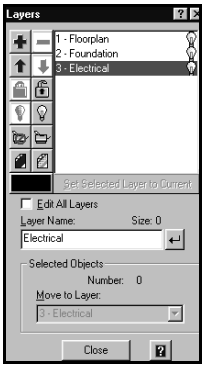
Right-click the page to delete and select Delete Page from the menu.

Tip

Double click a page in the Pages dialog box to make it the current page.

Setting Up Layers

You can manage layers in other ways with the Layers dialog box. You can do any of the operations on a single layer, and you can work with multiple layers when removing, locking, unlocking, showing, and hiding layers.



Benefits of Layers

Designer lets you create layers for each page of your document. This allows you to place some objects on one layer, others on another layer, and so on, just as you might with several overhead transparencies.

Layers help you:

- Manage complex drawings with many overlapping objects
- Categorize objects that logically belong together by layer
- View certain objects in your drawing while hiding others
- Easily select and edit objects
- Protect objects from accidental changes
- Trace from a template on another layer
- Print certain objects only

Each page in a Designer drawing has one layer by default. Layers remain perfectly aligned with one another. Designer automatically numbers layers for you. The total number of layers you can use is virtually unlimited—32,767.

Designer lets you do the following with layers:

- Name the layers
- Add and remove layers
- Change the order of layers
- Lock layers (so that objects cannot be moved or changed)
- Display or hide selected layers
- Specify layers as printable or non-printable
- Use one color (for easy identification) or multiple colors on a layer
- Move objects from one layer to another
- Edit all the layers or edit one layer at a time

Note

Designer does not store a layer that has no objects on it unless you have named the layer.

Basic Layer Tasks

You can click the Layer button at the bottom of the active window to open the Layer menu, which lists the numbers and names of all the layers on the current page, with the current layer highlighted.

From this menu you can

- Change to a different layer
- Add a layer
- Open the Layers dialog box for other operations

To change to a different layer

- Click the Layer tab of the layer you want to make active.

  or

  Click the Layers button and choose the layer in the Layers dialog.

Tip

You can easily move from layer to layer with the keyboard shortcuts **SHIFT+PAGE UP** and **SHIFT+PAGE DOWN**. Press **SHIFT+PAGE UP** to move to a higher-numbered layer. Press **SHIFT+PAGE DOWN** to move to a lower-numbered layer.

To select multiple layers

1. Create or open a document with multiple layers.
2. Click the Layers button at the bottom of the active window. The Layers dialog box opens.
3. Choose the first layer you want to select.
4. Press and hold **SHIFT** and choose the last layer you want to select. Every layer between the two layers is selected.

Tip

Double click a layer in the Layers dialog box to make it the current layer.

To select multiple layers that are not next to each other

1. Create or open a document with multiple layers.
2. Click the Layers button at the bottom of the active window. The Layers dialog box opens.
3. Choose the first layer you want to select.

4 Press and hold **CTRL** and choose the other layers you want to select. Only the layers you choose are selected.

Note

By default, Designer names the layers Layer 1, Layer 2, and so forth. You can change these names to give each layer in your drawing a unique name.

To rename a layer

1 Right-click the layer you want to rename.

2 Select Rename layer from the menu.

3 Type in the layer name.

4 Click Ok.

or

1 Click the Layers button at the bottom of the active window. The Layer menu opens.

2 Click the Layers button in the menu. The Layers dialog box opens.

3 Highlight the name of the layer you want to rename.

4 Point to the Layer Name text box and click the left mouse button.

5 Type a new name and press enter. The new name appears in the list of names.

To add and remove layers

1 Right-click on a layer tab.

2 To add a layer, choose Add Layer from the menu.
or
To delete a layer, choose Delete Layer from the menu.

or

1 Click the Layers button at the bottom of the active window. The Layers dialog box opens.

2 To add a layer, click the Add Layer button.

3 To remove a layer, choose the layer you want to remove and click the Delete Layer button. The layer is removed and all objects on that layer are deleted.

Note

When you remove a layer, all objects on that layer are deleted. You cannot remove the current layer.

To change the order of layers

1 Right-click on a layer tab.

2 Use the Move Layer Up and Move Layer Down commands in the Layers menu.

or

1 Click the Layer button at the bottom of the active window. The Layer menu opens.

2 Click the Layers button in the menu. The Layers dialog box opens.

3 To move a layer up the list, choose the layer you want to move and click the Move Up button.

4 To move a layer down the list, choose the layer you want to move and click the Move Down button.

To move an object from one layer to another

1 Select the object you want to move to another layer.

2 Right-click on the active layer tab. The Layer menu opens.

3 Select Move to Layer from the menu.

4 Double click the name of the layer to which you want to move. The selected object moves to the chosen (now current) layer.

To edit all layers

1. Right-click on a layer tab and select Edit All Layers.
   or
   Click the Layers button at the bottom of the active window. The Layers dialog box opens.
2. Select the Edit All Layers option. You can now select and edit all objects on all layers. Deselect this option to return to single-layer selection and editing.

Note

You cannot move an object on a lower layer in front of an object on a higher layer. You can, however, change the order of layers so that the entire layer and its contents move in front of another layer.

Locking and Unlocking Layers

When a layer is locked, it can either be displayed or hidden, but it cannot be edited or deleted. You cannot lock the current layer.

To lock or unlock layers

1. right-click on a layer tab and choose Locked.
   or
   Click the Layer button at the bottom of the active window. The Layers dialog box opens.
2. To lock a layer, choose the layer you want to lock and click the Lock Layer button.
3. To unlock a layer, choose the layer you want to unlock and click the Unlock Layer button.

Showing and Hiding Layers

You cannot hide the current layer. If you make a hidden layer the current layer, it is no longer hidden.

Hidden layers are not printed, so you can hide layers not only in your display but also in your printout. If you want to print all of the layers in the drawing, be sure to show all the layers before you print.

To show or hide layers

1. Right-click on a layer tab and select Visible from the menu.
   or
   Click the Layers button at the bottom of the active window. The Layers dialog box opens.
2. To show a layer, choose the layer you want to show and click the Show button.
3. To hide a layer, choose the layer you want to hide and click the Hide button.

Hiding and Locking Individual Objects

In addition to letting you hide or lock all objects on a specified layer, Designer also lets you hide or lock individual objects.

Temporarily hiding objects may speed screen redraw time, especially if the objects include gradient fills or bitmaps. Locking objects may be desirable if you want to ensure that you do not accidentally move or resize them.

To hide or lock individual objects

1. Select one or more objects to hide or lock.
2. Open the Arrange menu.
3. Choose Hide or Lock.

To show or unlock all objects

1. Open the Arrange menu.
2. Choose Show All or Unlock All.

Using Multicolor or Single-Color Layers

You can make every object on a particular layer the same color.

Using single-color layers can help you visually keep track of which objects are on which layer. Designer lets you mix single-color layers and multiple-color layers in the same drawing.

By default, a layer is multicolored. If you limit a particular layer to a single color, all existing objects and all subsequent objects are filled with the single color. You can use the current default layer color or click the Layer Color button to choose a different color.

To change a layer to a single-color layer

1. Click the Layers button at the bottom of the active window. The Layers dialog box opens.
2. Choose the layer that you want to make a single color.
3. Click the Layer Color button. A color palette opens.
4. Choose a color from the color palette.
5. Click the Single-color button. An indicator appears to mark the chosen layer as all one color.

Note

If you skip steps 4 and 5 above, the default layer color is applied.

To change a layer back to a multicolor layer, open the Layers dialog box, choose the layer, and click the Multicolor button. The objects on the layer change back to their previous colors.

Printable Layers

You can make layers printable or non-printable. By default, all layers are printable.

Tip

Hidden layers cannot be set to printable.

To make a layer printable or non-printable

1. Right-click the layer tab and select Printable from the menu.
   or
   Click the Layers button at the bottom of the active window. The Layers dialog box opens.
2. To make a layer printable, choose the layer you want to print and click the Printable Layer button.
3. To make a layer non-printable, choose the layer you do not want to print and click the Non-Printable Layer button.

Setting Up Coordinates

Designer uses coordinates for precise drawing and positioning. You can display coordinates to reference the current mouse position, the origin and size of a selected object, the origin and endpoint of a selected object, or the orientation and rate of expansion during transformations. Coordinates can also be used to draw, move, or resize an object.

Displaying Coordinates

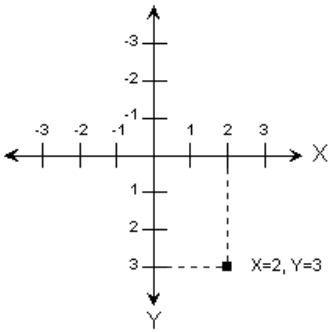
Coordinates are displayed in the status bar. When no object is selected, the status bar shows the coordinates of the mouse pointer. When an object is selected, the status bar shows the coordinates of the selected object. During a transformation such as manually resizing an object, the status bar shows the coordinates of the transformation.

Choosing a Coordinate System

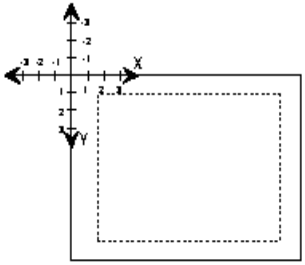
Designer can use Cartesian (rectangular) or polar (radial) coordinates. In the polar coordinate system, you can express angles in degrees or radians.

Using Cartesian Coordinates

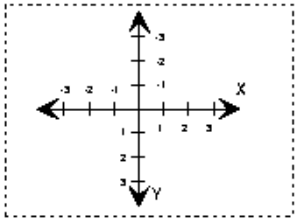
Cartesian coordinates use the familiar vertical and horizontal axes. The vertical axis is called Y, and the horizontal axis is called X.



The X and Y axes correspond closely to the rulers in the Designer window. The ruler origin is the intersection of the two axes, where X=0, Y=0. If the origin is set at the top left of a page, the values for X go from left to right, and the values for Y go from top to bottom, just like the rulers.

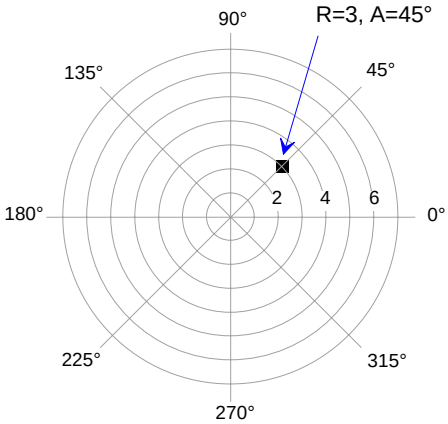


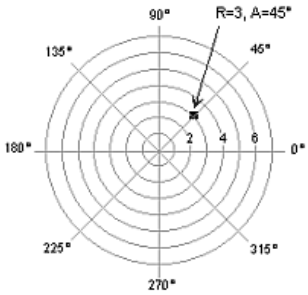
If you drag the ruler origin to the center of the page, the axes and rulers are repositioned with respect to the page.



Using Polar Coordinates

Polar coordinates use a different method to reference each point on the page. Instead of having two straight axes, polar coordinates measure the distance from the center and the angle from the axis.

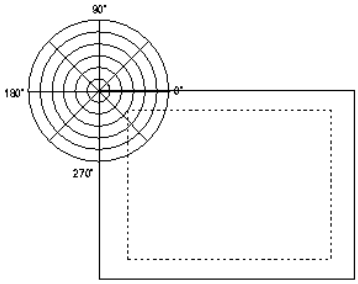




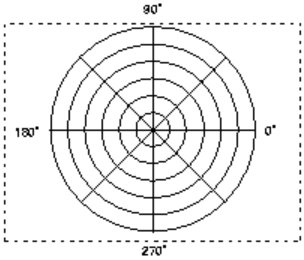
The distance from the center is called R (for radius). R is measured in inches, centimeters, or some other linear unit of measure. Angles are called A and are measured in degrees or radians. Degrees and radians are both radial, rather than linear, units of measure. One radian is equal to approximately 57.3 degrees.

To find a point where R equals 3 and A equals 45 degrees, find 3 at zero degrees and then move along that circle until you reach 45 degrees.

The zero degree point of the polar coordinate system corresponds to Designer's horizontal ruler. The ruler origin is the center of the polar coordinate model. If the origin is set at the top left of a page, the relationship of the system to the page is as shown in the following diagram.



If you drag the ruler origin to the center of the page, the rulers and system are repositioned with respect to the page.



To choose a coordinate system

1. Click the Coordinates button in the status bar.
2. Choose Cartesian, Polar (Radians), or Polar (Degrees). The position and object information reflects the new coordinate system.

Drawing with Coordinates

Coordinates give you a more precise method of drawing than using the mouse. Instead of pointing, clicking, and dragging the mouse, you can enter numbers for coordinates for an object's origin (starting point) and its ending point, or for an object's width and height.

The Coordinates dialog box gives you several methods for specifying the size and position of an object, as well as some actions that let you point and click with the keyboard, without using a mouse or other pointing device.

The following example shows how to draw a rectangle by entering coordinates. It is assumed that the rulers are set to inches. The upper left corner of the rectangle is positioned at the point (4,6). The rectangle is ten inches wide and three inches high.

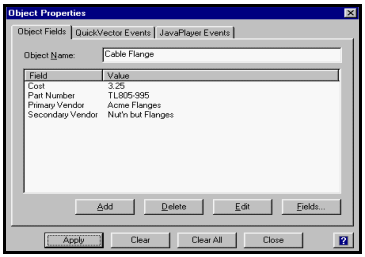
To draw a rectangle with coordinates

1. Click the Coordinates button in the status bar and choose Coordinates. The Coordinates dialog box opens.
2. Click Create a New, then select Rectangle from the list.
3. Click the down arrow in the Method list box and choose Width/Height, if necessary.
4. In the Position section choose the top left handle in the From list.
5. Place the cursor at the X scroll box. Type 4 and press the Tab key.
6. In the Y scroll box, type 6. You have now specified the X and Y coordinates for the starting point of the rectangle.
7. In the Width scroll box, type 10 and press tab. The width of the rectangle is 10 centimeters.
8. In the Height scroll box, type 3.
9. Press enter or click Create. Designer draws the rectangle on the page with the exact starting point and dimensions that you entered.
10. Click Close to close the Coordinates dialog box.

Setting Object Names and Other Properties

You can assign names to objects and groups of objects in your drawing. This lets you create a list of objects, select objects by name, and create your own library of clip art. You can assign names, costs, and other fields to complex engineering drawings.

The Object Properties dialog box lets you set object properties according to customized fields and values.



To name (or rename) an object

1. Select an object.
2. On the Object menu, click Properties. The Properties dialog box opens.
3. Type a name in the Object Name box and click Apply.
4. Click Close.

To create a new field

1. Select an object.
2. On the Object menu, click Properties. The Properties dialog box opens. Notice the name of the object that appears in the Object Name box.
3. Click Add.
4. Type Cost, for example, in the Field box and press the tab key.
5. Type 3.25, for example in the Value box and click Apply or press the Enter key.

6 Repeat steps 3 through 5 to add additional fields and values.

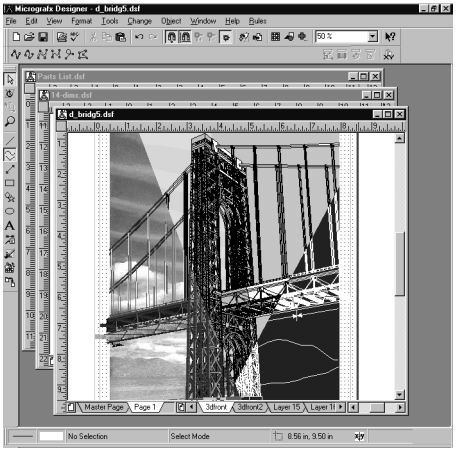
7 Click Close

.

Working with Files

Designer lets you display more than one file at a time. You can also have more than one window containing the same document. Like other Windows applications that let you open multiple documents, you can select the Cascade and Tile commands in the Window menu to arrange multiple windows on your screen.

The currently selected drawing window is the active window. The active window (with the title bar highlighted) receives the next action. Only one drawing window is active at a time.



You can resize a window manually and can maximize, restore, and minimize an open window by clicking the appropriate button at the top right of the window. After you minimize a window, you can select the Arrange Icons command in Designer's Window menu to automatically space the minimized document icons evenly on your screen.

Note

To select objects on multiple layers prior to export, open the Layers dialog box, select Edit All Layers, close the dialog box, and then select the desired objects on the desired layers of the current page.

Opening Files

To edit or view a file in Designer, you first open, or load, the file using the Open command in the File menu (keyboard shortcut **CTRL+O**).

To change folders, point to the folder containing the document that you want to open and double click the left mouse button. The file names in the folder appear at the left.

You also can type the directory name separated with backslashes. For example, type c:\iGrafx\designer\tutorials and press enter.

To quickly scroll to a specific filename, you can click the File Name list and type the first character of a filename. The list jumps to the first file beginning with that character.

Each time you choose the Open command in the File menu, the Open dialog box recalls the most recently used drive and directory.

When you open a DRW document with multiple pages, you receive a dialog box asking how you want to open the document.

- If each page in the original document contains a separate drawing, click Split Up Pages. Designer retains the contents on multiple pages as they were in the original DRW file.

- If a large drawing spans several pages in the original document, click Enlarge Document. The entire drawing is loaded as a single-page drawing. The page size is enlarged to include all of the used pages of the original drawing.

To open a file

1. On the File menu, click Open. The Open dialog box opens. (Keyboard shortcut **CTRL+O**)
2. Click the drive that contains the document you want to open.
3. Double click the appropriate folder.
4. Click a filename to see a preview of the drawing.
5. Click Open. The drawing appears in the drawing area.

Note

The Open dialog box does not show a file preview for DRW files. When you open a DRW file, it is automatically converted to a DSF file and the extension is changed to DSF.

You also can type the folder name separated with backslashes. For example, type **C:\IGRAFX\DESIGNER\TUTORIAL** and press **ENTER**.

To quickly scroll to a specific filename, you can click anywhere in the list of file names and then type the first character of the filename. The list jumps to the first file beginning with that character.

Each time you click the Open command on the File menu, the Open dialog box recalls the most recently used drive and folder.

To create a new file

- Click New on the File menu. Designer opens a new window containing an untitled document. (Keyboard shortcut **CTRL+N**)

Tip

If the Standard toolbar is displayed, you can click the New button .

To name a new file

1. Click Save or Save As on the File menu. The Save As dialog box opens.
2. Type a name in the File Name text box and press **ENTER**.

Tip

The keyboard shortcut for Save is **CTRL+S**.

If the Standard toolbar is displayed, you can click the Save button .

Recalling a File

The recall list in the File menu contains the last four documents you opened or saved in Designer. This command lets you quickly access the most recently used documents.

Note

If a file is deleted or is on a drive that is not currently available, it still may appear in the submenu. When you choose one of these files, Designer displays a message stating that it cannot find the file.

To open a recently used file

- Click the filename of the recently used document on the File menu.

Note

If a document has been deleted or is on a drive that is not currently available, Designer displays a message stating that it cannot find the document.

Closing a File

You can close the file in the active window in one of five ways:

- Click the Close button in the top right corner of the window.
- Open the File menu and choose Close.
- Open the document Control menu and choose Close.
- Double click the Control menu box at the top left of the drawing window.
- Press **CTRL+F4**.

If the file you are working with has changes, and you have not saved the latest changes, Designer asks you to select one of three choices: Yes, No, or Cancel.

- Yes saves the latest changes to your drawing. If you have not previously saved the drawing, the Save As dialog box opens. Type a name in the text box and press enter.
- No does not save changes to the current file and closes the document.
- Cancel cancels the Close command and returns you to the current document.

To close a file

- Click Close (keyboard shortcut **CTRL+F4**) or Close All on the File menu, or click the "X" Close button at the right side of the document's window.

Note

All open documents are closed if you close Designer.

To make a copy of a file

1. Click Open on the File menu. The Open dialog box opens.
2. Click the right mouse button on the name of the file you want to copy.
3. Click Copy on the shortcut menu.
4. Double-click the folder where you want the copy to reside.
5. Click the right mouse button outside of any file names, and click Paste.

To delete a file

1. On the File menu, click Open. The Open dialog box opens.
2. Click the right mouse button on the name of the file you want to delete.
3. On the shortcut menu, click Delete.
4. Click Yes to delete the file or click No to cancel the deletion.

Note

Deleting may either delete the file or move the file to the Recycle Bin, depending on how you have set the properties of the Recycle Bin.

To rename a file

1. On the File menu, click Open. The Open dialog box opens.

2 Click the right mouse button on the name of the file you want to rename.

3 On the shortcut menu, click Rename.

4 Type the new filename and extension and press **ENTER**.

Finding a File

If you are not sure of the location of a file, you can let Designer search for it. You can specify a search path that includes the drive, directory, and subdirectories, or you can search for a file on multiple disk drives.

Tip

If Designer lists multiple files found in a search, you can select the desired files from this list and then open all the files at once, even if the files are in different directories or subdirectories.

To find a file

1 On the File menu, click Open. The Open dialog box opens.

2 Click Find. The Find File dialog box opens.

3 Type the name of the file you want to search for.

4 Type a drive and folder, or click the Browse button to search for the folder.

5 Click Find new. Designer lists the names and locations of matching files.

6 Highlight one or more file names from the search list.

7 Click Open. Each selected document opens in its own window.

Tip

You can use wild-card characters (for example, ***.DSF**) to find files of the same type or files with similar names.

If Designer lists multiple files found in a search, you can select the desired files from this list and then open all the files at once, even if the files are in different folders or subfolders.

Saving a File

You should make a habit of saving your work often. This helps to ensure that your files are saved in the event of a power interruption or a hardware or software problem.

The first time you save a new document file, you can name it and choose where you want to store it. Afterwards, each time you choose the Save command, any changes to the file are saved.

To save a file

1. If you have more than one document open, select the window of the document you want to save.
2. On the File menu, click Save. If you are saving a document for the first time, the Save As dialog box opens. If you already have saved the file, your changes are saved in the file you named earlier.
3. Type the filename you want. If you do not provide an extension, DSF is used.
4. Choose the drive and folder in which you want to store the file.
5. Choose the file format you want in the file type list box if you want to save the document as a different format.
6. Click Save to save the file.

Make a habit of saving your work often. This helps to ensure that your files are saved in the event of a power interruption or a hardware or software problem.

The first time you save a new document file, you can name it and choose where you want to store it. Afterwards, each time you choose the Save command, any changes to the file are saved.

Import and Export

You also can import and export image files in several file formats, and you can import and export color palettes.

When you close Designer

If any of the files you are working with have changes, and you have not saved them before closing Designer, the Save Changes dialog box opens and requests that you select one of three choices: Yes, No, or Cancel.

- Click Yes to save changes to the current drawing before closing Designer. If you have not previously saved the drawing, the Save As dialog box opens. Type a name in the text box and press **ENTER**.
- Click No to close Designer without saving changes to your drawing.
- Click Cancel to cancel the Exit command and return to Designer.

Saving Copies of a File

The Save As command in the File menu (keyboard shortcut **CTRL+SHIFT+S**) lets you rename a document so that you have the original document and a new version. This option is useful for making a copy of a file.

To save a copy of a file

1. On the File menu, click Save As. The Save As dialog box opens. (Keyboard shortcut **CTRL+SHIFT+S**)
2. Type a different filename for the document copy.
3. Choose the drive and folder in which you want to store the copy.

4 Click Save. A copy of the document is stored with the new filename.

To revert to a saved file

1 On the File menu, click Revert To Saved. Designer asks if you are sure you want to ignore all changes before it reverts to the previous version.

2 Click Yes to open the most recently saved version of the document, or click No to return to the current document.

Note

This command restores the document to the most recently saved version, undoing all changes made since you last saved the file.

Closing Designer

The Exit command in the File menu closes Designer. Use this command when you finish working with the program or when you want to free memory to work in another application.

You can close Designer in one of four ways.

- Choose the Exit command in the File menu.
- Choose the Close command in the Control menu for Designer's main window.
- Double click the Control menu box of Designer's main window.
- Press **ALT+F4**.

If any of the files you are working with have changes, and you have not saved them before closing Designer, the Save Changes dialog box opens and requests that you select one of three choices: Yes, No, or Cancel.

- Yes saves changes to the current drawing before closing Designer. If you have not previously saved the drawing, the Save As dialog box opens. Type a name in the text box and press enter.
- No closes Designer without saving changes to your drawing.
- Cancel cancels the Exit command and returns you to Designer.

To close Designer

- On the File menu, click Exit. (Keyboard shortcut **ALT+F4**); or
- On Designer's title bar, click the "X" Close button.

Importing and Exporting Files

Designer uses the iGrafx Share *Media* to import from and export to standard file-formats for vector graphics, bitmap graphics, and text. This feature lets you use and share files created or used by other applications.

Import/ Export Filters

The installation CD includes filters (sometimes known as converters or translators) for many different file formats. When you import a file, the Share Media uses a filter to convert the file created with another application into Designer's format. When you export, a filter is used to convert the file into another program's format.

Note

Designer can *open* DSF, DS4, DRW, GRF, and MGX files. You also can *import* any of these file types.

Multiple pages and layers during import/export

When you import a file with more than one page (such as DSF, DS4, DRW, or MGX), only the objects on the first page are imported. The imported objects are added to the current page and layer in Designer.

When you import a file with more than one layer (such as DS4, DRW, or MGX), all the objects on all the layers are imported. However, the imported objects are added to the current page and layer in Designer; the imported objects are no longer on separate layers.

When you use the Custom Installation option, the Micrografx Installer lets you install only the filters, fonts, and clip art that you need. If you need a filter that is not installed, run the Installer again, choose Custom Installation, and install it.

New filters are developed and added to Designer from time to time.

Note

If you do not have the filter for a specific format, that format will be missing in the Import/Export dialog boxes. Use the Windows Notepad to examine the file MGXXLATE.LOG in your Windows folder. That file contains a log of any import/export problems. You may need to reinstall iGrafx Designer with a Custom installation, to make sure all the filters are installed.

Importing Files

The Import command (keyboard shortcut **CTRL+1**) lets you import graphic and text files into Designer. Designer can import the following file types.

Extension	Description
ABC	ABC FlowCharter
AF2	ABC FlowCharter 2.0
AF3	ABC FlowCharter 3.0
AI	Adobe Illustrator
BMP	Windows Bitmap
CDR	CorelDRAW! 3-8
CGM	Computer Graphics Metafile
CMX	Corel Clipart Format
CTM	Clear Text CGM
DGN	MicroStation Designer File
DIB	Windows DIB
DRW	Micrografx drawing
DWF	AutoDesk Drawing Web Format
DWG	AutoCAD Drawing File 12-14
DXF	AutoDesk AutoCAD
EMF	Windows Enhanced Metafile
EPS	Adobe Illustrator Encapsulated PostScript
FLO	FlowCharter
FPX	FPX Format
GEM	GEM Metafile (GEM Draw, Artline)
GIF	CompuServe bitmap

Extension	Description
HGL	HP Graphics Language
IGS	IGES Drawing
IGX	iGrafx Professional
JPG	JPEG (Joint Photographic Experts Group) bitmap
PCD	Kodak Photo CD bitmap
PCT	Macintosh PICT
PCX	ZSoft bitmap (PC Paintbrush)
PDF	Adobe Acrobat
PFD	Optima
PNG	CompuServe PNG
PP4	iGrafx Image / MGX PictPub 4.0
PP5	iGrafx Image / MGX PictPub 5.0
PPF	iGrafx Image / MGX PictPub
PS	Post Script
PSD	Adobe Photoshop
RAS	Sun Raster
S3D	iGrafx 3D / Micrografx 3D
SCT	Scitex CT
TGA	Targa bitmap
TIF	TIFF (Tag Image File Format) bitmap
VSD	Visio Drawing
WMF	Windows Metafile
WPG	WordPerfect or DrawPerfect graphics

Note

Designer can *open* DSF, DS4, DRW, GRF, and MGX files. You also can *import* any of these file types.

Multiple pages and layers during import

When you import a file with more than one page (such as DSF, DS4, DRW, or MGX), only the objects on the first page are imported. The imported objects are added to the current page and layer in Designer.

When you import a file with more than one layer (such as DS4, DRW, or MGX), all the objects on all the layers are imported. However, the imported objects are added to the current page and layer in Designer; the imported objects are no longer on separate layers.

Note

Designer can *open* DSF, DS4, DRW, GRF, and MGX files. You also can *import* any of these file types.

To import a file

1. On the File menu, click Import. The Import dialog box opens.
2. Click the down arrow in the Files of Type list box.
3. Choose the type of file you want to import.
4. Change to the drive and folder you want.
5. Highlight the name of the file you want to import.
6. Click Setup if you want to change import settings (if available).

7 Click Import. The dialog box closes and the imported file appears in the drawing area.

Note

If you skip step 6, Designer uses the settings previously used when importing this file type. The available import settings vary depending on the file type you want to import.

Tip

Files in the Hewlett-Packard Graphics Language (HPGL) format are sometimes named with a PLT (plotter) extension. Before importing a plotter file, make sure it has a PLT extension so that Designer will list it in the Import dialog box.

Exporting Files

The Export command (keyboard shortcut **CTRL+2**) lets you export Designer files for use in other programs. Designer can export the following file types. See Importing Files for a list of file extensions and descriptions.

Extension	Description
ABC	ABC FlowCharter
AF2	ABC FlowCharter 2.0
AF3	ABC FlowCharter 3.0
AI	Adobe Illustrator
BMP	Windows Bitmap
CDR	CorelDRAW! 3-8
CGM	Computer Graphics Metafile
CMX	Corel Clipart Format

Extension	Description
CTM	Clear Text CGM
DGN	MicroStation Designer File
DIB	Windows DIB
DRW	Micrografx drawing
DWF	AutoDesk Drawing Web Format
DWG	AutoCAD Drawing File 12-14
DXF	AutoDesk AutoCAD
EMF	Windows Enhanced Metafile
EPS	Adobe Illustrator Encapsulated PostScript
FLO	FlowCharter
FPX	FPX Format

Encapsulated PostScript files can be exported in one of four ways: with no header or preview, with no preview, with a TIFF preview, or with a WMF preview. If you plan to export an EPS file and import it into a Macintosh application (which is typical when sending files to a service bureau), you should export with no header or preview.

Note

Several settings in the Designer registry entries control how Designer files are exported. For more information, refer to Key name: Translation in the help topic Designer registry keys and values.

Multiple pages and layers during export

When you export a Designer file with more than one page, only the objects on the current page are exported. If any objects are selected on the current page, only the selected objects are exported.

When you export a Designer file with more than one layer to the DSF, DS4, or DRW file type, selected objects (even those on multiple layers) are exported to one layer. If no objects are selected, all layers and objects are exported, and the multiple layers are retained.

When you export a Designer file to any file type *other* than DSF, DS4, or DRW, all objects on the current page are exported to one layer.

Notes

To select objects on multiple layers prior to export, open the Layers dialog box, select Edit All Layers, close the dialog box, and then select the desired objects on the desired layers of the current page.

Designer can save to DS4 (Version 4.x) and MGX (Micrografx clip art) files. You can also export to DSF if needed.

To export a file

1. Select the objects you want to export. If no objects are selected, the entire page is exported.
2. On the File menu, click Export. The Export dialog box opens.
3. Choose a drive and folder for the exported file's destination, if necessary.
4. Type a name for the file.
5. Click the down arrow in the Save as Type list box.
6. Choose the type of file you want to export. Designer automatically adds the proper extension to the filename.
7. Click Setup if you want to change export settings (if available).
8. Click Export. Designer exports the file in the chosen format.

Note

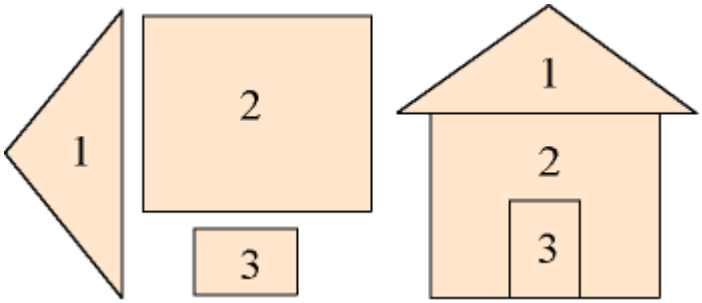
If you skip step 7, Designer uses the settings previously used when exporting this file type. The available export settings vary depending on the file type you want to export.

Drawing Objects

What is a Designer Object?

An object is the basic element of a Designer drawing. Designer objects are vector-based; their shapes and positions are defined geometrically. Unlike bitmapped objects, vector-based objects can be resized with no loss of image quality. They print at the resolution of the printer, and they are displayed at the resolution of the display device.

You create drawings by drawing, arranging, and editing objects. You can manipulate objects in a variety of ways to enhance and help organize your drawing. For example, objects can be colored, combined, duplicated, and enlarged.



Basics of Drawing

Drawing with Designer is easy. You select the shape you want to draw, and then drag the mouse to draw the object. Designer gives you the precision and flexibility you need to draw almost any shape imaginable.

Designer gives you three different options for drawing objects.

Drawing with the Toolbar and Ribbon

There are five primary shape tools on the Designer toolbar. Click on any shape to reveal a drawing ribbon.

From the drawing ribbon, select the drawing button most appropriate for your Designer project.

To draw an object using the ribbon

1. Click the Simple Line tool in the toolbox.
2. Click a drawing method. For example, click the Line Segment button to draw a straight line.
3. Move the pointer onto the drawing area and drag to create the desired object.

Tip

If you do not see the Toolbox or the Ribbon, click Toolbars on the View menu, and then click the Toolbox and Ribbon items.

To draw using the last drawing method

When the pointer is a select pointer, you can automatically return to the previous drawing method.

1. Point to an empty area and double click the left mouse button.

2 Your cursor changes back to the last drawing tool used. Drag to create an object.

To draw with crosshairs

▶ Press the keyboard shortcut **CTRL+H** to turn crosshairs on or off.

Canceling and Redoing an Action

Sometimes you will want to stop an action that you have not yet finished, or undo the last change you made. If you change your mind after undoing an action, you can redo it.

Use the **ESC** key to interrupt an action before you complete it.

Use Undo to reverse an action, or event, that you just completed (keyboard shortcut **CTRL+Z**). You can undo up to 100 of the last events, depending on the undo event limit setting.

Use Redo to redo an action.

Tip

Undo and Redo affect only actions that have occurred since the last time you saved the drawing. For example, if you move an object and then save the drawing, you cannot undo the move.

Use the Reset Transform command to remove all transformations, such as movements or rotations, from selected objects. Resetting an object transformation:

- Returns the object to its originally drawn position and size.
- Removes all skews and rotations that you have applied.
- Removes warps.
- Returns the origin to the object's center.

Tip

Fills and reshaped points are not affected by Reset Transform. Also, duplicating an object is a transformation that cannot be reset.

To cancel an action before completing it

- Press the **ESC** key.

Tip

If you are drawing a line but decide you don't want to draw it after all, press **ESC**. If you are moving an object but decide to cancel the move, press **ESC** and the object returns to its original position.

To undo an action

- On the Edit menu, click Undo.

  or

  Use the keyboard shortcut **CTRL**+Z.

Tip

You can set the undo event limit on the General tab of the Options dialog box (on the Tools menu, click Options, and click General).

To redo an action

- On the Edit menu, click Redo (keyboard shortcut **CTRL+SHIFT+Z**).

Tip

You can set the undo event-limit on the General tab of the Options dialog box (on the Tools menu, click Options).

Resetting an Object Transformation

Use the Reset Transform command to remove all transformations, such as movements or rotations, from selected objects. To reset a transformation, select the objects to reset, open the Change menu, and choose Reset Transform.

- Resetting an object transformation:
- Returns an object to its originally drawn position and size.
- Removes all skews and rotations that you have applied.
- Removes warps.
- Returns the origin to the object's center.

Note

Fills and reshaped points are not affected by Reset Transform. Also, duplicating an object is not a transformation that can be reset.

To reset an object transformation

1. Select the objects to reset.
2. On the Arrange menu, click Reset Transform.

Drawing with the Constraint Tools

The Constraint tools restrict, or constrain, the way in which objects are drawn. A selected button remains on until you click it again to turn it off.

Constraining with the Keyboard

You can use keystrokes to activate constraints. Keystrokes activate a constraint only while the key is pressed.

You can use a key to toggle the effect of a constraint button. For example, if you press and hold **CTRL** while the Angle Constraint button is selected, you turn off the constraint.

Constraining to a 15-degree Angle

You can use the Angle Constraint button (or press Shift) to force lines to draw at a 15-degree angle. This constraint is useful for drawing lines (and object edges) that are perfectly horizontal or vertical.

Constraining to a Square or Circle

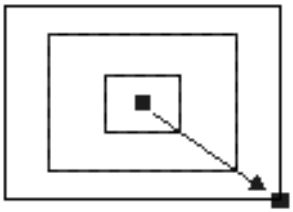
Use the Proportional Constraint button (or press Shift) to force rectangular or elliptical shapes to draw as squares or circles, respectively.

Reversing the Drawing Direction

Use the Reverse Direction button (or press **CTRL**) to reverse the direction Designer normally draws objects created from a single side (for example, drawing a square from a single side). See the specific drawing method you are using for details.

Using the From Center Button

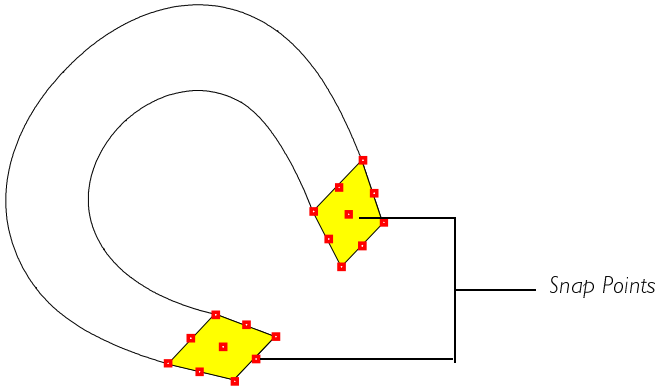
Use the From Center button (or press **CTRL**) to force Designer to draw the object from the center outward. Drawing from the center can be useful when you want the center of the object to be at a particular point.



Drawing with Snap Points

You can use object snap to "snap," or attract, the end of a line to a point on a object. These points, or snap points, attract the ends of lines like a magnet when they are near.

Snap points appear as small red squares on a object. You can use snap points to draw a line or other object that perfectly touches the object. Snap points can help show the symmetrical form of a object when you need to draw, for example, a line through the exact center of a circle. Snap points appear only on the bounding box of text and warped objects.



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Note

Snap points are not attached to an object and do not move when the object is moved or deleted.

Adding Snap Points to an Object

Click the Add Snap Points button in the Edit ribbon to add snap points to selected objects (keyboard shortcut **CTRL+N**). You can also click the Snap Points button in the status bar, if displayed. Snap points are placed at the locations selected in the Rulers/Snap panel of the Preferences dialog box.

To add snap points to an object

1. Select the objects you want to have snap points.
2. Click the Add Snap Points button in the menu bar. Snap points are placed at the locations selected on the Rulers/Snap tab of the Options dialog box.

Tip

You can select Add Snap Points with the keyboard using **CTRL+F7**

Removing Snap Points from an Object

Click the Remove Snap points button in the Edit ribbon to remove all snap points from the drawing area\ (keyboard shortcut **CTRL**+shift+n). You can also click the Snap Points button in the status bar, if displayed.

For instructions on setting snap point options, see "Setting Preferences" in Chapter 3.

To remove snap points

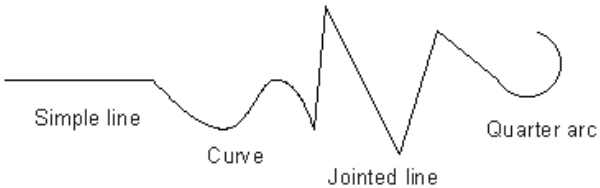
- Click the Remove Snap Points button in the menu bar. All snap points from the drawing area are removed.

Tip

You can select Remove Snap Points with the keyboard using **CTRL+SHIFT+F7** You can also click the Snap Points button on the status bar, if displayed.

Using Connect-A-Draw

Connect-A-Draw is a Designer feature that makes it easy to chain the ends of open objects as you draw them. You can use this method to create an object made of several different line types. For example, you can draw a straight line, then chain it to a curve, then chain it to a freehand object, and so on.



To chain lines while drawing

1. Draw a segment of the line.
2. Select a different drawing method, if you wish. Hollow boxes appear at both ends of the line.
3. Point to a hollow box at one end of the line and draw the next portion of the object.
4. Repeat steps 2 and 3 to chain more segments.

To chain an existing open object

1. Select the object you want to augment.
2. Select a drawing method. Hollow boxes appear at both ends of the line when an applicable method is selected.
3. Point to a box at one end of the line and draw the next portion of the object.
4. Repeat steps 3 and 4 to chain more segments.

Choosing Drawing Shapes and Objects

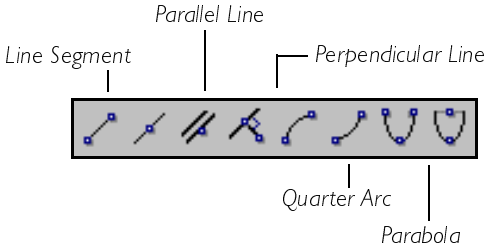
Every Designer drawing is little more than a composition of shapes and objects. The designer toolbar is composed of buttons that let you create any shape or object imaginable. Your Designer shape and objects can begin simply and develop into unique and functional graphics according to your own specifications.

The standard Designer shapes and objects are as follows:

- Simple Lines
- Compound Lines
- Sticky Lines
- Rectangles
- Polygons
- Ellipses

Drawing Simple Lines

Click the Simple Line tool (keyboard shortcut **CTRL+D**) to display the simple line drawing buttons in the ribbon at the top of the Designer window. These buttons are used to draw curves, rectangles, polygons, and ellipses.



To draw a simple line segment

The Line Segment button  draws single, straight lines.

1 Click the Simple Line tool  in the toolbox.

2 Click the Line Segment button in the ribbon.

3 Move the pointer to the drawing area.

4 Drag to draw the line.

5 Release the mouse button when you finish drawing the line.

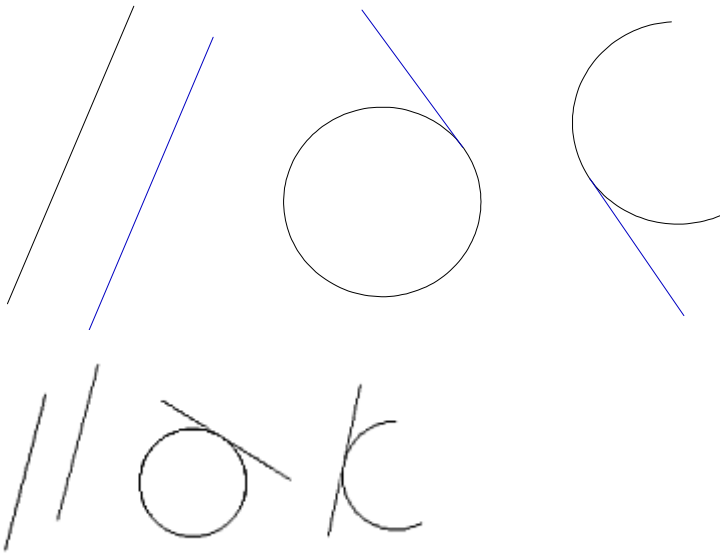
Tips

If you do not see the Toolbox or the Ribbon, click Toolbars on the View menu, and then click the Toolbox and Ribbon items.

To constrain the line to a 15-degree angle, select the Angle Constraint button . To draw from the center outward, press and hold **CTRL** while drawing or select the From Center button .

Drawing Parallel Lines

The Parallel Line button draws a line that is parallel or tangent to a line segment, arc, ellipse, or rectangle.



To draw a parallel or tangent line

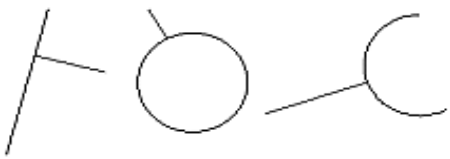
1. Click the Simple Line tool in the toolbox.
2. Click the Line Segment button in the ribbon.
3. Draw your initial line segment by dragging it across your Designer page.
4. Click the Parallel Line button in the ribbon.
5. Move the pointer near the object, and press and hold the left mouse button.
6. Drag the pointer the desired distance from the line or curve to draw the second line.
7. Release the mouse button when you finish drawing the line.

Tip

If you do not see the Toolbox or the Ribbon, click Toolbars on the View menu, and then click the Toolbox and Ribbon items.

Drawing Perpendicular Lines

The Perpendicular Line button draws a line that is perpendicular to a line segment, arc, ellipse, or rectangle.



To draw a perpendicular line

1. Click the Simple Line tool in the toolbox, if necessary.
2. On the ribbon, click the Line Segment button

3 Draw your initial line segment by dragging it across your Designer page.

4 On the ribbon, click the Perpendicular Line button .

5 Move the pointer near your first line, and press and hold the left mouse button.

6 Drag the pointer the desired distance from the line or curve to draw the line.

7 Release the mouse button when you finish drawing the line.

Tips

If you do not see the Toolbox or the Ribbon, click Toolbars on the View menu, and then click the Toolbox and Ribbon items.

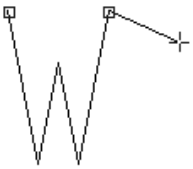
To draw from the center outward, press and hold **CTRL** while drawing, or click the From Center button .

Extending a Line

You can extend a straight line at the end of an open object with the Parallel and Perpendicular line buttons. The added line maintains the slope of the original line, or is at a right angle to the original for the Parallel and Perpendicular buttons, respectively.

To extend a straight line, double click the line you want to extend, click the Simple Line tool in the toolbox, click the Line Segment button in the ribbon, and click the Parallel or Perpendicular button. Point to the end of the line you want to extend and drag the extended line

.



To extend a straight line

1. Double click the line you want to extend.
2. Click the Simple Line tool in the toolbox.
3. Click the Parallel button or the Perpendicular button in the ribbon.
4. Point to the end of the line you want to extend, and drag to extend line.

Tip

If you do not see the Toolbox or the Ribbon, click Toolbars on the View menu, and then click the Toolbox and Ribbon items.

To draw an arc

The 3-Point Arc button draws one, two, or three quarters of an ellipse.

1. Click the Ellipse tool in the toolbox.
2. Click the 3-Point Arc button in the ribbon.
3. Drag to draw a line between the first two points. Release the mouse button. The arc appears on the screen and changes size and proportion as you drag the pointer.

4 Click the mouse button when you finish drawing the arc.

Tips

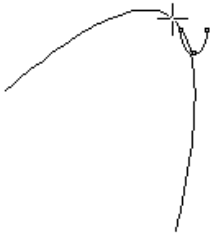
If you do not see the Toolbox or the Ribbon, click Toolbars on the View menu, and then click the Toolbox and Ribbon items.

Use the Proportional Constraint button to force Designer to draw radial arcs that are one-quarter of a perfect circle.

Use the Reverse Direction button to control the bowing direction of the arc. When the button is not selected (the default), the arc bows to the right as you draw upward and left as you draw downward. The opposite occurs when the button is selected.

Drawing a Parabola

The Parabola button draws parabolic shapes. You create parabolas by drawing a line and then bowing the line outward -- much like pulling an elastic string.



To draw a parabola

1. Click the Simple Line tool in the toolbox.
2. Click the Parabola button in the ribbon.
3. Point where you want to begin the parabola.
4. Drag where you want to place the other end of the parabola. Release the mouse button.
5. Move the pointer to where you want the highest point of the curve.
6. Click the mouse button to finish drawing the parabola.

Tip

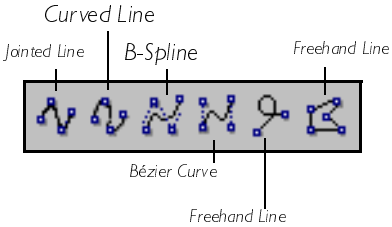
If you do not see the Toolbox or the Ribbon, click Toolbars on the View menu, and then click the Toolbox and Ribbon items.

To constrain the line in steps 3 and 4 to a 15-degree angle, select the Angle Constraint button .

To draw the line in steps 3 and 4 from the center outward, press and hold **CTRL** while drawing, or select the From Center button .

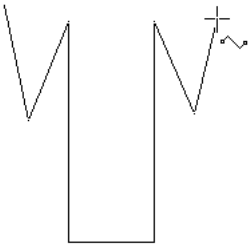
Drawing Compound Lines

Click the Compound Line tool (keyboard shortcut **CTRL+SHIFT+W**) to display the compound line drawing buttons in the ribbon at the top of the Designer window. These buttons are used to draw objects from connected lines and curves, such as jointed lines, curves, B-splines, Bézier curves, freehand objects, and irregular polygons.



Drawing Jointed Lines

The Jointed Line button  draws objects that are a "chain" of connected straight lines.



Jointed lines are open unless the last point is the same as the first; then Designer automatically closes it. If you want to close an open jointed line, select the object, open the Change menu, choose Combine, and choose the Connect Closed command. The ends are connected with a straight line.

To draw a jointed line

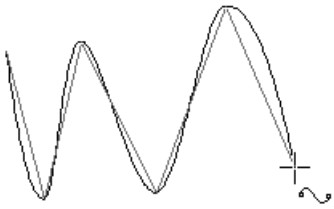
1. Click the Compound Line tool in the toolbox.
2. Click the Jointed Line button in the ribbon.
3. Point where you want to begin the jointed line, and click the left mouse button.
4. Move the mouse to the second point, and click the left mouse button.
5. Repeat for each segment or point.
6. Press **ESC** when you finish.

Tip

Press **CTRL** or click the Angle Constraint button to constrain the line to a 15-degree angle.

Drawing Curves

The Curved Line button draws objects that are a "chain" of connected, curving (parabolic spline) lines.



Objects drawn with the Curved Line button are open unless the last point is the same as the first; then Designer automatically closes it. If you want to close an open curve, select the object, click Connect Closed on the Arrange menu. The ends are connected with a straight line.

To draw a curve

1. Click the Compound Line tool in the toolbox.
2. Click the Curved Line button in the ribbon.
3. Point where you want to begin the curve, and click the left mouse button.
4. Drag to draw a line, and click the left mouse button.
5. Drag the pointer. The line curves in the direction you move the pointer. Click the left mouse button.
6. Repeat steps 3 and 5 to add more curved segments.
7. Press **ESC** when you finish.

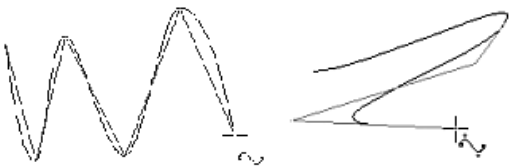
Tips

If you do not see the Toolbox or the Ribbon, click Toolbars on the View menu, and then click the Toolbox and Ribbon items.

To constrain the line to angles that are multiples of 15 degrees, click the Angle Constraint button .

Drawing Bézier Curves

The Bézier Curve button draws Bézier curves. After a little practice, you can use this tool to create smooth, curving objects in much less time than it takes using other tools.



Although drawing Bézier curves takes some practice, it's worth the effort. If you are new to Bézier curves, practice reshaping some curved objects with them before trying to draw with Bézier curves.

To draw a Bézier curve

1. Click the Compound Line tool in the toolbox.
2. Click the Bézier Curve button in the ribbon.
3. Point where you want to begin the curve, and click the left mouse button.
4. Move the pointer where you want to place the second point. Press and hold the left mouse button until Designer connects the two endpoints.
5. Drag the pointer to change the curvature of the line. Release the mouse button when you have the curve that you want.

   or

   Release the mouse button without dragging to create a cusp (an angle).
6. Repeat steps 3 and 6 to draw more (connected) curves.
7. Press **ESC** when you finish.

Tips

If you do not see the Toolbox or the Ribbon, click Toolbars on the View menu, and then click the Toolbox and Ribbon items.

When you draw Bézier curves, the first mouse press places the first anchor; the second mouse press and drag places the second anchor and changes that anchor's control points.

Be sure to press the left mouse button for longer than a "click" when placing the second and subsequent Bézier points. Pressing the mouse button for one second should be long enough. If you click the mouse button, you end the Bézier drawing action.

Objects drawn with Bézier Curve are open unless the last point is the same as the first; then Designer automatically closes it. If you want to close an open curve, select the object, click Combine on the Change menu, and click Connect Closed. The ends are connected with a straight line.

Drawing B-Splines

The B-Spline button draws B-spline curves. B-splines are smooth curves based on at least three points. The curve touches the first and last points and is pulled by the middle point.

Objects drawn with the B-Spline button are open unless the last point is the same as the first; then Designer automatically closes it. If you want to close an open curve, select the object, and click Connect Closed on the Arrange menu. The ends are connected with a straight line.

To draw a B-spline

1. Click the Compound Line tool in the toolbox.
2. Click the B-Spline button in the ribbon.
3. Point where you want to begin the curve, and click the left mouse button.
4. Drag to draw the first line of the curve, and click the left mouse button.
5. Drag to draw the second line of the curve, and click the left mouse button.
6. Repeat step 5 to draw additional (connected) curves.
7. Press **ESC** when you finish.

Tip

If you do not see the Toolbox or the Ribbon, click Toolbars on the View menu, and then click the Toolbox and Ribbon items.

Drawing Freehand Objects

The Freehand button draws freeform objects as if you were drawing with pencil and paper.

This button is especially useful if you are using a digitizing pad and pen to trace drawings. When you finish drawing, Designer automatically smooths the object and converts it to curves.

Freehand objects are open unless the last point is the same as the first; then Designer automatically closes it. If you want to close an open freehand object, select it, open the Arrange menu, and choose the Connect Closed command. The ends are connected with a straight line.

To draw a freehand object

1. Click the Compound Line button in the toolbox.
2. Click the Freehand button in the ribbon.
3. Point where you want to begin drawing.
4. Drag to draw the object.
5. Release the mouse button when you finish drawing.

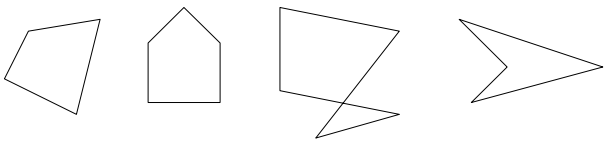
Tips

If you do not see the Toolbox or the Ribbon, click Toolbars on the View menu, and then click the Toolbox and Ribbon items.

Freehand objects are open unless the last point is the same as the first; then Designer automatically closes it. If you want to close an open freehand object, select it, click Combine on the Change menu, and click Connect Closed. The ends are connected with a straight line.

Drawing Irregular Polygons

The Irregular Polygon button lets you draw closed objects with multiple



sides.

See Drawing Regular Polygons and Drawing Stars to draw polygons, such as triangles and stars, in which each side is the same length.

To draw an irregular polygon

1. Click the Compound Line tool in the toolbox.
2. Click the Irregular Polygon button in the ribbon.
3. Point where you want to begin the polygon.
4. Drag to draw the first side of the polygon. Release the mouse button when you have the first side drawn as you want it.
5. Move the pointer where you want to place the third point. Click the left mouse buttons.
6. Repeat step 5 to place more points, if you wish.
7. Press **ESC** when you finish.

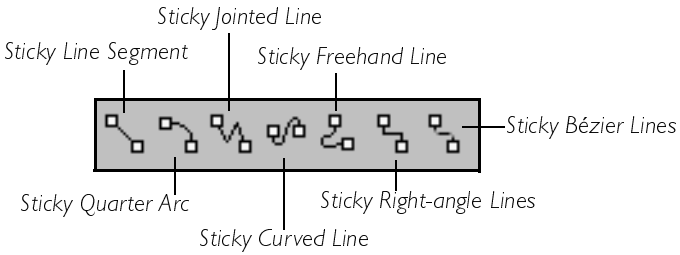
Tips

If you do not see the Toolbox or the Ribbon, click Toolbars on the View menu, and then click the Toolbox and Ribbon items.

Click the Angle Constraint button to constrain the line to a 15-degree angle.

Drawing Sticky Lines

Click the Sticky Line Tool (keyboard shortcut **CTRL+SHIFT+U**) to display the sticky line drawing buttons in the ribbon at the top of the Designer window. These buttons are used to create diagramming lines with ends and points that automatically attach, or stick, to the ends and points of other lines.



To draw a sticky line

1. Select the Sticky Line tool in the toolbox.
2. Click where you want the line to start.
3. Keeping the mouse button pressed, move the pointer where you want the line to end.
4. To complete the line, release the mouse button.

To draw a sticky quarter arc

1. Select the Sticky Quarter Arc tool in the toolbox.
2. Click where you want the line to start.
3. Keeping the mouse button pressed, move the pointer where you want the line to end.
4. To complete the line, release the mouse button.

To draw a sticky jointed line

1. Select the Sticky Jointed Line tool in the toolbox.

2 Click where you want the line to start.

3 Keeping the mouse button pressed, move the pointer where you want the line to stop.

4 Release the mouse button and click and drag the line again, moving the pointer where you want the line to end.

5 To complete the line, release the mouse button and press **ESC**.

To draw a sticky curved line

1 Select the Sticky Curved Line tool in the toolbox.

2 Click where you want the line to start.

3 Keeping the mouse button pressed, move the pointer where you want the line to curve.

4 Release the mouse button and click and drag the line again, moving the pointer where you want the line to end.

5 To complete the line, release the mouse button and press **ESC**.

To draw a sticky freehand line

1 Select the Sticky Freehand Line tool in the toolbox.

2 Click where you want the line to start.

3 Keeping the mouse button pressed, move the pointer where you want the line to end.

4 To complete the line, release the mouse button.

To draw a sticky right-angle line

1 Select the Sticky Right-Angle Line tool in the toolbox.

2 Click where you want the line to start.

3 Keeping the mouse button pressed, move the pointer where you want the line to end.

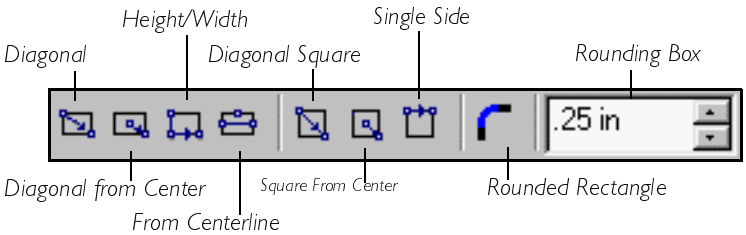
4 To complete the line, release the mouse button.

To draw a sticky Bézier line

1. Select the Sticky Bézier Line tool in the toolbox.
2. Click where you want the line to start.
3. Keeping the mouse button pressed, move the pointer where you want the line to end.
4. To complete the line, release the mouse button.

Drawing Rectangular Objects

Click the Rectangle Tool (keyboard shortcut **CTRL+SHIFT+X**) to display the rectangle drawing buttons in the ribbon at the top of the Designer window. These buttons are used to draw rectangular objects from opposite corners or from a single side. You also can draw a rectangle based on its height and width.



Note

Although "rectangle" refers to both squares and rectangles, "square" means only perfect square shapes.

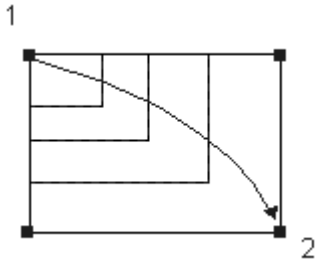
Drawing a Rectangle or Square

There are seven methods for drawing a rectangle: the Diagonal, the Height/Width, and the Single Side methods.

- Diagonal from center
- From center line
- Diagonal square
- Diagonal square from center
- Single side

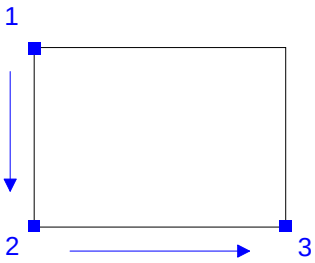
Using the Diagonal Method

The Diagonal method is one of the most intuitive ways to draw rectangles because you just drag diagonally to create the rectangle.



Using the Height/ Width Method

The Height/Width method lets you draw rectangles and by specifying the height and width.



Using the Single Side Method

The Single Side method draws only squares. Click the Single Side button and drag to draw one edge of the square. The rest of the square draws automatically. When you finish, release the mouse button.

Notes

There are two ways to draw a square. You can use the Single Side method or you can choose the diagonal drawing method and activate the Proportional Constraint button (or press **SHIFT**).

By default, squares draw down as you drag right, and up as you drag left. Select the Reverse button for the opposite to occur.

To draw a rectangle or square using the Diagonal method

1. Click the Rectangle tool in the toolbox.
2. Click the Diagonal button in the ribbon.
3. Point where you want to begin the rectangle and drag the pointer to the opposite corner.
4. Release the mouse button when you finish the rectangle.

Tip

Press **SHIFT** while drawing the rectangle to force a square.

To draw a rectangle or parallelogram using the Height/Width method

1. Click the Rectangle tool in the toolbox.
2. Click the Height/Width button in the ribbon.
3. Point where you want to begin the rectangle or parallelogram.
4. Drag to draw the first edge.

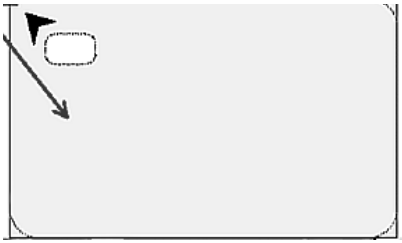
5 Release the mouse button.

6 Move the pointer to draw the rest of the object.

7 Click the right mouse button (and release **SHIFT** if you drew a rectangle) when you finish.

Drawing Rectangles with Rounded Corners

The Rounded Rectangle button lets you create rectangles and squares with rounded corners. You can increase or decrease the curve of the corner (before it is drawn) by increasing or decreasing the radius. A larger radius increases the curvature; a smaller radius decreases it.



To draw a rounded rectangle

1 Click the Rectangle tool in the toolbox.

2 From the ribbon, click the method button of your choice.

3 Click the Rounded Rectangle button in the ribbon.

4 Change the radius in the Radius box, if you wish.

Note

You can round rectangles created with the Height/Width button only if you constrained the rectangle while drawing it.

5 Point to where you want to begin the rectangle.

6 Draw the rectangle.

Rounding Existing Rectangles

You can round the corners of existing rectangles that have not been rotated, skewed, converted to curves, or warped. Rectangles drawn with the Height/Width method, From Centerline method, or Single Side method must have been drawn at a 90-degree angle before you can round the corners.

Tip

To draw a 90-degree angle, use the Angle Constraint button.

To add rounded corners to an existing rectangle

1. Double click the rectangle with the select pointer. A blue handle appears near the rectangle's upper left corner. If several hollow handles appear on the rectangle, this method cannot be used.
2. Drag the blue handle toward the center of the rectangle.
3. Release the mouse button when you finish rounding the corners.

Tip

You can round rectangles created with Height/Width only if you constrained the rectangle while drawing it.

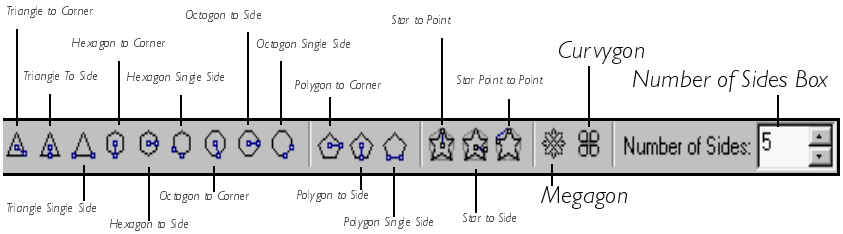
You can also round rectangle corners by selecting the rectangle and clicking the Point Reshape button on the Ribbon.

Drawing Regular Polygons

Click the Regular Polygon tool (keyboard shortcut **CTRL+SHIFT+Y**) to display the regular polygon drawing buttons in the ribbon at the top of the Designer window. These buttons are used to draw rectangular objects from opposite corners or from a single side. You also can draw a regular polygon from center to corner, from center to side, and from just one side

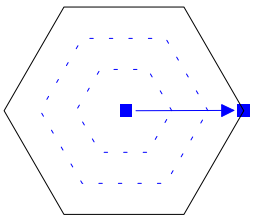
There are three ways to draw a polygon: the To Corner, To Side, and Single Side methods. You can use the method that suits your needs or preferences.

If you want to draw irregular polygons (polygons in which not all the sides are equal), use the Compound Line tool.



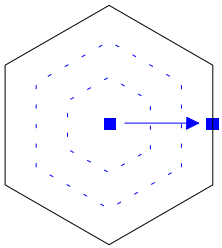
Using the To Corner Method

The To Corner method lets you draw polygons from the center to any particular corner.



Using the To Side Method

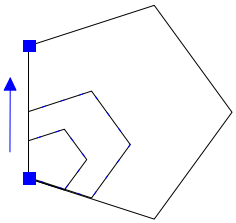
The To Side method lets you draw polygons from the center to a side.



Using the Single Side Method

The Single Side method lets you create polygons by drawing only one side. Designer draws the other sides.

Drag Single Side to draw one edge of the polygon. The rest of the polygon is drawn automatically. Release the mouse button when you finish.



To draw a polygon from center to a corner or a side

1. Click the Polygon tool in the toolbox.
2. Click the To Corner button in the ribbon, or click the To Side button in the ribbon.
3. Enter the number of sides for the polygon in the Sides box (three or more).
4. Point where you want the center of the polygon.

5 Drag to draw the polygon.

6 Release the mouse button when the polygon is the size you want.

Tips

If you do not see the Toolbox or the Ribbon, click Toolbars on the View menu, and then click the Toolbox and Ribbon items.

To constrain polygons to multiples of 15 degrees, select the Angle Constraint button .

To draw a polygon from the center to a side

1 Click the Polygon tool in the toolbox.

2 Click the To Side button in the ribbon.

3 Enter the number of sides for the polygon in the Sides box (three or more).

4 Point where you want the center of the polygon.

5 Drag to draw the polygon.

6 Release the mouse button when the polygon is the size you want.

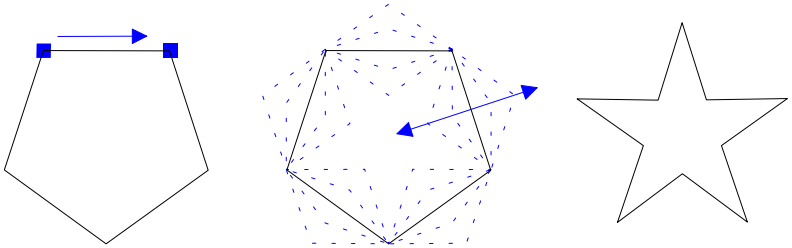
Tips

To constrain polygons to a 15-degree angle, select the Angle Constraint button .

Press **SHIFT** to quickly switch to drawing from center to corner.

Drawing Stars

Designer lets you draw star shapes with any number of points.



To draw a star

1. Click the polygon tool in the toolbox.
2. Click any of the three Star buttons in the ribbon. For example, click the To Point button, the To Side button, or the Point to Point button, according to your drawing preference.
3. Type the number of points for the star in the Sides box, if you wish.
4. Press and hold the left mouse button and draw a polygon. To complete the star, release the mouse button.

To draw a curvygon

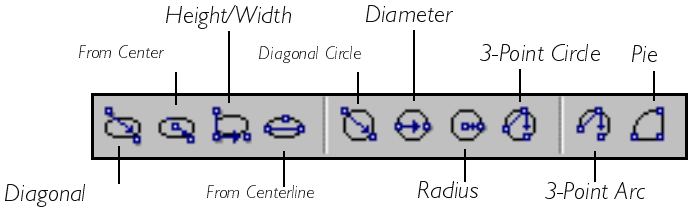
1. Click the curvygon tool in the toolbox.
2. Point the cursor where you want the curvygon to start.
3. Keeping the mouse button pressed, move the pointer to create the curvygon.
4. You can change the shape of the curvygon by pressing the mouse button while moving the pointer. Continue until you are satisfied with the curvygon.
5. To complete the curvygon, either press **ESC** or double-click outside of the curvygon.

Drawing Elliptical Objects

Click the Ellipse tool (keyboard shortcut **CTRL+SHIFT+Z**) to display the ellipse drawing buttons in the ribbon at the top of the Designer window. These buttons are used to draw a circle from one edge to the opposite edge, or an ellipse from one corner to the opposite corner. You also can draw an ellipse by specifying its height and width, or a circle by selecting three points.

You also can use the Ellipse button to draw an elliptical arc by specifying three points of the arc.

An ellipse drawn with the Height/Width method or the Centerline method must be drawn at a 90-degree angle before you can reshape it into a wedge or an arc.



Note

"Ellipse" refers to both ellipses and circles, but "circle" describes only perfect circular shapes.

Constraining with the Keyboard

You can use keystrokes to activate constraints. Keystrokes activate a constraint only while the key is pressed.

You can use a key to toggle the effect of a constraint button. For example, if you press and hold **CTRL** while the Angle Constraint button is selected, you turn off the constraint.

Constraining to a 15-degree Angle

You can use the Angle Constraint button (or press **CTRL**) to force lines to draw at a 15-degree angle. This constraint is useful for drawing lines (and object edges) that are perfectly horizontal or vertical.

This button also forces horizontal and vertical movements, and rotations and skews of 15-degree increments.

Constraining to a Square or Circle

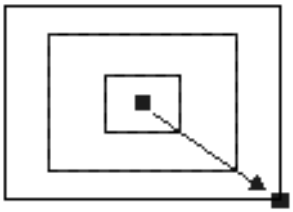
Use the Proportional Constraint button (or press **CTRL**) to force rectangular or elliptical shapes to draw as squares or circles, respectively.

Reversing the Drawing Direction

Use the Reverse Direction button (or press **SHIFT**) to reverse the direction Designer normally draws objects created from a single side (for example, drawing a square from a single side). See the specific drawing method you are using for details.

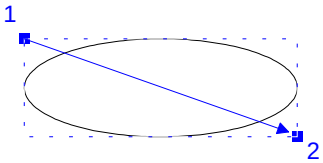
Using the From Center Button

Use the From Center button (or press **SHIFT**) to force Designer to draw the object from the center outward. Drawing from the center can be useful when you want the center of the object to be at a particular point.



Using the Diagonal Method

The Diagonal method lets you draw an ellipse diagonally from one corner of its bounding box to the opposite.



To draw an ellipse using the Diagonal method

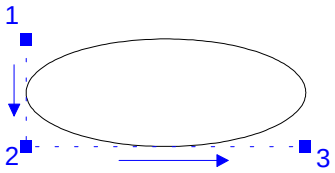
1. Click the Ellipse tool in the toolbox.
2. Click the Diagonal button in the ribbon.
3. Point where you want to begin the ellipse's (invisible) rectangular bounding box.
4. Drag diagonally to draw the ellipse.
5. Release the mouse button when you finish.

Tip

Press **SHIFT** while drawing the ellipse to force a circle.

Using the Height/ Width Method

The Height/Width method lets you draw an ellipse by specifying the height and width of its bounding box.



Using the Diameter Method

The Diameter method lets you draw circles from one edge of the circle to the opposite edge. Drag to draw the circle. Release the mouse button when you finish.

Using the 3-Point Circle Method

The 3-Point Circle method lets you draw a circle by specifying three points on its edge.

Tips

"Ellipse" refers to both ellipses and circles, but "circle" describes only perfect circular shapes.

An ellipse drawn with the Height/Width method must be drawn at a 90-degree angle before you can reshape it into a wedge or an arc.

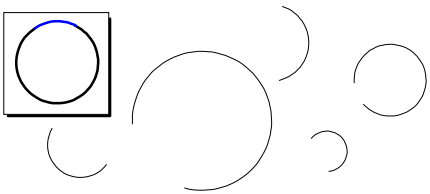
There are three ways to draw a circle. You can use the Diameter method or the 3-Point Circle method, or you can choose one of the elliptical drawing methods and activate the Proportional Constraint button .

To draw a circle using the 3-Point Circle method

1. Click the Ellipse tool in the toolbox.
2. Click the 3-Point Circle button in the ribbon.
3. Point where you want to place the first point on the circle. Press and hold the left mouse button.
4. Drag the pointer where you want to place the second point. Release the mouse button.
5. Move the pointer where you want to place the third point. Click the left mouse button to draw the circle.

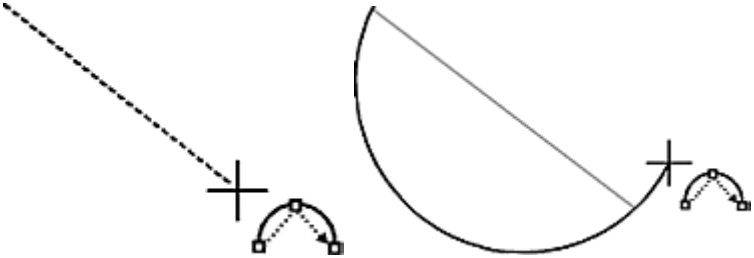
Drawing an Elliptical Arc

An elliptical arc is a segment of an ellipse. There are two ways to draw an elliptical arc: the 3-Point Arc and the Trace an Ellipse methods.



Using the 3-Point Arc Method

The 3-Point Arc method lets you draw an arc by specifying three points on the arc.



Tip

You can draw quarter arcs using the Quarter Arc button . With quarter arcs you don't first draw an ellipse, but you are limited to drawing only one quarter of an ellipse. (See Drawing Elliptical Objects for more information.)

To draw a 3-point elliptical arc

1. Click the Ellipse tool in the toolbox.
2. Click the 3-Point Arc button in the ribbon.
3. Drag the arc's diameter and release the mouse button.
4. Move the pointer to create the arc.
5. Click the left mouse button to draw the arc.

Tracing the Arc of an Ellipse

You can use the edge of an existing ellipse to draw an elliptical arc if you have not rotated, skewed, or converted the ellipse to curves. The arc traces along the edge of the ellipse and replaces the ellipse.

To draw an elliptical arc by tracing an ellipse

1. Draw the ellipse to use as a template for the arc.
2. Select the ellipse.
3. Click the Edit tool and Point Reshape button in the ribbon.
4. Position the pointer outside the ellipse.
5. Drag in a circular motion outside of the ellipse. An arc draws on top of the ellipse's edge.
6. Release the mouse button and press **ESC** when you finish.

Note

You can also create arcs from pie wedges as long as the wedges have not been skewed, rotated, or converted to curves.

Editing an Arc

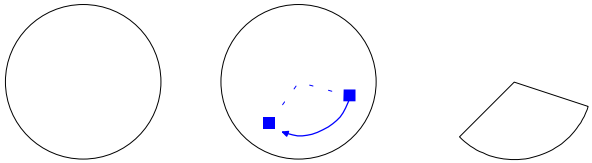
You can lengthen or shorten an arc by double clicking the arc and dragging in a circular motion outside the object.

You can also use the Edit ribbon. Select the arc, click the Edit tool , and click the Point Reshape button . Then drag in a circular motion outside the object.

Drawing a Pie Wedge

You use an existing ellipse to draw individual or multiple pie wedges. You can draw several pie wedges to create a circular pie, or you can create just a portion of the pie.

Each pie wedge is a closed object that you can select and edit individually. For example, you can create a chart in which each wedge of the pie is a different color.



To draw pie wedges using the ribbon

1. Draw an ellipse.
2. Click the Pie button in the ribbon.
3. Position the pointer near the ellipse and drag in a circular motion to create the first wedge.
4. Release the mouse button when the wedge is the size you want.
5. Repeat steps 3 and 4 to add more adjacent wedges to the pie.
6. Press **ESC** or click outside the object when you finish.

Note

You cannot create a pie from an ellipse (or elliptical arc) that has been converted to curves, rotated, or skewed.

Converting an Ellipse into a Pie Wedge

You edit an ellipse (or elliptical arc) to change it into a pie wedge. Double click the ellipse with the select pointer to select it for reshaping, then drag the pointer in a circular motion inside the ellipse. Press **ESC** or double click when you finish.

To convert an ellipse into a pie wedge

1. Double click the ellipse with the select pointer to select it for reshaping.

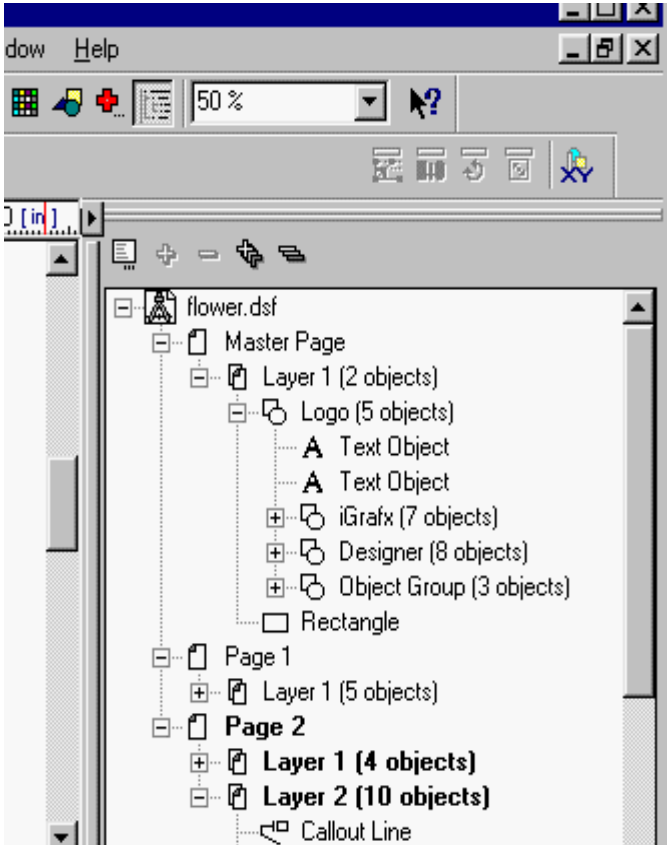
2 Drag the pointer in a circular motion *inside* the ellipse. (Dragging outside the ellipse creates an arc instead of a wedge.)

3 Press **ESC** or double click when you finish.

Working with Objects

Using the Object Explorer

The Object Explorer lists the items in the current drawing. You can use the Object Explorer to select, move, edit, remove, and even rename items.



A "+" or "-" symbol accompanies each parent. A parent is an item in the drawing (such as a page, layer, or object) that contains other items. To expand the list to show the resources belonging to the parent, click the "+" symbol or double-click the parent. The list expands, and the symbol changes to a "-" symbol. Click the "-" symbol or double-click the parent to collapse the list again.

To select an object, click its name. The Object Explorer uses highlighting to show which items you have selected. To select multiple resources, hold down the **SHIFT** or **CTRL** key as you click.

To display an object's shortcut menu, right-click the object's name.

To rearrange the hierarchy of an object, drag it to its new parent.

To rename an item, click its name, pause briefly, and then click the name a second time.

To display the Object Explorer as a separate window, drag it by its border.

Selecting an Object

Designer offers you many ways to edit, transform, and reshape objects. You can select, copy, paste, resize, group, connect, and align objects, as well as link and embed Windows OLE objects.

When you want to apply any action to an object, you first must select it. Eight small blue boxes called *handles* appear around an object when it is selected (if the object is a line, only two handles appear; one at each end). If several objects are selected at once, outer handles appear surrounding all the selected objects.

Designer gives you five ways to select objects:

- Click to select.
- Select all.
- Drag to block select.
- Select by property.
- Click object names in the Object Explorer.

Note

Watch the handles! They can help you determine if you've selected the correct object when there are many objects in one area. You also can use the status bar at the bottom of the drawing window to help determine if you've selected the correct object. The status bar shows the shape selected, such as Rectangle, Line, Ellipse, Polygon, and so on.

Clicking to Select Objects

To select objects by clicking, you must be in select mode. You are in select mode when the pointer becomes a select pointer. There are two ways to enter select mode.

To select an object, point to it with the tip of the select pointer and click the left mouse button. You must point to an element of the object such as a line or color. For example, to select an unfilled circle, you point and click the edge of the circle, not the hollow interior. If the interior is filled, you can click anywhere in the interior to select the object.

If you are in a drawing mode, you can point to the object with a drawing pointer and double click to select it. The blue handles appear to indicate that the object is selected.

Note

Single clicking an object in drawing mode results in implied selection of the object, indicated by a hollow selection handle. (For details on implied selection, see the section "Implied Selection" later in this chapter.)

To select additional objects, press and hold shift and click the other objects that you want to include. Be careful not to move the pointer while clicking or you'll move the object.

To select an object by clicking it

- To select an object, point to it with the tip of the select pointer and click the left mouse button.

Tips

You must point to an element of the object such as a line or color. For example, to select an unfilled circle, you point and click the edge of the circle, not the hollow interior. If the interior is filled, you can click anywhere in the interior to select the object.

If you are in a drawing mode, you can point to the object with a drawing pointer and double click to select it. The blue handles appear to indicate that the object is selected.

Single clicking an object in drawing mode results in Implied Selection of the object, indicated by a hollow selection handle.

To select additional objects, press and hold **CTRL** and click the other objects that you want to include.

Be careful not to move the pointer while clicking or you'll move the object.

Selecting Overlapping Objects

You can select overlapping objects by pressing **ALT** while clicking. Each click selects an object deeper in the stack, starting with the object in front.

Tip

Using **ALT** forces Designer to avoid the rotate/skew mode when you click an already-selected object. It also lets you click anywhere inside an unfilled object to select it.

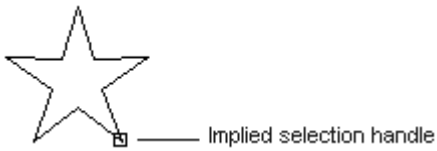
Deselecting Objects

Click the left mouse button anywhere away from all objects to deselect all selected objects. If you want to deselect some objects, but not others, point to the object you want to deselect, press and hold **SHIFT**, and click the left mouse button. Point to another object to deselect and click again. Release **SHIFT** when you finish.

Implied Selection

You can change an object's interior fill, line style, or other style attribute immediately after drawing it without explicitly selecting it. Remembering the last drawn object is called *implied selection*.

Implicitly selected closed objects have one hollow handle. Implicitly selected open objects have a hollow handle at each endpoint.



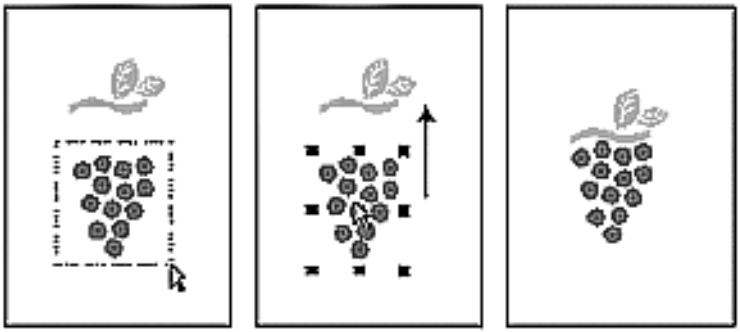
Tips

Single clicking on an object when you're in drawing mode also implicitly selects the object.

Implicitly selected objects cannot be resized or rotated without first selecting them. Click away from the object to deselect it. Click the Edit tool or double click the object to explicitly select it.

Block Selecting Objects

You can select objects by using the select pointer to drag a rectangular block around the objects you want to select. To block select, you must be in edit mode. The entire object must be enclosed in the rectangular block before that object is selected.



Note

You can also block selecting objects by selecting the Always block selects option on the Input tab of the Options dialog. To access this dialog, select Options from the Tools menu and click the Input tab.

Tip

The entire object must be enclosed in the rectangular block before that object is selected.

You can cancel a block selection by pressing **ESC** before releasing the mouse button.

Check the Status Bar to determine how many objects you have block selected. If you have selected 10 objects, for example, the status toolbar shows Objects (10).

Selecting All Objects

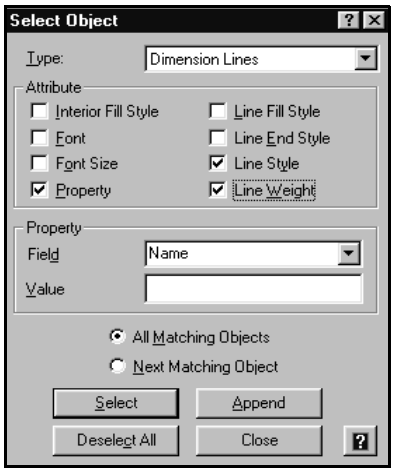
Use any of these methods to select all the objects on the page.

- On the Edit menu, Click Select All
- Press the keyboard shortcut **CTRL+A** or **F2**

To select all objects *except* those currently selected, press **CTRL+SHIFT+A** or **SHIFT+F2**.

Selecting by Name or Physical Characteristic

The Select command on the Edit menu (keyboard shortcut **CTRL+SHIFT+F2**) opens the Select dialog box. This dialog box lets you select objects based on their attributes and properties.



The Select Object dialog box shows a list of possible physical characteristics, such as line style, fill style, and font. Select an object and select the attributes for which you want to search. Designer selects other objects on the page with matching attributes.

For example, to search for objects with a yellow interior and 2-point line thickness, select an object matching those specifications and select Interior Fill Style and Line Thickness. All objects on the page with a yellow interior and a 2-point thickness are selected.

To select objects by attribute

1. Select the object upon which you want to base your search.
2. Open the Edit menu and choose Select. The Select dialog box opens.
3. Select the attributes for which to search. For example, if the selected object has a red interior and you choose fill color, all objects with red interiors are selected.
4. Click Select.

Selecting Objects by Property Value

You can type a value into the Property Value text box and select objects with that value. The value is associated with the property chosen in the Property drop-down list box. You can either select other objects with the same value or use wildcard characters to designate the portions of names to search for.

For example, if the value for the property "Name" is "bolt1," but you want to select all types of bolts, you can type "bolt*" to select bolt1, bolt2, and so on.

Wildcard characters let you search for partial matches. Use "?" for single characters; use "*" for multiple characters.

To select objects by property value

1. Open the Edit menu and choose Select. The Select dialog box opens.
2. Choose a property you want to search for in the Field list box.
3. Type the value of the property. You can use wildcard characters to search for partial matches.
4. Click Select.

Selecting Matching Objects

After you enter the characteristics of the objects you want to select, you can click Select to select all matching objects on the current layer and page.

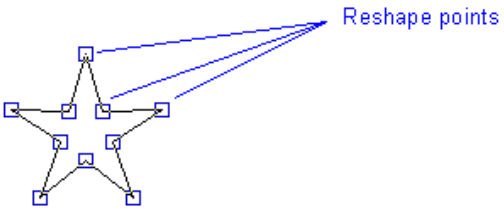
If you want to select additional sets of objects without deselecting the current objects, click Append, select another set of objects, click Append again, and so on.

You can select matching objects one at a time by using the Next Matching Object option. Click Select to deselect the first object and select the next one.

Other Clicking Actions

Click an already-selected object with the select pointer to place it in rotate/skew mode. Rotate/skew selection is indicated by the appearance of special rotate and skew handles.

Double click an object with the select pointer to place it in reshape mode. Different types of objects have different reshaping indicators.



To be certain that you are in the correct mode, check the double-line status toolbar. If the object is selected for Rotate/Skew, the double line status toolbar shows Rotate and Skew Mode. If the object is selected for reshaping, the status toolbar shows the reshape mode. To turn on the status toolbar, click Status Bar on the View menu, and click Double.

Moving an Object

You can move an object in several ways. You can move an object using the mouse or with the arrow keys on your keyboard. You can also move an object numerically for more precision. It is also possible to move an object while drawing it.

Tip

Hold the mouse still for one second when moving an object to display a wireframe outline of the object to help you position it.

To move an object with the mouse

1. Select one or more objects you want to move.
2. Position the pointer anywhere inside the object or group of objects (do not place the pointer on a handle).
3. Drag the object to the new position.

4 Release the mouse button.

Note

In order to be able to select an object and move it with one motion, select Options from the Tools menu and click the Input tab on the Options dialog. Click the Selects and moves one object option.

Tips

Hold the mouse still for one second when moving an object to display a wireframe outline of the object to help you position it.

You can cancel a move by pressing **ESC** before releasing the left mouse button. The object returns to its original position.

Use the coordinates displayed in the Status Bar to position objects precisely.

To move an object with the arrow keys

1. Select one or more objects you want to move.
2. Point anywhere inside the object or group of objects (do not point to a handle).
3. Press and hold the spacebar.
4. Press an arrow key to nudge the object.
5. Release the spacebar when you finish.

Moving an Object While Drawing it

This useful feature lets you move an object before you finish drawing it.

To move an object while drawing, press and hold the right mouse button without releasing the left mouse button. Move the outline of the unfinished drawing to its new position. Release the right mouse button and continue drawing.

To move an object while drawing

1. Start drawing.
2. Press and hold the right mouse button without releasing the left mouse button.
3. Move the outline of the unfinished drawing to its new position.
4. Release the right mouse button and continue drawing.

Constraining an Object's Movement

Press and hold SHIFT while moving an object to snap to a path of movement that is in 15-degree increments from the original position. You can use this technique to constrain the object's movement to a vertical path (0 degrees or 180 degrees) or a horizontal path (90 degrees or 270 degrees). Using SHIFT in this way overrides the Snap to Rulers command in the Tools/Snap menu, if necessary, to constrain to the 15-degree angle.

Applying Multiple Changes to an Object

You can use the Transform dialog box to make a series of changes to an object by recording each individual change, then applying them all at the same time.

For example, you can move an object 2 inches right, 1 inch down, and then make it twice as large. You also can apply these transformations to other objects, if you want.

To apply multiple changes to an object

1. On the Arrange menu, click Transform.
2. Click one of the submenu commands to display the Transform dialog box.
3. Click the Details button to show the Multiple Transforms area.
4. Click a transform tab and select the transformation amounts, origin, and the number of copies.

5 Click Add in the Multiple Transforms area. The transform type and amount appears.

6 Repeat steps 5 and 6 to add more transformations to the list.

7 Select an object and click Apply to apply the multiple transforms.

Updating a Remembered Transformation

Remembered transforms remain in the multiple transforms box until you close Designer or transform an object and reopen the Transform dialog box.

You can update a remembered transform based on its current settings.

To update a remembered transformation

1 On the Arrange menu, click Transform.

2 Click one of the submenu commands to display the Transform dialog box.

3 Click the Details button to show the Multiple Transforms area.

4 Highlight the remembered transform you want to change

5 Make the changes in the left portion of the dialog box, and click Modify. The new measurements appear.

To delete a remembered transformation

1 Click Empty to delete all remembered transforms, or

2 Click Delete to delete the last transform on the list.

Duplicating Objects

There are four ways to duplicate an object.

- From the Edit menu, select Duplicate.
- From the Edit menu, select Clone.
- Press **CTRL** and drag a copy.

- Use the Copies option in the Transform dialog box.

To drag a copy

1. Select the object you want to copy.
2. Press and hold **CTRL**.
3. Drag the duplicate object to a new position.
4. Release the mouse button and then release **CTRL**.

To duplicate using the menu

1. Select the object you want to copy.
2. From the Edit menu, select Duplicate.

Note

You can set the offset for the duplicate by selecting Options from the Tools menu and clicking the General tab. Enter the horizontal and vertical units in the Offset For Duplicate section.

To create a duplicate with no offset, select Clone from the Edit menu, with the object selected.

Tip

To rotate or skew a copy of an object, press and hold **CTRL** while rotating or skewing.

Scaling Objects

Resizing Objects Manually

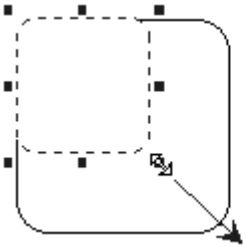
You can change the size and shape of an object by selecting it and dragging one of its handles.

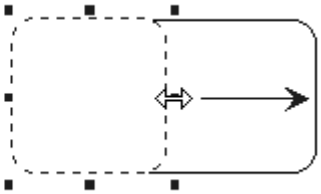
There are two types of handles: corner and side.

- Corner handles (at the four corners of the bounding box) enlarge or shrink an object while maintaining its original proportions.

  or

- Side handles (at the center of each side of the bounding box) stretch an object and change its proportions.





To resize an object manually

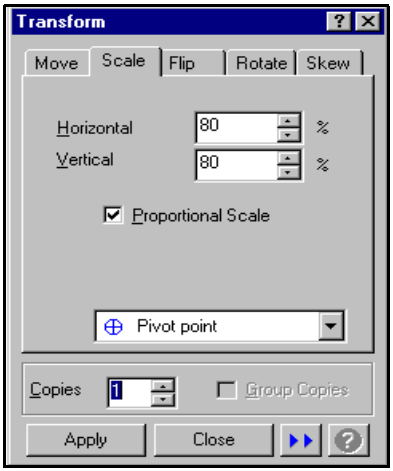
1. Select the object to resize.
2. Move the pointer to one of the object's eight handles.
3. Drag the handle to resize the object.
4. Release the mouse button when you finish.

Tip

To keep your image proportional, press and hold the **SHIFT** key while dragging a corner handle. Press and hold the **CTRL** key while dragging a corner handle to resize a rectangle to a square or an ellipse to a circle.

Resizing Objects Numerically

You can use the Scale panel in the Transform dialog box to precisely resize an object. Open the Change menu, choose Transform, and choose Scale to display the Scale panel of the Transform dialog box.



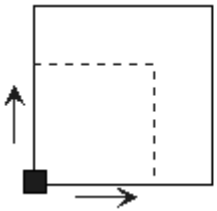
Note

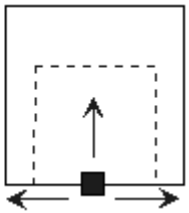
The measurements of the last transformation appear in the Transform dialog box. For example, if you manually resize an object to 50% of its original size and open the Transform dialog box, 50 appears in the Scale panel.

You numerically resize an object by selecting a object and entering a percentage of the current size. The current size is 100%. A number below 100% decreases, and a number above 100% increases the size. Designer displays a preview of the resized object as a rectangular outline.

The horizontal number affects the side-to-side size; the vertical number affects the top-to-bottom size. The horizontal and vertical sizes are the same unless you deselect the Proportional Scale option.

The Scale panel of the Transform dialog box lets you resize an object based on its current size. For example, if you enlarge a circle to 200% and then type **200** to enlarge it to another 200%, the circle is enlarged an *additional* amount.





Note

Before you can transform an object imported as a WMF file, you must convert the object to curves.

To resize an object numerically

1. Select the object to scale.
2. Open the Arrange menu and choose Transform.
3. Choose Scale to display the Scale panel.
4. Select the origin of the resize in the Origin list box, if you want.
5. Type a number in the Horizontal and Vertical boxes. A red outline of the resized object appears as a preview.
6. Type the number of copies you want to make, if any.
7. Click Apply to accept the change.

Note

You can also resize an object numerically by using the Coordinates dialog.

Scaling an Object in the Transform Dialog Box

If you display the Transform dialog box by clicking Transform and then Repeat Last on the Arrange menu, the measurements of the last transformation appear in the Transform dialog box. For example, if you manually resize an object to 50% of its original size and use Repeat Last to open the Transform dialog box, **50** appears in the Scale panel.

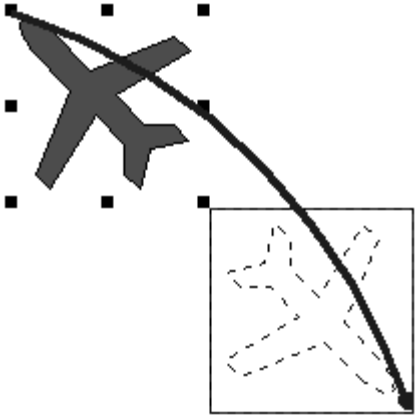
A resize does not appear if you resize an object while the Transform dialog box is open.

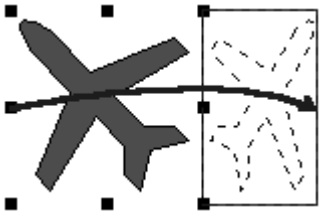
Making Equally Resized Copies

You can create an array of equally sized copies by using the transform dialog box. Type the number of copies you want to make. The original object is not affected. Designer shows the first and last preview copy in red and other copies in blue. Only the first five and last five copies are previewed.

Flipping Objects

Flipping Manually





To flip an object manually

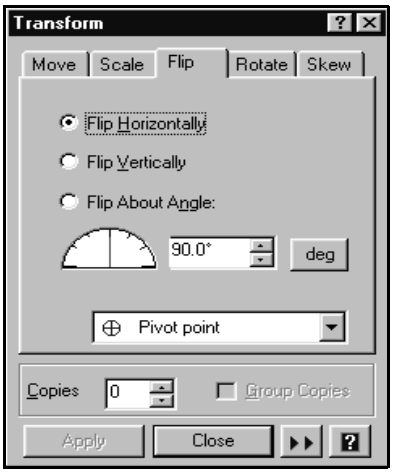
- Drag a handle across the object's opposite side.

Tip

The action is similar to turning the page of a book.

Flipping Numerically

You can use the Flip panel of the Transform dialog box to flip an object at a specific angular value.



When you flip an object numerically, you specify an imaginary line that passes through or beside an object at any angle. The object behaves as though it is hinged to the line, and flips over it.

To numerically flip an object, you specify an imaginary line that passes through or beside an object at any angle. The object behaves as though it is hinged to the line and flips over it.

To flip an object at a specified angle, select the point as which the flip occurs from the Origin list box, and then type an angle for the flip axis in the angle box.

You can place the imaginary axis at which flipping occurs at any of the ten object origin points. For example, select the center origin to flip an object around a central axis, or select the right middle origin to flip the object around its right side.

To flip an object horizontally or vertically

1. Select the object you want to flip.
2. On the Arrange menu, click Transform, and then click Flip to display the Flip panel.

3 Choose Flip Horizontal to flip the object horizontally (like a page in a book), or choose Flip Vertical.

To flip an object at a specified angle

1 Select the object you want to flip.

2 On the Change menu, click Transform.

3 Choose Flip to display the Flip panel.

4 In the Origin list box, select a point on the object. This is the point that the flip axis passes through.

5 Type an angle from 0 to 179 in the Angle box or drag the red needle to specify a flip angle.

Tip

You can place the imaginary axis at which flipping occurs at any of the ten object origin points. For example, select the center origin to flip an object around a central axis, or select the right middle origin to flip the object around its right side.

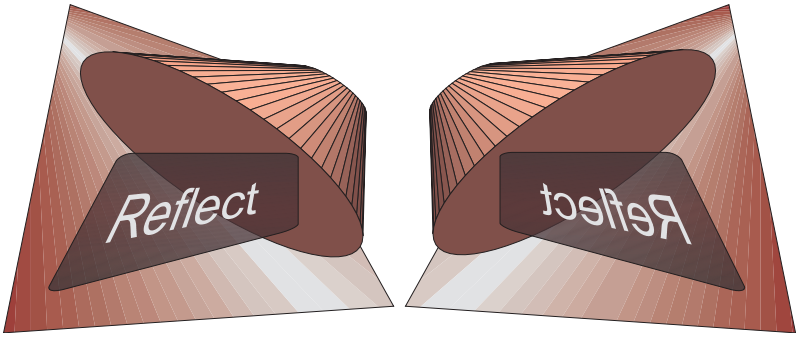
To make copies of an object while flipping it

1 Select the object you want to flip.

2 On the Arrange menu, click Transform.

3 Choose Flip to display the Flip panel.

4 Type the number of copies in the Copies box. Designer repeats the flipping, placing copies on top of one another.



Tip

As a shortcut, press F7 to flip horizontally. Press **SHIFT**+F7 to flip vertically.

Rotating Objects

Rotating Objects Manually

The manual method lets you use the pointer to rotate an object. You manually rotate by dragging a corner handle in a circular motion around a pivot point.

To rotate an object manually

1 Select the object you want to rotate, and then click the Rotate/Skew button in the toolbar.

2 Drag the pivot point to a new location, even outside the object, if you want.

3 Move the pointer to a corner handle.

4 Drag in a circular motion around the object.

5 Release the mouse button when you are finished.

Tip

Press and hold CTRL while dragging a corner handle to constrain the rotation of an object to 45-degree increments. Press and hold **SHIFT** while dragging a corner handle to rotate a copy of an object.

You can cancel a rotation by pressing **ESC** before releasing the left mouse button. The object returns to its original position.

Constraining Manual Rotation

You can constrain rotations to fixed increments by setting a Manual Rotation Increment value in the Rotation panel of the Options dialog box. For example, if the Manual Rotation Increment is set to 12 degrees, then an object rotates in 12-degree increments when you drag its corner handles.

To change the Manual Rotation Increment

1 On the Tools menu, click Options.

2 Click Rotation to go to the Rotate tab.

3 Enter the rotation amount in the Manual Rotation Increment box (or drag the red needle in the dial control).

Using the Preset Rotation Key

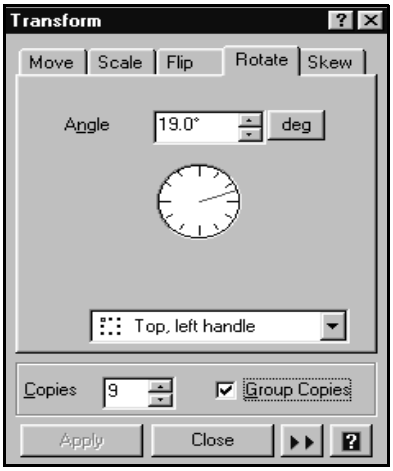
You can rotate an object a preset amount by selecting the object and pressing **F8**. Each time you press **F8**, the object is rotated the preset amount. The initial setting for the **F8** key is 45 degrees.

To change the rotation key setting

1. From the Tools menu, click Options. The Options dialog opens.
2. Click Rotation.
3. In the F8 Rotation Increment box, drag the red needle to the desired increment, or type in the angle.
4. Click OK to close the Options dialog.

Rotating Objects Numerically

You can use the Rotate panel of the Transform dialog box to precisely rotate an object by specifying the degree of rotation. Open the Arrange menu, choose Transform, and choose Rotate to display the Rotate panel.



Setting the Rotation Angle

When you choose Repeat Transform, the measurements of the last transformation appear in the Transform dialog box. For example, if you manually rotate an object 25 degrees and choose Repeat Transform, 25 appears in the Angle box.

Changing the Pivot Point

The pivot point defaults to the center of the object, but you can drag it anywhere inside or outside the object.

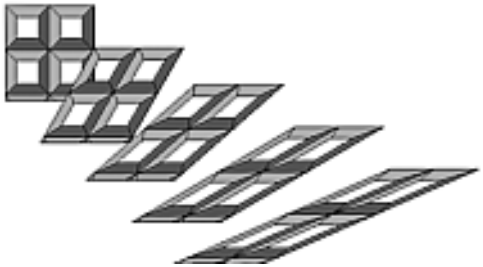
You can permanently reposition an object's pivot point by pressing SHIFT while dragging it to a new position. To return the permanent pivot point to the center of the object, use a center snap point and then press SHIFT and drag the pivot point back to the center.

To rotate an object numerically

1. Select the object to rotate.
2. On the Arrange menu, click Transform. A submenu opens.
3. Click Rotate to display the Rotate panel.
4. Type a number in the Angle box, or drag the dial to specify a rotation angle.
5. Select a new pivot point in the Origin list box, if you wish.
6. Click Apply to rotate the object.

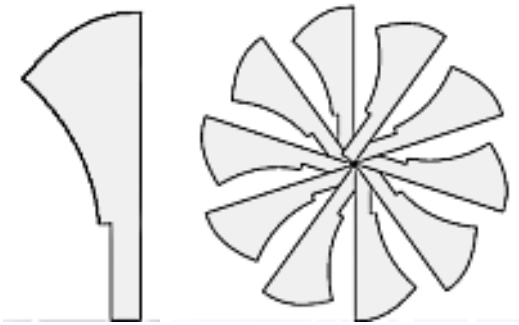
Copying Rotated/ Skewed Objects

You can create an array of rotated or skewed objects between the original object and its final position. Designer shows the first and last preview copy in red and other copies in blue. Only the first five and last five copies are previewed.



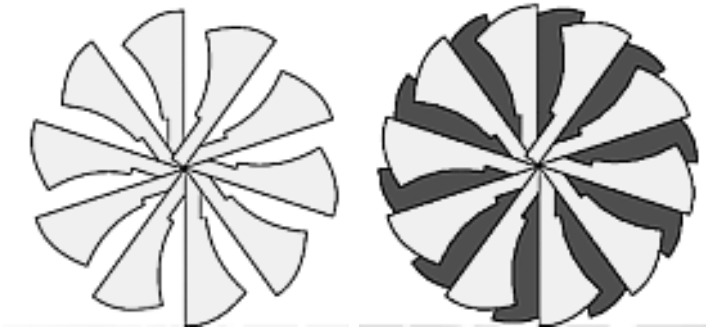
To copy rotated/skewed objects

1. Select the object to rotate.
2. From the Arrange menu, click Transform. A submenu opens.
3. Click Rotate or Skew and type the specifications you want.
4. Type the number of copies you want to create.
5. Click Apply to draw the copies.



Grouping Rotated/ Skewed Copies

Often it is best to group copies together while rotating, moving, scaling, or skewing a particular object. By doing so, you can easily move a group of objects at once without disrupting the positioning of each individual object



You can create an array of skewed objects between the original object and its final position.

Changing the Order of Objects

You can reorder the stacking arrangement of objects with the Order command on the Change menu.

You can only change the order of objects on the current layer. If you are using multiple layers, objects on upper layers always appear on top of objects on lower layers.

Command	Action
Bring Forward	Moves the currently selected object one level toward the front (keyboard shortcut **SHIFT+F10**)
Send Backward	Moves the currently selected object one level toward the back (keyboard shortcut **SHIFT+F9**)
Bring to Front	Moves the currently selected object in front of all other objects on the current layer (keyboard shortcut **F10**)
Send to Back	Moves the currently selected object behind all other objects on the current layer (keyboard shortcut **F9**)
Reverse	Reverses the stacking order of the selected objects. For example, the order 1, 2, 3, 4 becomes 4, 3, 2, 1 (keyboard shortcut **CTRL+SHIFT+F9**)

To change the order of objects

1. Select one or more objects.
2. On the Arrange menu, click Order and click a command on the Order submenu.

Tip

You can click the right mouse button to open the shortcut menu, and click an ordering command.

Grouping Objects

When you create a drawing with many objects, it is useful to group objects together to help organize your drawing. Grouping makes it easier to select objects, and makes it possible to manipulate several objects at once.

Group objects when you want to create a collection of individual objects. Grouping does not change an object's appearance.

Changing a style of an object group changes all objects in the group to the new style. For example, if you select a group of objects and change the interior fill color to red, all objects in the group become red unless you have smart colorization.

To group objects

1. Select the objects you want in the group (they don't have to be adjacent)
2. On the Arrange menu, click Group.

   or

   Click the right mouse button to open the shortcut menu and click Group, or press **F5** (keyboard shortcut).

Ungrouping Objects

You can ungroup objects to return them to their original, ungrouped state.

To ungroup objects

1. Select the group to break apart
2. On the Arrange menu, click Ungroup.

   or

Click the right mouse button to open the shortcut menu and click Ungroup, or press **SHIFT+F5** (keyboard shortcut).

Tips

If you have groups within groups, use the Ungroup command more than once to break up all the groups.

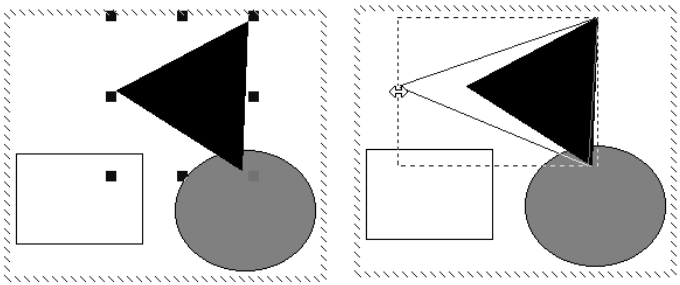
There are two other ways to ungroup a selected group.

Working with Grouped Objects

In many ways, grouped objects are similar to individual objects. For example, changing line and fill styles affects the whole group, and moving a group is like moving one object. You can also skew and rotate groups.

Editing a Grouped Object

If you want to reshape or change the color of one object in a group, you can first break apart the group *or* you can select only the object within the group that you want to edit.



You can also edit objects that belong to groups within other groups. Point to the object or group you want to edit and continue double clicking until the group you want to edit displays the hatch edit border. When you finish, double click outside the groups until the hatch edit border disappears.

To edit an object without ungrouping it

1. Using the select pointer, double click the object group that contains the object you want to edit. A hatch edit border appears around the group.
2. Select the object to edit. Blue handles appear around the selected object. Edit or move it as you would any object.
3. Double click anywhere outside the group when you finish.

Tip

To select additional objects within the group, press and hold **SHIFT** and click the other objects that you want to select.

Adding a New Object to a Group

You can add an object to a group of objects. Double click the group to which you want to add an object, and draw or paste another object. It is automatically included inside the editing border and becomes part of the group. Double click outside the edit border when you finish adding objects.

Removing an Object from a Group

You can separate an object from its group without breaking apart the group. Double click the object in the group. An edit border appears around the group. Select the object you want to remove. Click Cut on the Edit menu. Double click outside the group and paste the object where you want it. You can also press **DEL** to delete the object.

Connecting Objects

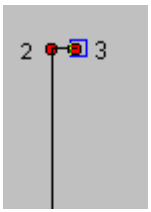
The Connect commands let you join objects, making it easy to create complex shapes.

Note

You cannot connect text, grouped objects, or bitmaps.

Connect Open

You can use the Connect Open command to combine two or more objects with open endpoints. The Connect Open command joins selected objects by drawing a line between the open endpoints, leaving the last side open.



Connect Open

To connect open

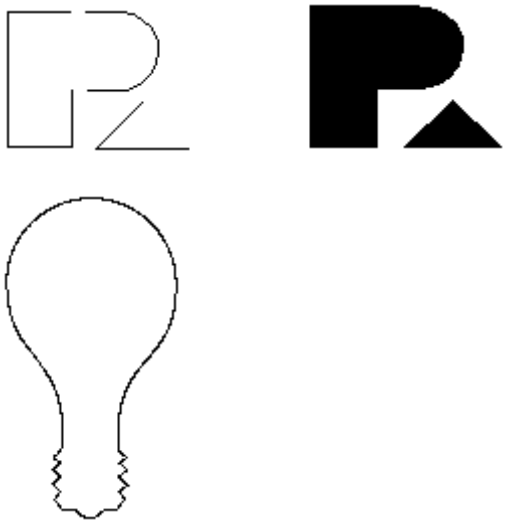
1. Select the objects you want to connect
2. On the Arrange menu, click Connect Open, or press **CTRL+F11**.

Connect Closed

You can use the Connect Closed command to close open shapes or to connect and fill closed shapes. You can use Connect Closed with one or more objects.

On selected objects with open endpoints, the Connect Closed command draws a line between all endpoints, creating a completely closed shape.

On selected objects with no endpoints (already closed shapes), the Connect Closed command connects the objects and the resulting object is filled with the fill color of the first drawn object (the one in back). Note that in this case no lines are drawn.



connect closed

To connect closed

1. Select the objects you want to connect.
2. On the Arrange menu, click Connect Close, or press **F11** (keyboard shortcut).

Connect Closed when Objects Overlap

If you use Connect Closed on overlapping objects that are closed, the front object cuts or "punches" a hole in the underlying object.

If the top object extends off the edge of the bottom object, the extending portion is filled. Select Fill Overlaps in the Format dialog box to fill the overlapping portion also (that is, the hole in the bottom object is filled).

Disconnecting Objects

After applying Connect Open, you can use Disconnect to restore an object to its original, disconnected objects. However, after applying Connect Closed to an open connected object, you can no longer restore the original objects.

To disconnect connected objects

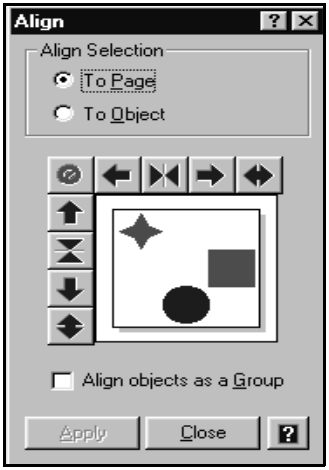
1 Select the connected object you want to disconnect.

2 On the Arrange menu, click Disconnect, or press **SHIFT+F11**

Aligning Objects

Aligning Objects to the Page

You can align one or more objects to several positions on the page. For example, you can align an object to the exact center of the page. You can open the Align dialog box by pressing ALT+ I.



Keyboard Shortcuts for aligning objects

Action	Keyboard Shortcut
Align to page center	**CTRL+SHIFT+5**
Align to page middle	**CTRL+SHIFT+6**
Align to rulers	**ALT+2**
Align to page left	**CTRL+SHIFT+3**
Align to page top	**CTRL+SHIFT+4**
Align to page right	**CTRL+SHIFT+7**
Align to page bottom	**CTRL+SHIFT+8**
Justify to page horizontally	**CTRL+SHIFT+9**
Justify to page vertically	**CTRL+SHIFT+0**

To align objects to a page

1. Select the objects you want to align.
2. From the Arrange menu, click Align. (Keyboard shortcut ALT+ I.)
3. In the Align Selection, click To Page.
4. Click a vertical and/or horizontal alignment button. The preview box shows an example of the alignment.
5. Click Apply to align the objects.

Aligning Objects as a Group

Select Align Objects as Group to align the selected objects to a page as a group.

Note

Align Objects as Group treats the selected objects as a group only for the Align to Page command. It does not actually group the objects or affect the operation of other commands.

Aligning Objects to Other Objects

You can align objects to each other. For example, if you select three objects and align them to the center, they are stacked in the center of the bounding box.

Designer uses the bounding box that surrounds all selected objects as the basis for alignment. For example, if you select three objects and align them at top left, they align to the top left corner of the surrounding bounding box.

Action	Keyboard Shortcut
Align to left	**ALT+3**
Align to center	**ALT+5**
Align to right	**ALT+7**
Justify horizontally	**ALT+9**
Align to top	**ALT+4**
Align to middle	**ALT+6**
Align to bottom	**ALT+8**
Justify vertically	**ALT+0**

To align objects to each other

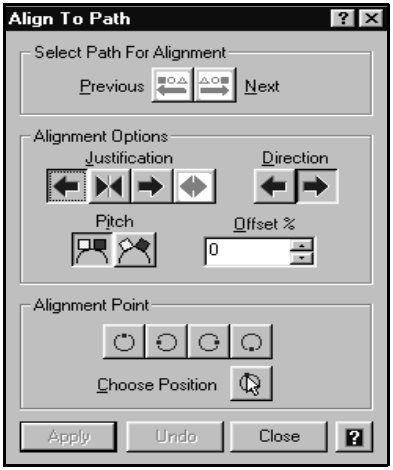
1. Select the objects you want to align.
2. On the Arrange menu, click Align.
3. Click To Object in the Align Selection section.
4. Click a vertical and/or horizontal alignment button. The preview box in the panel shows an example of the alignment.
5. Click Apply to align the objects.

Aligning Objects to a Path

You can align objects along the path of another object. For example, you can draw a curve and align a series of stars along it. Grouped and text objects cannot be used as a path (but you can align them to a path).

It is easy to get the alignment you want because Designer previews the effect of alignment settings as you choose them. When the alignment preview shows the arrangement you want, you can apply the alignment.

The Align To Path dialog box is used to align objects to a path. From the Arrange menu, point to Align, and click To Path.



Notes

The Align To Path panel is used only to align objects (or text that has been converted into curves) to a path.

Designer removes warps, rotations, and skews of objects that are aligned to a path. Convert the objects to curves (keyboard shortcut **CTRL+R**) before aligning them if you want to keep their previous transformations.

Distributing Multiple Objects Evenly

You can use the justify setting in the alignment dialog box to distribute objects along the path.

Designer removes warps, rotations, and skews of objects that are distributed along a path. If you want to keep their previous transformations, convert the objects to curves (keyboard shortcut **CTRL+R**) before you distribute them.

Selecting the Path Object

The Select Path for Alignment buttons select the object to use as a path for the other objects. The initial path selection is the object that provides the longest path. Each time you click a Select Path for Alignment button, the path object changes.

The Previous button cycles through objects in the opposite order in which they were drawn.

The Next button cycles through objects in the order in which they were drawn.

Changing the Alignment Justification

The Justification buttons set the position of the aligned objects in relation to the alignment point.

The Left button positions objects so the left edge of the left-most object aligns to the alignment point.

The Center button centers objects around the alignment point.

The Right button positions objects so the right edge of the right-most object aligns to the alignment point.

The Justify button spaces objects evenly on the path.

RT_Changing_the_Alignment_Justification

RT_Changing_the_Alignment_Justification
Aligning Objects to the Page

Aligning Objects to Other Objects
Aligning Objects to a Path
Selecting the Path Object

Changing the Alignment Pitch

The Pitch buttons set the orientation, or pitch, of the aligned objects in relation to the path. Click the current Pitch button to display the other pitch options.

The Rotate to Path button aligns the objects along a path by rotating, but not changing the shapes.

The Follow Path button places objects along a path without skewing or rotating the shapes.

RT_Changing_the_Alignment_Pitch
RT_Changing_the_Alignment_Pitch
Aligning Objects to the Page
Aligning Objects to Other Objects
Aligning Objects to a Path
Changing the Alignment Pitch

Changing the Alignment Direction

The Direction buttons set the direction in which objects align along the path.

The Backward button aligns objects in the opposite direction in which the path was drawn (the alignment direction is endpoint to origin).

The Forward Direction button aligns objects in the direction in which the path was drawn (the alignment direction is origin to endpoint).

RT_Changing_the_Alignment_Direction
RT_Changing_the_Alignment_Direction

Aligning Objects to the Page
Aligning Objects to Other Objects
Aligning Objects to a Path

Changing the Alignment Offset

The Offset % box controls where objects vertically rest on a path. An offset of 100 aligns the bottom of the objects to the path, an offset of 0 aligns the middle of the objects to the path, and an offset of -100 aligns the top of the objects to the path.

An offset greater than 100 (to the limit of 200) aligns the bottom of the objects above the path. An offset less than -100 (to the limit of -200) aligns the top of the objects below the path.

RT_Changing_the_Alignment_Offset

RT_Changing_the_Alignment_Offset
Aligning Objects to the Page
Aligning Objects to Other Objects
Aligning Objects to a Path

Changing the Alignment Point

The Alignment Point buttons set the location on the path of the point used to align the objects. The alignment point can be set to the fixed locations of left, center, and right for open paths or top, left, right, and bottom for closed paths.

RT_Changing_the_Alignment_Point

RT_Changing_the_Alignment_Point
Aligning Objects to the Page
Aligning Objects to Other Objects
Aligning Objects to a Path

To set the alignment point to a custom location

1. Click To Path to display the Align To Path tab.
2. If the Align To Path tab obscures the objects you want to align, drag it out of the way.
3. Click the Choose Position button Choose Position.
4. Drag the red Alignment Point to the location that you want

To align objects to a path

1. Select the objects you want to align, including the object you want to use as a path.
2. On the Change menu, click Align. A submenu opens.
3. Click To Path to display the Align To Path tab.
4. If the Align To Path tab obscures the objects you want to align, drag it out of the way.
5. Choose the object to use as the path by clicking the Previous button or the Next button in the Align To Path tab until the preview rectangles are shown along the desired path.
6. Choose the Alignment Point that you want.
7. Change the justification, pitch, and direction settings, if you wish.
8. Click Apply to align the objects.

Tip

Click Undo to return objects to their unaligned positions.

Copying and Pasting Objects

You can copy objects from a drawing to the Windows Clipboard and paste the object into another Designer drawing or another Windows program.

Copying and pasting to the Clipboard is an easy way to move objects from one Designer drawing to another. You can also move drawings and text from Designer to many other Windows programs, or from a Windows program to Designer.

The Copy and Cut commands both move selected objects to the Clipboard.

- Copy places a copy of the selected object on the Clipboard.
- Cut removes the original object from the drawing and places it on the Clipboard.

The Paste command retrieves objects from the Clipboard and places them in your drawing. Before you can paste, you must copy or cut an object to the Clipboard. You can repeatedly paste the same object from the Clipboard until you cut or copy a new object to the Clipboard.

Tip

Use either **CTRL+V** or **SHIFT+INS** as a keyboard shortcut for the Paste command.

Pasting Inside

The Paste Inside command (on the Effects/Masking menu) lets you mask an object.

Paste Special

Use Paste Special on the Edit menu to simultaneously paste and link the object.

Replacing Objects

Use the Replace dialog box (select Replace on the Arrange menu) to control how selected objects are replaced by those from the Clipboard.

Replacing with Multiple Objects

If you select several objects to replace, Designer distributes Clipboard objects to replace selected objects. The first object in the Clipboard (from back to front if no reordering has taken place) replaces the first original object, the second Clipboard object replaces the second original object, and so on.

Select the Group Clipboard Objects option to replace each selected object with the entire contents of the Clipboard.

If you have several objects selected but only one in the Clipboard, each selected object is replaced with the Clipboard object.

To replace an object

1. Cut or copy one or more objects to the Clipboard.
2. Select the object or group of objects to replace.
3. On the Arrange menu, click Replace. The Replace dialog box opens.
4. Change the replacement options, if you wish.
5. Click Apply. The object in the drawing area is replaced with the contents of the Clipboard.

Pasting to Fit

You can use the Scale to Fit option in the Replace dialog box to force a Clipboard object to scale up or down to completely fill the bounding area of the original object.

Aligning while Pasting

The Align to Border option in the Replace dialog box lets you position a replacement object inside the bounding box of the object it replaces. This option does not change the object's proportions.

OLE (Object Linking and Embedding)

You can use the Links dialog box to manage OLE links that you have created. To open the Links dialog box, click OLE Links on the Edit menu.

When you paste an object, you can establish a connection, or link, between the pasted object and its source. This connection is usually called "OLE," for Object Linking and Embedding.

Embedding/ Inserting OLE Objects

Whenever possible, Designer embeds an object while pasting it. Double clicking an embedded object automatically opens the program in which the object was created so you can edit it. You can also select the object, click the right mouse button, and click Edit on the shortcut menu to edit the embedded object.

Designer automatically embeds the object if the object's associated program is a registered OLE server. To find out if the object is an OLE object, select it and look at the status bar to see if OLE Object is displayed.

Use the Paste button to paste and embed the object into your drawing. If the source program is OLE-compatible, the object is automatically embedded when it is pasted. The format of the original object is highlighted.

Besides using Paste to embed objects from OLE-compatible programs, or you can use Insert Object.

Insert Object lets you either:

- Insert any file that is associated with a registered OLE server program on your computer. If you choose to link to the file, the inserted object reflects any changes you make to the file.

  or

- Open an OLE-compatible program, create a new object in the program, and insert the object into Designer. You don't have to save the object as a file.

Tips

If you paste (embed) from a non-drawing program such as Microsoft Word, the object is sometimes pasted as a picture (usually an icon). If you want to paste editable text, you must paste it *without* embedding or linking it. On the Edit menu, click Paste Special, select Text, and then click Paste.

Although you must have the embedded object's associated program on your system, you don't have to have the original file. This makes embedding useful for portable computers where disk space is at a premium.

To insert an OLE object

1. On the Insert menu, click OLE Object. The Insert Object dialog box opens.
2. Click Create New, and then select the type of object that you want to create. Click OK. The other program opens.
3. Use the program to create the object.
4. When you finish, press the **ESC** key. The object is inserted in the Designer drawing.

Tip

Only OLE-compatible-program objects are listed in the Insert Object dialog box.

To create an OLE object

1. On the Insert menu, click OLE Object. The Insert Object dialog box opens.
2. Click the Create from File option.
3. Click the Link option if you want to link rather than embed the object.

4 Click Browse, locate the file, and click Open.

Tip

Only OLE-compatible-program objects are listed in the Insert Object dialog box.

Linking OLE Objects

Linking lets you maintain an invisible connection between an OLE object and its original (source) file. Linking is used with pasting and is sometimes called *paste linking*. When you paste link an object into Designer, you can make changes to the object's original file. If you update the original file, the Designer document also updates.

Designer must have access to the object's original file before you can edit it. For example, if the file LINK.TIF is located on drive A, be sure the diskette containing LINK.TIF is inserted in the drive before you attempt to edit the linked object.

Tip

Linking is a way for more than one user to connect to the same file. For example, linking can be helpful on a network where several users are working with the same file. Users are linked to a master file so that whenever one user makes a change, the master and all linked files show the change.

To link an OLE object

1 Create the object in its original program and save it as a file.

2 Copy the object you want to link to the Clipboard.

3 Close the original program if you want.

4 Open Designer, if necessary.

5 On Designer's Edit menu, click Paste Special. The Paste Special dialog box opens.

6 Click Paste Link. The object is pasted in the center of the page.

Tip

You must save the linked object as a file.

To edit a linked/embedded object

1 Double click the object to edit. The program in which the object was created (the server) opens and displays the object.

2 Edit the object.

3 On the File menu, click Save to update the changes in Designer.

4 Close the server program when you finish editing.

5 Click Yes to save the linked file and update the object in Designer; click No to disregard changes made since you last saved the linked file.

Tip

Another way to edit a linked object is to click Links on the Edit menu, select the Link to edit in the Links dialog box, and click Edit.

Activating Linked Objects

You might want to play or activate certain types of objects instead of editing them. For example, you can play sound, music, or animation objects that you have linked in your drawing.

If you select a linked video clip, for example, the shortcut menu for the object displays the item Linked Video Clip Object. The menu sub-items include a Play option. Non-action objects, such as pictures, can only be edited.

Viewing an OLE Link

Links are displayed in the Links dialog box. A description of each link includes the name of the source application, the type of linked object (for example, picture or text), the filename, and whether the object updates automatically or manually.

Updating an OLE Object

You can update objects automatically or manually by selecting Automatic or Manual in the Links dialog box. Automatic updates a linked object whenever you change it. Manual only updates the object when you click Update Now in the Links dialog box and when you click Yes whenever you are prompted to update links.

Tip

Some OLE programs don't automatically update. In those cases, you must choose Save to update.

Breaking an OLE Link

The Cancel Link command breaks the link between an object and its source program (server).

To break an OLE link

1. Select the linked object in Designer.
2. On the Edit menu, click OLE Links.
3. Click Cancel Link.
4. You are asked if you want to sever the link permanently. Click Yes to break the link; click No to cancel and leave the link unbroken.

Changing the Location of a Linked File

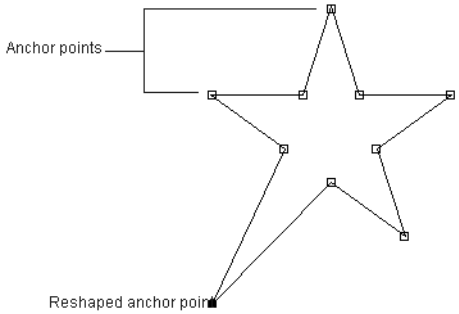
When you establish a link, Designer "remembers" the location and name of the source file. If you move or rename the file, you must tell Designer the new location and filename in order to reestablish the link.

To change an OLE link

1. Select the object in Designer.
2. On the Edit menu, click OLE Links. The Links dialog box opens.
3. Click Change Link. The Change link dialog box opens.
4. Change to the directory where the source file is located and select the new filename, if necessary.
5. Click OK. The link is reestablished.

Overview of Point Reshaping

When you select an object for point reshaping, you can drag its anchors.



You can reshape any object using this method, but rectangles, ellipses, and arcs reshape in predefined ways when you drag their anchors.

The Point Reshape mode lets you change the shape of an object by dragging one or more of its anchors.

Note

Special objects can be reshaped only in specific ways in Point Reshape mode. You can identify these special cases because they show solid anchors when selected for Point Reshaping.

To select an object for Point Reshaping

1. Select the object.
2. In the Toolbox, click the Edit tool .
3. From the menu, select the Reshape Points command.

   or

   Right-click the mouse button to open the menu.

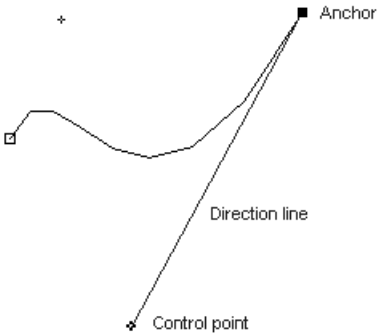
   or

   Select the object, press and hold **CTRL**, and click.

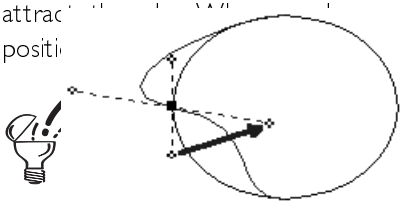
Displaying an Anchor's Control Points

An anchor's control points are visible only during curve reshaping. If an object is not in Curve Reshape mode, you can put it in Curve Reshape mode by selecting the object, clicking the Edit tool, and choosing the Reshape Curve command.

To display an edge's control points, click one of the edge's anchors. Because there are Bézier control points for each anchor on a edge, you must decide which anchor's control points you want to use to reshape the edge. After a little experience with control-point reshaping, this choice will usually be obvious.



Bézier control points look like small checkerboards. Dragging a control point changes the shape of the edge associated with the point. Control points are always connected to anchors. Think of a control point as a magnet that attrac[illegible] ontrol point, its anchor does not change positi[illegible]



When you move the mouse pointer over a control point, Designer draws a preview line between the control point and its anchor. This lets you quickly identify the anchor to which a control point is connected.

To reshape by moving an anchor

1. Select the object that you want to reshape.
2. In the Toolbox, click the Edit tool .
3. From the menu, click the Reshape Points command.

   or

   Click the right mouse button to open the menu.

   or

   Hold **CTRL** and click the object.
4. If the object shows a solid anchor (indicating a special Point Reshape case), click the right mouse button and click To Curves. This cancels the special reshape definition and displays the object's hollow anchors.
5. Click an anchor to select it. It turns solid.
6. Drag the anchor to a new location. The object's shape changes.

Tips

To create a copy of an anchor, press and hold **SHIFT** as you drag it.

To constrain an anchor's angular movement to 15-degree increments, press and hold **CTRL** as you drag it.

To move multiple anchors

1. Select the object that you want to reshape.
2. Click the Edit tool in the toolbox.
3. From the menu, click the Reshape Points command.

   or

   Click the right mouse button to open the menu.

   or

   Hold **CTRL** and click the object.

4 If the object shows a solid anchor (indicating a special Point Reshape case), click the right mouse button and click To Curves. This cancels the special reshape definition and displays the object's hollow anchors.

5 Drag a box around the anchors you want to select.

or

Click the first anchor you want to select

6 Press and hold **SHIFT**, and click the other anchors you want to select. Selected anchors become solid.

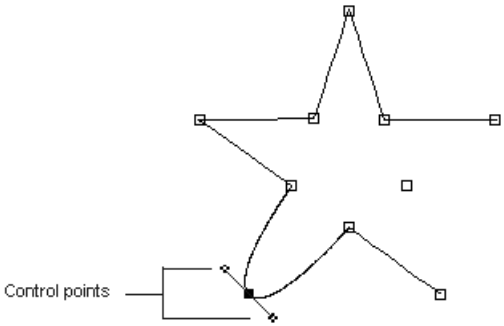
7 Drag any selected anchor. All anchors follow the movement.

Tip

If you start to drag a box around anchors and then change your mind, press **ESC** to cancel the box.

Overview of Curve Reshaping

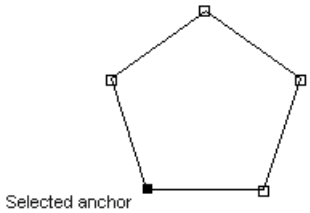
When you select an object for curve reshaping, you can drag its control points.



To use curve reshaping on special objects such as text, rectangles, ellipses, or arcs, you must first convert them to curves.

Moving a single anchor

Moving an anchor is the simplest way to reshape an object. As you drag an anchor, the lines connecting it to other anchors change.



Moving multiple anchors

You can move several anchors simultaneously by selecting the anchors and dragging one of them

To select:	Do this:
One anchor	Click the anchor.
Multiple anchors	Drag a box around the anchors, or press and hold **SHIFT** and click the anchors.
All anchors	On the Edit menu, click Select All, or press **CTRL +A.**
All except currently selected anchors	Press and hold **SHIFT** and click Select All on the Edit menu, or press **CTRL+SHIFT+A**.

Tip

If you start to drag a box around anchors and then change your mind, press **ESC** to cancel the box.

The Curve Reshape mode lets you change the shape of an object by dragging its Bezier control points. This type of reshaping creates curved edges. The further you drag a Bezier control point, the more you curve an edge.

Take some time to practice reshaping Bézier curves. It's a skill that's worth learning if you plan to draw and edit curved objects.

To select an object for Curve Reshaping

1. Select the object.
2. In the Toolbox, click the Edit tool .
3. From the menu, select Reshape Curves, or select the object, press and hold **CTRL+SHIFT**, and click.

   or

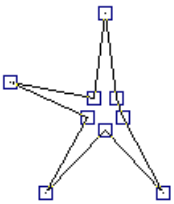
   Click the right mouse button to open the menu.

Tip

Anchors appear on an object when the object is in a reshape mode. If you are not certain which reshape mode the object is in, check the pointer. The pointer is shaped like an anchor in Point Reshape mode and a control point in Curve Reshape mode.

Adding and Deleting Anchors

You can add new or delete existing anchors to help in reshaping. Use the Add Point and Remove Point buttons on the Edit ribbon to add and delete anchors. You can add and remove anchors in either Point or Curve Reshape modes.



Anchor deleted

To add a new anchor to an object

1. Select the object.
2. In the Toolbox, click the Edit tool .
3. On the menu, select Reshape Points or Reshape Curves.
4. If the object shows a solid anchor (indicating a special Point Reshape case), click the right mouse button and click To Curves. This cancels the special reshape definition and displays the object's hollow anchors.
5. Click the Add Point button .
6. Click where you want to add anchor.

You also can add anchors to an object by pointing where you want an anchor, holding **CTRL**, and clicking the left mouse button.

To delete an anchor

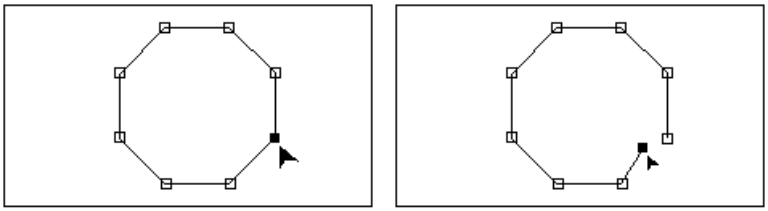
1. If necessary, double-click the object to allow point reshaping.
2. Click the anchor you want to delete.
3. On the ribbon, click the Remove Point button . Only the selected anchors are deleted.

Tip

Select the anchor and press the **DEL** key.

Breaking Apart at an Anchor

You can slice an object at an anchor. After you slice the object, the single anchor becomes two anchors that you can move separately.



To break apart an object at an anchor

1. Select the object you want to slice.
2. In the Toolbox, click the Edit tool .
3. Select Reshape Points or Reshape Curve from the menu.
4. If the object shows a solid anchor (indicating a special Point-Reshape case), click the right mouse button and click To Curves. This converts the special object to curves and displays the object's hollow anchors.
5. Select the anchor to break apart.
6. Click the Slice button . The line is now severed at the anchor.

Reshaping Curves and Corners

Converting a corner to a curve

You can produce symmetrical curves in Point Reshape mode by converting an anchor to a symmetrical curve point. After you convert an anchor to a symmetrical curve point, dragging the point reshapes the connected edges as curves.

Converting a curve to a corner

You can remove the curve from an object where it passes through an anchor by converting the anchor from a curve to a corner. The corner anchor acts like a hinge.

To reshape a curve

1. Select the object that you want to reshape.
2. Click the Edit tool in the toolbox.
3. Select Reshape Curve in the menu *or* Hold **CTRL+SHIFT** and click the object *or* click the right mouse button to display the menu.
4. Select an anchor on the edge that you want to reshape. Checkerboard-shaped control points appear near the anchor.
5. Drag the control points to change the edge's shape.

Converting to Curves

The Convert To Curves command (keyboard shortcut **CTRL+R**) and Convert to Curves button convert an object such as text, a rectangle, or an ellipse into a conventional object. This lets you edit the object with reshape points. It also does the following.

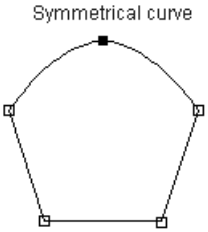
- Converts dimension lines to groups.
- Converts a Windows metafile to Designer objects.
- Converts other shapes to path objects and changes them so that Designer does not remember any previous transforms done to them.

Note

You cannot convert an object back into a special object, except by using Undo.

Creating Symmetrical Curves

An anchor on a curve has two control points. The Symmetrical Curve button (keyboard shortcut **CTRL+7**) causes the second control point to mirror the movement of the first. You can use the Symmetrical Curve button to help maintain the curve of an object.



To convert a corner to a symmetrical curve

1. Select the object that you want to reshape.
2. In the Toolbox, click the Edit tool .
3. Select Reshape points from the menu *or* click the right mouse button *or* hold **CTRL** and click the object.
4. If the object shows a solid anchor (indicating a special Point-Reshape case), click the right mouse button and click To Curves. This cancels the special reshape definition and displays the object's hollow anchors.
5. Click an anchor to select it. It turns solid.
6. On the ribbon, click the Symmetrical Curve button . The lines touching the anchor become symmetrical curves.

To convert a curve to a corner

1. Select the object that you want to reshape.
2. In the Toolbox, click the Edit tool , and select Reshape Points or Reshape Curve.

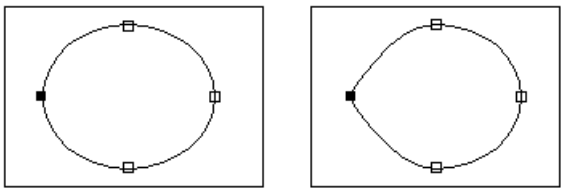
3 If the object shows a solid anchor (indicating a special Point-Reshape case), click the right mouse button and click To Curves. This cancels the special reshape definition and displays the object's hollow anchors.

4 Select the anchor.

5 Click the Corner button on the Ribbon.

Creating a Corner

You can create a corner, or non-curving anchor, at any point on a curve with the Corner button (keyboard shortcut **CTRL+5**). Lines that pass through non-curving anchors lose their curvature.



You can also create a corner at the end of a line to remove a curve on a line.

To create a corner

1 Select the object that you want to reshape.

2 In the Toolbox, click the Edit tool .

3 On the ribbon, click the Curve Reshape button *or* hold **CTRL+SHIFT** and click the object.

4 Select an anchor on the curve.

5 Click the Corner button . The lines touching the anchor become straight so that a corner is formed at the anchor.

RT_To_create_a_corner

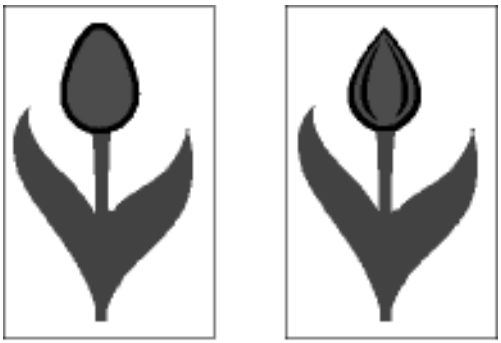
RT_To_create_a_corner

To select an object for Point Reshaping

Creating a Corner

Creating a Cusp

A cusp is an anchor where two Bezier curves intersect at different angles, resulting in an elbow shape. Cusps are created by moving one control point independently of the second control point. You can unlock an anchor's control points so you can move them independently using the Unlocked Cusp button (keyboard shortcut **CTRL+6**).



After creating the shape that you want by moving the control points independently, you can re-lock the control points using the Locked Cusp button (keyboard shortcut **CTRL+4**). Locking control points locks the angular relationship between the points so that when you drag one of the points, the opposite moves also as required to keep the angle between the two points the same. An anchor's control points are locked automatically by converting the anchor to a symmetrical curve or corner.

To create a cusp

1. Select the object that you want to reshape.
2. In the Toolbox, click the Edit tool .
3. Select Reshape Curve on the menu *or* hold **CTRL+SHIFT** and click the object.
4. Select an anchor on the curve.
5. Click the Unlocked Cusp button .

6 Drag one of the control points. Half of the cusp is formed.

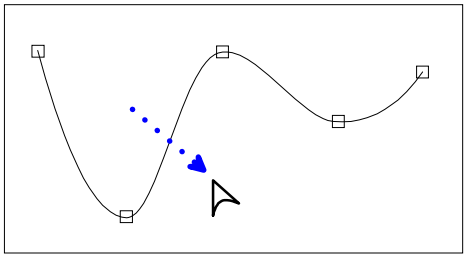
7 Drag the second control point to create the second half of the cusp.

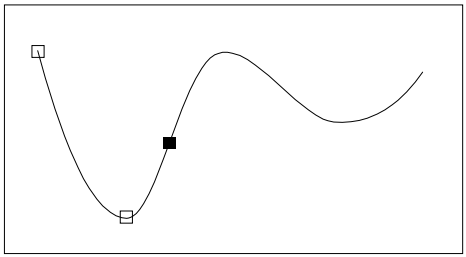
Tip

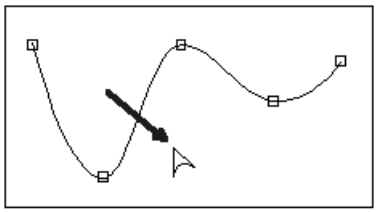
To lock or unlock a control point, press and hold **SHIFT** while dragging the point. The locked or unlocked status of the point switches while the **SHIFT** key is pressed.

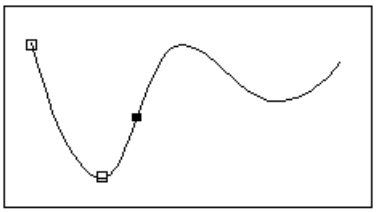
Cut at Point

Cutting opens a closed object and creates two endpoints wherever the cut occurs. You can cut a line in either Point or Curve Reshape modes.









To cut an object

1. Select the object.
2. In the Toolbox, click the Edit tool .
3. Select Reshape Points or Reshape Curve from the menu.
4. If the object shows a solid anchor (indicating a special Point Reshape case), click the right mouse button and click To Curves. This cancels the special reshape definition and displays the object's hollow anchors.
5. Click the Cut at Point button .
6. Drag across the line to be cut. A new, solid anchor appears at the cut location.

Note

You can slice only one line at a time. Make sure you click the Cut at Point button before making each slice.

Overview of Special Objects

Rectangles, ellipses, and arcs can be reshaped only in specific ways in reshape mode. You can identify these special cases because they show solid anchors when selected for Reshaping.

- The special Rectangle Reshape mode for rectangles lets you round or sharpen the corners of a rectangle by dragging the solid anchor toward the center of the rectangle.
- The special Ellipse or Conic Reshape mode for ellipses lets you change an ellipse into a pie-shaped wedge or an arc. To change the ellipse into a pie-shaped wedge, drag the solid anchor toward the center of the ellipse. To change the ellipse into an arc, drag the solid anchor around the outside of the ellipse.

- The special Ellipse or Conic Reshape mode for arcs lets you change an arc into a pie-shaped wedge by dragging either of the two solid anchors toward the inside of the arc.

Note

To reshape a rectangle, ellipse, or an arc in other ways, you must first convert it to a curve.

To convert a special object to curves

- Select the object, click the Edit tool , and select Reshape Curve or Reshape Points from the menu.

  or

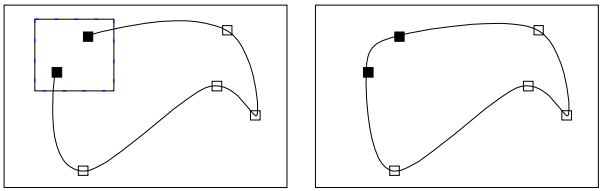
- Double click the object to put it in reshape mode (depends on the Options/Input settings), click the right mouse button, and click To Curves on the mouse men, or click the To Curves button on the edit ribbon.

  or

- Select the object. Right click and select Reshape Curve or Reshape Points from the menu.

Joining Endpoints of an Open Object

You can join the two endpoints of an open object by using the Join Points button . The two points are joined with a straight line.



To join endpoints of an open object

1. Select the object that you want to join.
2. In the Toolbox, click the Edit tool .
3. Select Reshape Points or Reshape Curve from the menu.
4. Select one of the endpoints. It turns solid.
5. Press and hold **SHIFT**, and select the other endpoint. It turns solid.
6. Click the Join Points button . Press **ESC** to exit reshape mode. The object is now closed and filled with the default interior fill.

Smoothing an Object

If an object or curve contains many twists and turns, you can smooth its appearance by eliminating some of its anchors.

Objects produced by tracing bitmaps sometimes have an undesirably large number of anchors. By reducing the number of anchors in a traced object, you often can improve the object's appearance. Reducing the number of anchors in an object also can improve its printing speed.

To smooth an object

1. Select the object.
2. On the Object menu, click Reduce Points.
3. In the Reduce Points dialog box, drag the Points sliding bar toward Less. The further you drag the sliding bar, the more points Designer tries to eliminate.

Tip

If you don't like the effect of the point reduction, You can restore the original shape. On the Edit menu, click Undo Reduce Points.

Trimming Objects

Inside objects and outside objects can be trimmed.

To trim an inside object

1. On the Effects menu, select Trim and then click Trim Inside Object on the submenu.
2. Select the object to be trimmed.
3. Select the trimming object. The inside object is trimmed.

To trim an outside object

1. On the Effects menu, select Trim and then click Trim Outside Object on the submenu.
2. Select the trimming object.
3. Select the object to be trimmed. The selected object is trimmed.

Outlining Objects

You can outline one object or a group of objects.

To outline an object

1. Select one or more objects.
2. On the Effects menu, select Modify and then click Outline on the submenu.
3. An outline of the object or group of objects is created.

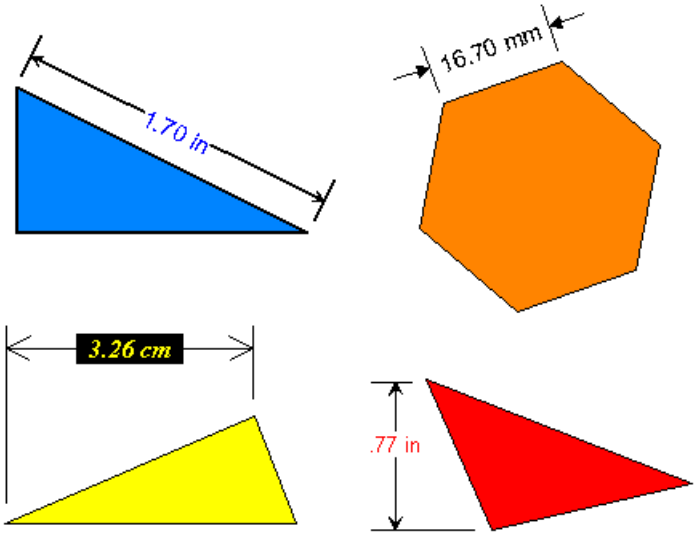
Note

The outline is placed on top of the original object. To view the outline, select and move the outline.

Using Dimensions

Using Dimensions

Dimension lines show the size, length, distance, or other measurements related to objects in a drawing.



The Designer dimension features are powerful and easy-to-use. The dimension capabilities of Designer include:

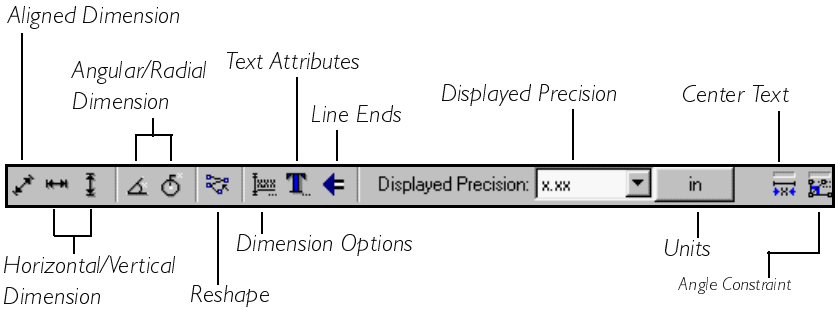
- Dimension lines can measure the aligned (diagonal), horizontal, or vertical distances between points.
- Dimension lines are dynamic objects that automatically recalculate their measurements when scaled, moved, rotated, or skewed.
- Dimension lines can be offset from their measured points to improve appearance and to aid clarity.

- Dimension lines can have a variety of line ends, including arrowheads, bars, and boxes.
- Dimension lines can indicate distance with inside or outside arrows.
- You can position the dimension units above, on, or below a dimension line, and adjust their orientation.
- You can position the dimension units anywhere along a dimension line, or extend the units beyond either end of the line.
- You can set the degree of precision, font, and font size individually for each dimension line.
- You can specify the units of measure, including custom units, for each dimension line. You can also set a scale to relate one unit of measure to another.
- You can add text before and after the dimension value for a dimension line.
- The dimension units that you use with a drawing are saved with the drawing so that you do not have to reset them each time you open the file.

Drawing Dimension Lines

The Dimension tool (keyboard shortcut **CTRL+0**) is used to draw dimension lines.

The Dimension Ribbon



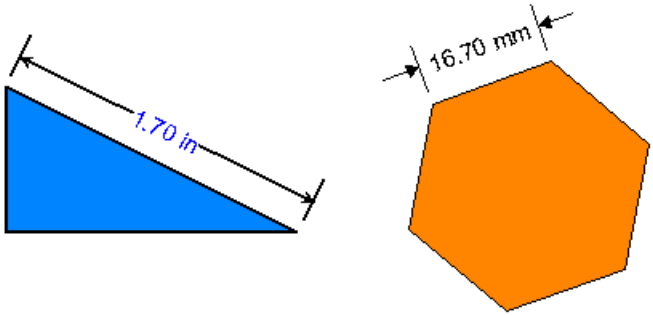
The Dimension tool (keyboard shortcut **CTRL+0**) is used to draw dimension lines. To draw a dimension line, click the Aligned, Horizontal, Vertical, Angular, or Radial button in the ribbon and then drag the line from one point to another to measure the distance. To offset the dimension line from the points measured, you drag the pointer away from the dimension line. Based upon whether you have selected an aligned, a horizontal, or a vertical measure, Designer calculates the distance between the points and displays it in the units you specify.

After drawing a dimension line, you can easily reshape it and edit its other attributes, including text alignment, line thickness, and line ends.

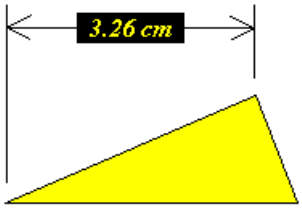
Tip

Dimension lines are generally added to a drawing after the drawing is created. To make it easy to align dimension lines to the endpoints of shapes, select the End Points option in the Rulers/Snap panel of the Options dialog box. Then use snap points to force the mouse pointer to move precisely to an endpoint. Use Dynamic Snap to be linked to the object.

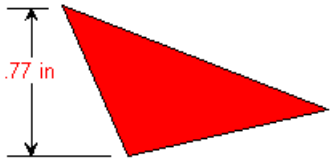
The Aligned button lets you draw dimension lines that measure the diagonal distance between two points.



The Horizontal button lets you draw dimension lines that measure the horizontal distance between two points. If two points are diagonal to each other, a horizontal dimension line still measures the horizontal distance between the points.



The Vertical button lets you draw dimension lines that measure the vertical distance between two points. If two points are diagonal to each other, a vertical dimension line still measures the vertical distance between the points.



To draw a dimension line

1. Click the Dimension tool in the toolbox or **CTRL+0** (zero).
2. Click the Aligned, Horizontal, Vertical, Angular, or Radial button in the ribbon.
3. Move the pointer to the starting point of the object you want to measure, and press and hold the left mouse button. Use dynamic snap points to link to an object.
4. Drag the pointer to the endpoint of the object you want to measure and release the mouse button. You can use **CTRL** to constrain the angle to increments of 15 degrees. A dimension line appears between the two points. The blue handle at the cursor location indicates the position of the dimension text.
5. Move the mouse in the appropriate direction to offset the dimension line and to adjust the location of the dimension units. You can use **SHIFT** to force the alignment point to the center.
6. After positioning the dimension line and text, click the left mouse button to finish drawing the dimension line.

Tip

If you make a mistake while drawing a dimension line, you can press **ESC** to start over.

Using Constraint Buttons

The Center Text button forces the dimension units to be centered between the dimension endpoints. Deselect the Center Text button to position the dimension units manually.

Note: Press **SHIFT** while drawing a dimension line to force the opposite state of the Center Text button. For example, pressing **SHIFT** when the Center Text button is deselected turns on the text centering constraint (while **SHIFT** is pressed).

The Angle Constraint button forces dimension lines to draw only in 15-degree increments.

Note

Press **CTRL** while drawing a dimension line to force the opposite state of the Angle Constraint button. For example, pressing **CTRL** while the Angle Constraint button is selected turns off the constraint (while **CTRL** is pressed).

Setting Displayed Precision

The Displayed Precision list box shows the current decimal precision of the dimension units. You can change the number of decimal places shown by clicking the down arrow next to the box and choosing another setting.

Editing Dimension Lines

Reshaping Dimension Lines

After drawing a dimension line, you can adjust the position of its endpoints and dimension units with the Reshape button .

To reshape a dimension line

1. Click the Dimension tool in the toolbox.
2. Select the dimension line you want to reshape by pointing and clicking the left mouse button.
3. Click the Reshape button in the ribbon. Solid blue handles appear at the line's endpoints and units location.
4. Drag the handles that you want to change to their new positions. You can use **SHIFT** to force the alignment point to the center.
5. Press **ESC** or double click the mouse button when you finish.

Tip

To enter the dimension reshape mode quickly, double click a dimension line with the select pointer.

Setting Line Ends

The Line Ends button lets you control the appearance of the dimension line. The options available include the following.

- The type of line end marker. The predefined types include arrowheads, bars, squares, circles, and triangles. You can also define custom line ends.
- Whether the same or different markers are used at each end of the line.
- The size, placement, and angle of the line end markers.
- The thickness of the line.
- The style of the line (solid, dotted, or dashed).

To choose a line end

1. Click the Dimension tool in the toolbox.

2 Select the dimension line you want to modify.

3 Click the Line Ends button in the ribbon. The Line Ends menu opens.

4 Click the desired line end in the menu. To choose other line ends and other line options, click Ends to open the Line Ends dialog box.

Tips

The Line Ends menu displays the most recently selected line ends.

Transforming Dimension Lines

Dimension lines are dynamic objects. This powerful feature means that no matter how you transform (move, rotate, skew, or scale) a dimension line, Designer will accurately calculate its length.

Transforming a dimension line does not change the line's aligned, horizontal, or vertical definition. For example, a horizontal dimension line continues to measure the horizontal distance between its endpoints, even when rotated into a vertical position (of course, the horizontal distance between two vertically aligned points is zero).

To rotate a drawing with dimension lines

1 Select the objects that you want to rotate, including the dimension lines.

2 Click the grouped objects a second time to display the rotation handles.

3 Drag the pivot point to a new location, if you want.

4 Drag the handles to rotate the drawing. To preview the current location of the rotated drawing, pause briefly while still holding down the left mouse button.

Setting Dimension Text Options

The Show Dimension Text option in the General panel of the Dimensions dialog box determines whether dimension units are shown or hidden. Select this option to show the units. Deselect this option to hide the units.

The currently selected units setting appears in the Units button. Click this button to change this setting.

The Precision list box shows the current decimal precision of the dimension units. To change this setting, click the down arrow next to the box.

The Prefix and Suffix text boxes let you enter text to appear before and after the units of a dimension line.

The Show Extension Lines option determines whether extension lines are shown or hidden. Select this option to show extension lines. Deselect this option to hide extension lines.

The Gap box specifies the amount of space between the points measured by a dimension line and the start of its extension lines.

The Extension box specifies how far extension lines protrude beyond a dimension line.

The Use Outside Arrows option determines whether dimension lines show arrows pointing outwards or inwards.

The Outside Arrow Length box specifies the length of outside arrows.

To add Prefix and Suffix text to a dimension line

1. Click the Dimension tool in the toolbox.
2. Select the dimension line you want to modify.
3. Click the Dimension Options button in the ribbon. The Dimensions dialog box opens.
4. Click the General button to display the General panel, if necessary.
5. Click the Prefix text box and enter the text you want to appear before the dimension units; or

6 Click the Suffix text box and enter the text you want to appear after the dimension units.

7 Click Apply to add the text to the dimension units.

Tip

To set option defaults so that they apply to all subsequent dimension lines that you draw, deselect all dimension lines, click the Dimension Options button, and then select the dimension options that you want.

Text Orientation Options

The Text Orientation panel of the Dimensions dialog box sets the orientation of the dimension units in relation to the dimension line.

Select Aligned Face Up to force dimension units to display so that the base of the text is oriented along the dimension line, but the text is always upright in relation to the line.

Select Towards Object to force dimension units to display so that the base of the text is oriented along the dimension line. For a horizontal dimension line in which the extensions are below the line, the dimension units are displayed upside down.

Select Horizontal to force the dimension units to display horizontally, even for vertical and aligned dimension lines.

Select Horz./Vert. to force the dimension units to display horizontally for horizontal and aligned lines, and vertically for vertical lines.

Select Custom Angle to display dimension units at a specific angle. To set the custom angle, you can either drag the red needle in the dial control or click in the Angle text box and enter a specific value.

To set a custom angle

1 Click the Dimension tool in the toolbox.

2 Select the dimension line you want to modify.

3 Click the Dimension Options button in the ribbon. The Dimensions dialog box opens.

4 Click the Text Orientation button to display the Text Orientation panel, if necessary.

5 Type a number in the Angle text box or drag the red needle in the dial control to specify a custom angle.

6 Click the Custom Angle option to select it.

7 Click Apply to display the dimension at the custom angle.

Tip

To set option defaults so that they apply to all subsequent dimension lines that you draw, deselect all dimension lines, click the Dimension Options button, and then select the dimension options that you want.

Text Position Options

The Text Position panel of the Dimensions dialog box sets the position of the dimension units in relation to the dimension line.

The Horizontal Text Position options determine whether the units display on the text point of the dimension line or are aligned left, center, or right.

The Vertical Text Position options determine whether the units display above, on, or below the dimension line.

To display units above a dimension line

1 Click the Dimension tool in the toolbox.

2 Select the dimension line you want to modify.

3 Click the Dimension Options button in the ribbon. The Dimensions dialog box opens.

4 Click the Text Position button to display the Text Position panel, if necessary.

5 Click Above Line (under Vert Text Position) to select this option.

6 Click Apply to reposition the dimension units.

Tip

To set option defaults so that they apply to all subsequent dimension lines that you draw, deselect all dimension lines, click the Dimension Options button, and then select the dimension options that you want.

Using Color

Display

If the update of the display in the Color Picker dialog box is too slow on your computer, you can change the resolution to speed it up. The choices are Fine, Average, and Coarse. Coarse, which displays fewer colors, is the fastest; Fine, which displays more colors, is the slowest.

Setting Color Options

Click Options to open a menu that lets you change the resolution of the dialog box display, change the color grid, or change the way CMYK colors are automatically "normalized" for undercolor removal. If Spot Color is selected, you can choose to show or hide the color names.

Using Dithered Colors

Monitors and printers use a process called *dithering* to compensate for the inability to display some colors. Dithering simulates color by placing dots of different colors next to each other in a pattern. Thus, dithering lets you display on a screen, and print on some printers, colors that are actually not available.

If a color is supported on your monitor and graphics adapter, it is displayed. If a color is not supported, it is changed to the closest color available on the graphics adapter. The color is changed to the closest color or dithered color available when printed or when displayed on another device.

Black Component

The K value (true black) is added to compensate for ink impurities in process color printing. The percentage of black in a color is theoretically equivalent to the same percentage of cyan, magenta, and yellow.

By default, the Color Picker displays the black component slider to let you manually adjust the percentage of black in a color. You also can choose to let Designer normalize the CMYK percentages automatically. That is, the percentages for C, M, and Y are reduced or increased so that the percentage for black is as high as possible. This technique is known as undercolor removal (UCR). If you add a color and then reopen the dialog box, the percentages may differ even though the color is the same.

Choosing Colors

Using the Color Picker

Designer offers state-of-the-art color mixing capabilities and the flexibility to let you easily choose and use any color from the full spectrum.

You can use a color model to choose any color. You can use whichever color model you prefer (HLS, RGB, or CMYK) to choose colors. The Color Picker is a tool that lets you choose a color from the full range of possible colors and add it to the Color Palette.

You can click one of the first three buttons at the top of the dialog box to select a color model (RGB, CMYK, or HLS). (The fourth button is for spot colors using a color matching system such as PANTONE.)

Numeric values for the current color appear along the right for each color model. The values show the amount of color used to create the displayed color. For example, 255 Red, 128 Green, and 179 Blue create pink. The same pink can be created with 0% Cyan, 50% Magenta, 30% Yellow, and 0% Black. You can use whichever color model you prefer to choose colors.

The numeric values for the selected model appear in black. The values for the models not selected are gray. As you make changes to the values of the selected color model, all of the values reflect corresponding changes.

The underlying model that represents the full range of colors is like a three-dimensional cube. The color refiner box shows two of these dimensions, while the slider below the color refiner box shows the third dimension.

The list box gives you choices for two of the components of the selected color model. These two components are illustrated as width and height in the color refiner box. The third component of the color model (depth in the cubical color model) is controlled by the horizontal slider.

For example, if you select the HLS color model and select Hue-Lightness in the list box, hue is width (left and right), lightness is height (up and down), and saturation is depth (the slider).

Tip

If you are new to color models, start with the HLS model.

To open the Color Picker dialog box

1. Click Palette Options in the color palette title bar. A menu opens.
2. Click Add Color.
3. If the current palette is the master palette, the Palette Name dialog box opens.
4. Enter a new name for the copy. The Color Picker dialog box opens.

Note

You cannot change the master palette.

Choosing HLS Colors

Click the HLS tab in the Color Picker dialog box to use the HLS (Hue, Lightness, Saturation) color model.

If you start with black (highlight black in the palette), you can choose gray scales (shades of gray) by leaving the saturation at zero and changing the degree of lightness.

The Hue values for primary colors are red (0), yellow (60), green (120), cyan (180), blue (240), and magenta (300).

The Hue values range from 1 to 360 degrees (equivalent to settings on a color wheel, where 0 is the same as 360). The Hue setting selects a starting color value. The Lightness value adds a percentage of white or black to the hue and shows the percentage of lightness in the shade. Increasing lightness adds white; decreasing lightness adds black. The Saturation value decreases or increases the percentage of color in a selected hue. Increasing saturation adds color; decreasing saturation adds gray.

The standard setting for a hue is 50% lightness and 100% saturation. If you highlight pure red in the palette, the HLS values display Hue at 0 degrees, Lightness at 50%, and Saturation at 100%.

Choosing RGB Colors

You can click the RGB tab in the Color Picker dialog box to use the RGB (Red, Green, Blue) color model.

The numeric values for R, G, and B represent amounts of the additive primary colors red, green, and blue. The value for each primary color can range from 0 through 255. When these three colors are combined (maximum values of each), the result is white. When none of the colors are present (zero values for each), the result is black. The RGB model is an additive color model because the three primary colors are combined to produce pure white.

Choosing CMYK Colors

Click CMYK in the Color Picker dialog box to use the CMYK (Cyan, Magenta, Yellow, Black) color model.

As with the other color models, you can choose a color combination from the list box (Cyan-Magenta, Cyan-Yellow, or Yellow-Magenta) to use as the height and width of the model as illustrated in the color refiner box. The third color is controlled by the slider directly below the color refiner box. The fourth color, black, is controlled by the bottom slider.

The numeric values for C, M, and Y represent percentages of the subtractive primary colors cyan (light blue), magenta, and yellow, which are complements of red, green, and blue. When these three colors are combined (100% of each), the theoretical result is black, but impurities in printing inks result in a muddy brown. When none of the colors are present (0% of each), the result is white. The CMYK model is a subtractive color model because the three primary colors are removed to produce black.

To change the way Designer normalizes CMYK percentages

1. Click the Undercolor Removal button in the Color Picker-CMYK dialog box.
2. Click Manual if you want to prevent Designer from normalizing the CMYK percentages.

   or

   Click a percentage if you want to allow Designer to normalize the CMYK values. (For example, click 100% for complete normalization or 50% for half normalization.)

Tip

If you click a percentage in step 3 above, the black component slider at the bottom of the dialog box disappears.

Naming a Color

The color swatch at the top right of the dialog box shows the new color as you mix it. You can assign a name to this color swatch. Names can include numbers and spaces.

To name a color

1. Click the New Color color swatch in the Color Picker dialog box.
2. Type a name.
3. Press **TAB** or click another field. The name is displayed on the color swatch.

Tip

When you click Add to add the color to the current palette, Designer stores the assigned name with the color.

Using a Color Model

Designer, beginning with version 4.0, stores colors in the color model (HLS, CMYK, or RGB) in which they were originally created, whereas earlier versions of Designer only store colors in the RGB format. This capability is especially important for graphic designers, who typically create colors with the CMYK color model, because it ensures precise matching between color definition and storage.

You can use a color model to choose any color. You can use whichever color model you prefer (HLS, RGB, or CMYK) to choose colors. The Color Picker is a tool that lets you choose a color from the full range of possible colors and add it to the Color Palette.

Tip

If you are new to color models, start with the HLS model.

To choose colors with a color model

1. Click Palette Options in the Color Palette title bar.
2. Click Add Color.

3 If the current palette is the master palette, you are asked if you want to make a copy of the master palette. Click Yes and enter a new name for the copy. The Color Picker dialog box opens.

4 Click a color model tab.

5 Click the down arrow at the right of the list box to choose the first two dimensions for the color refiner box (for example, Hue-Lightness).

6 Enter the desired value in the current color model's scroll boxes.

7 Continue to adjust the settings in the selected color model until you have mixed the desired color. You can also press and hold the mouse button, and drag the color refiner cursor and the slider

8 Click Add to add the new color to the current palette.

9 Repeat steps 5 through 9 to add more colors to the palette.

Converting Color Model Values

Designer stores a color with the numeric values in the color model in which it was created. When you display the names of colors in the current Color Palette, the color model and corresponding values are displayed with a sample swatch of the color and a name, if any.

For example, you can add a color to a palette using the Color Picker, specifying RGB values of 0, 125, and 255. Then you can convert the color to CMYK values (100, 50, 0, and 0).

To convert values to another color model

1 Click Palette Options in the Color Palette title bar.

2 Click Palette Manager. The Palette Manager dialog box opens.

3 Click the color you want to convert and click Model. A menu opens with a check mark by the name of the color's current model.

4 Click the color model to which you want to convert.

5 Click OK. The selected color is stored with the new color model.

Mixing Your Own Color

If you need a simple method to create a color and you do not need to save the color in a palette for later use, you can use the Fill-Solid dialog box to create it. This method works as a temporary color palette to let you select two to four colors and mix them as a painter would on a palette.

If you plan to reuse the color later or you need to use a color model (HLS, CMYK, or RGB), you may want to use the Color Picker dialog box and add the color to the Color Palette.

To mix colors using the Fill-Solid dialog box

1. On the Format menu, select Interior Fill and then select Solid from the submenu.

   or

   On the Format menu, select Line Fill and then select Solid from the submenu.
2. Click the Color Mixer button.
3. Click a corner of the mixing palette. A pull-down palette opens. Choose a color from the palette.
4. Repeat steps 2 and 3 to choose a color for each corner of the mixing palette. The color transitions change to reflect the mix of colors.
5. Select one or more color squares in the mixing palette to choose the desired color(s).
6. Click Add and Close. The Color Picker dialog closes and your new color(s) now appear in the Object Format dialog palette.
7. Select the interior or line fill color and click Apply.

Finding an Object's Color Values

If you want to know what colors are already used in a drawing, you can select each object and find its colors.

To find the interior and line color of an object

1. Select the object
2. On the Format menu, select Interior Fill and then select Solid from the submenu.

   or

3. On the Format menu, select Line Fill and then select Solid from the submenu.
4. The Object Format dialog opens. The fill color and color values display.

Tip

The set of color values is stated in the color model originally used to create the color. For example, the value for yellow might be either RGB 255, 255, 0, or CMYK 0, 0, 100, 0, depending on whether the color was created in the RGB or CMYK color model.

Using the Color Palette

The Color Palette is a toolbar containing the current colors you can use in a drawing. It is especially convenient when you're working with large palettes or named colors.

You can dock, move, resize and reshape the Color Palette to keep it handy but out of your way. Colors in the current palette are always available, no matter which tool you select or which ribbon you display.

Palettes Included with Designer

Designer includes predefined color palettes plus the flexibility to design and assemble your own palettes that best match how you work.

A default palette, called the master palette, is automatically installed when you install Designer. To protect against accidental changes, the master palette cannot be changed, deleted, or merged. However, you can make a copy of it, give it a new name, and then make additions, deletions, or other changes.

You select the current palette on the Options menu on the Color Palette. If the master palette is the current palette, and you attempt to add a color, delete a color, rename the master palette, or rename a color in the master palette, a dialog box reminds you that you must save a copy of the master palette.

The Palette Name dialog box opens. Type a new name for the copy of the master palette and press **ENTER**. You can then make changes to the new palette, whose name is added to the list of available palettes on the Palette Options menu and the Palette Manager dialog box.

Designer lets you mix your own colors and add them to an existing palette, or you can create a new palette that includes only the colors you want.

Designer also includes the PANTONE® spot and process colors, which are available on the Spot Color tab of the Color Picker dialog box.

To open the Color Palette

- On the View menu, select Color Palette. The Color Palette opens.

or

Click the Color Palette button on the standard toolbar.

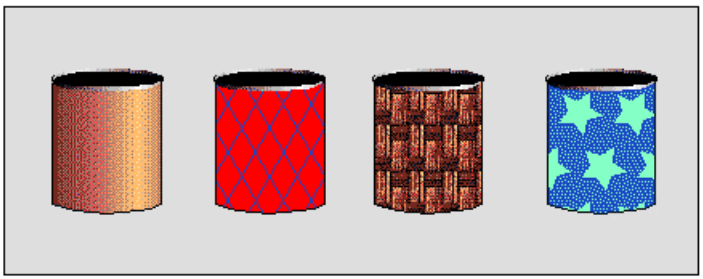
Using Lines, Fills, and Patterns

Overview of the Style Tools

Designer's style tools give you a variety of ways to change and assign colors, fill patterns, and many other style attributes for any object you draw.

You can assign fills and patterns to both lines and the interiors of closed objects. Besides solid colors, you can use

- Gradient fills (gradual changes from one color to another)
- Hatch patterns
- Image (bitmap) patterns
- Object fills (with repetitions of another object)



In addition, you can

- Paste one object inside another to achieve a masking effect
- Copy all the style attributes from one object and apply them to another

Style Attributes for Lines Only

For lines, you can change the

- Color
- Style (a pattern of dots and dashes)
- Line thickness
- Line end markers for straight lines and all open objects (arcs, curves, elliptical arcs, freehand objects, parabolas, and jointed lines)

Lines also are used as borders of closed objects. You can change their

- Color
- Style
- Thickness

In addition, you can make a line invisible to hide an object's border.

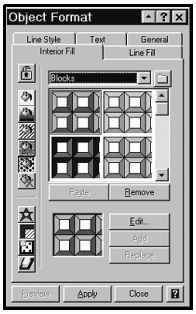
Using Fills with Text

Some interior fills, such as hatch fills and object fills, have both a foreground and background color. Don't confuse this type of background color with the text background color that you set in Fonts panel of the Text dialog box.

If you have applied a hatch fill or object fill to text, clicking a color in the Color Palette with the left mouse button alone sets the foreground interior color. To set the background interior color, point to a color, press and hold **SHIFT** and click the left mouse button.

Using the Object Format Dialog Box

You can access any panel of the Object Format dialog box with the click of a button. You can select line or interior colors and any type of fill for lines or interiors.



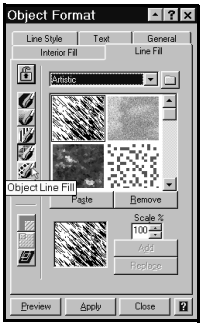
Interior Fill panel of the Object Format dialog box

Selection Tabs

The tabs across the top of the Object Format dialog box let you select line attributes, text fills, gradient fills, and object positioning, and other interior object properties.

Format Buttons

Within each panel exist specific buttons designed to perform specific formatting functions. Hold the cursor above a button to view the button's name. The button's function is described in Designer's hint window.



Format buttons on the Line Fill panel of the Object Format dialog box.

Apply Button and Close Button

As with many of the dialog boxes in Designer, the Fill dialog box stays open to let you apply changes to objects without having to open the dialog box repeatedly. You can click Apply each time you want to apply a change to a selected object. The dialog box does not close until you click Close.

Formatting Lines

Setting Line Styles

You can choose a dotted or dashed line style for selected lines. You also can set a style for lines before you draw them.

To speed your work, the Line Style menu keeps track of the most recent line style patterns you have used.

To choose a line style from the menu

1. Click the Format tool in the toolbox.
2. Click the Line Style button in the ribbon. The Line Style menu opens.
3. Click a style in the menu. The selected line or border changes to the new style.

Tips

If no objects are selected, subsequent lines and object borders draw in the new style. You can apply a line style to a line of any thickness.

You also can choose from other line styles in the Line-Style dialog box.

To choose a line style from the Line-Style dialog box

1. Click the Format tool in the toolbox.

2 Click the Line Style button in the ribbon. The Line Style menu opens.

3 Click Style. The Line-Style dialog box opens.

4 Click the style you want.

5 Click Apply. The selected line or border changes to the new style.

Tip

If no objects are selected, subsequent lines and object borders draw in the new style. The new style appears in the Line Style menu for later use.

Setting Line Ends

You can choose from a variety of line ends to enhance your drawing.

Lines (open objects) can have end markers at one or both ends. The line ends include arrowheads, lines, squares, circles, and triangles. You can set the line ends first, so that every line appears with the new end marker, or you can change the ends of selected lines.

You can add line ends to any open object. You can set both ends of a line to be the same or different for each end. You also can have an end marker on only one end of a line. Each line has a "first end" and a "last end," depending on which end is the starting point when the line is drawn.

As you select line ends, the ends you choose are added to the Line Ends menu. The menu shows the most recently selected line ends.

To choose a line end from the menu

1 Click the Format tool in the toolbox.

2 Click the Line Ends button in the ribbon. The Line Ends menu opens.

3 Click a line end sample. A selected line changes to the new ends.

Tips

If no line is selected, subsequent lines draw with the new ends.

You also can choose from other line ends in the Line-Ends dialog box. You can even create new line ends and paste them into the dialog box.

To choose ends from the Line-Ends dialog box

1 Click the Format tool in the toolbox.

2 Click the Line Ends button in the ribbon. The Line Ends menu opens.

3 Click Ends. The Line-Ends dialog box opens.

4 In the preview window, click the end of the line you want to change. (The end on the left is the first end; the end on the right is the last end.)

5 Click the button of the desired line end, using the scroll arrows to locate the one you want.

6 Click Apply. A selected line changes to the new style; if no objects are selected, subsequent lines draw in the new style.

Notes

The default options are Same Type and Same Attributes for both ends of the line. You can deselect these options to use two different end types or to make the two ends a different size, angle, and so forth.

To reset the line end to none, you can click No Ends in the Line Ends menu or choose the line with no end in the dialog box.

To draw a Gantt chart with Designer, set the dimensions of lines to weeks and days (units setting in the General panel of the Dimensions dialog box) and use triangles for line ends.

To add line ends to the Line-Ends dialog box

1. Click the Format tool in the toolbox.
2. Click the Line Ends button in the ribbon. The Line Ends menu opens.
3. Click Ends. The Line-Ends dialog box opens.
4. Draw an object to be used as a line end.
5. On the Edit menu, click Copy to copy your line end to the Clipboard.
6. Click the Paste button in the Line-Ends dialog box. The line end you created is added to the gallery of ends.

Tips

You can now choose the line end you created from this dialog box.

If the line end you add is an object with weighted lines, select Weighted and then select Scale with the Object in the Line-Thickness dialog box so that lines are scaled correctly when the object is reduced.

You also can remove line ends you created and pasted into the Line-Ends dialog box. (You cannot remove ends originally included with Designer.)

To remove line ends from the Line-Ends dialog box

1. Click the Format tool in the toolbox.
2. Click the Line Ends button in the ribbon. The Line Ends menu opens.
3. Click Ends. The Line-Ends dialog box opens.
4. Select the line end you want to remove.

5 Click Remove. The line end is removed from the gallery.

Tip

You cannot remove ends originally included with Designer.

Editing Line Ends

If you need to adjust the position or appearance of a line end, you can scale, move, rotate, or flip the line end relative to its line. You can watch the preview in the Line-Ends dialog box to see the effect your adjustments have. Experiment with the controls to reach the result you want.

Scaling a Line End

Change the size of a line end by changing the value of Width % and Height %. The default values are 100%, which is the original size. Changing both these values to 50% makes the line end half the original size; changing the values to 200% makes the line end twice the original size. To scale the line end proportionally, change Width % and Height % the same amount.

Moving a Line End

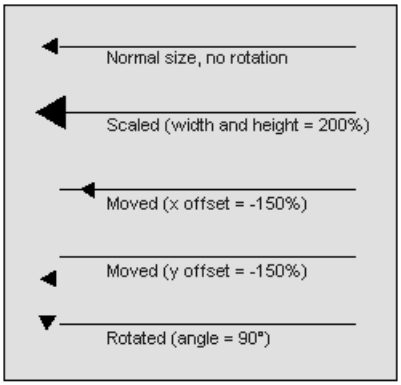
You can move, or offset, a line end from its line by increasing or decreasing the values in the X Offset % or Y Offset %. Zero is the default position.

Increasing the percentage for X Offset moves the line end away from the line. Decreasing the percentage for X Offset (using a negative value) moves the end toward the middle of the line.

Increasing the percentage for Y Offset moves the line end up. Decreasing the percentage for Y Offset (using a negative value) moves the line end down.

Rotating a Line End

You can rotate a line end relative to the line by changing the value for Angle. The default value (no rotation) is zero degrees.



Setting Line Styles

If you select Use Line, the current line thickness and fill attributes are applied to the line end. If you want to retain the original style attributes of an object you are pasting into the line end gallery, deselect this option.

To edit line ends

1. Select the line with the ends you want to edit.
2. Click the Format tool in the toolbox.
3. Click the Line Ends button in the ribbon. The Line Ends menu opens.
4. Click Ends. The Line-Ends dialog box opens.
5. Choose the settings you want to apply to the line ends.

Using Weighted Lines

Weighted lines are lines that are thicker than a "hairline." A hairline (the default) is the thinnest line that can be displayed or printed on a specific device. Cap options affect the ends of lines; join options affect the intersection of lines.

You can set the thickness of lines and the cap and join options of lines with Line Thickness in the Style Ribbon toolbar. If no objects are selected, you set a new default when you change the line thickness or cap and join options. Subsequent lines display with the selected width, height, and angle. In addition, you can change the weighted line options for a selected line.

For simple weighted lines, the width and height are the same, and the pen angle is set to zero degrees. You change only the width (thickness) of the line.

For a different effect, Designer can simulate a calligraphy pen (whose tip is typically taller than it is wide) and the way it might be used (at an angle in relation to the page). If you select Calligraphic lines, you can set the width, height, and angle of the "pen tip."

The Line Thickness menu displays previously used weighted lines so you can choose them directly from the menu.

Setting the Line Thickness

You can choose a line thickness directly from the Line Thickness menu, or you can change the thickness of a line in the Line-Thickness dialog box. Line thickness can range from a fraction of a point up to 360 points (5 inches).

You also can customize and edit line attributes. You can

- Change the thickness of a line.
- Change the cap and join options.
- Create calligraphic lines.
- Choose whether the line thickness changes when an object is scaled.

To choose a line thickness from the menu

1. Click the Format tool in the toolbox.
2. Click the Line Thickness button in the ribbon. The Line Thickness menu opens.
3. Click a line thickness. A selected line changes to the new thickness.

Tips

If no object is selected, subsequent lines draw in the new thickness.

To set the line thickness in the Line-Thickness dialog box

1. Click the Format tool in the toolbox.
2. Click the Line Thickness button in the ribbon. The Line Thickness menu opens.
3. Click Thickness. The Line-Thickness dialog box opens.
4. Click the value in the Width box and type a number to change the thickness (width and height are the same).
5. Click Apply.

Tip

If the Scale with Object option is selected, the line thickness increases or decreases when the object is resized. If Scale with Object is not selected, the line thickness remains the same when the object is resized.

Setting Join and Cap Options

You can choose the shape of the corner intersection and the ends of lines. Designer offers three choices for each. Select the options you want in the Line-Thickness dialog box. A preview line (in the upper right) shows a red line in the center to show the effect of different cap options.

Setting Cap Options

Cap options determine the appearance of the ends of lines.

- The Round Cap option places the center point of a circle at the end point of the line. (The diameter of the circle matches the thickness of the line.)
- The Square Cap option places the center point of a square at the end point of the line. (The width and height of the square match the thickness of the line.)
- The Flat Cap option ends the line at the end point of the line.

Setting Join Options

Join options determine the appearance of the corner intersection of lines in an object.

- The Round Join option places the center point of a circle at the vertex of two line ends. (The diameter of the circle matches the thickness of the lines.)
- The Mitre Join option creates a pointed intersection that is the true intersection of two lines.
- The Bevel Join option averages the angles of the two lines, creating a blunt intersection.

Tips

Experiment with the rounded cap option and a line style of short dashes to obtain a dotted (rather than dashed) line style.

When you select the Mitre Join option in the Line-Thickness dialog box, any lines that meet at angles sharper than 11 degrees are drawn with beveled joins. This prevents objects from having extremely pointed joins.

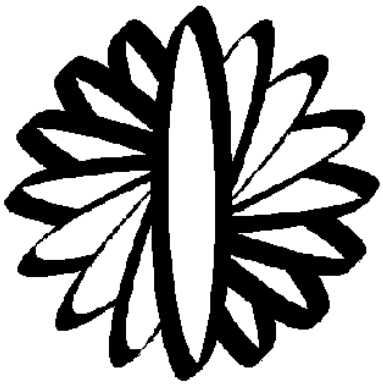
To set join and cap options

1. Click the Format tool mp in the toolbox.
2. Click the Line Thickness button in the ribbon. The Line Thickness menu opens.
3. Click Thickness. The Line-Thickness dialog box opens.
4. Click the cap and join options repeatedly until you ones you want are displayed.
5. Click Apply.

Creating Calligraphic Lines

You can draw calligraphic lines with Designer by selecting both Weighted and Calligraphic in the Line-Thickness dialog box. Then you change the Pen Width, Height, and Angle settings. Calligraphic lines can add a more natural look to many drawings, especially when used with curved lines.

To make a line calligraphic, you change the value for the width or height in relation to the other. As you experiment to find the right settings, the dialog box shows a preview of the lines.



The primary way to set calligraphic lines is to adjust the width and height settings. The lines with the most "flair" are produced by choosing very different width and height settings. For example, a very thin but very tall setting will produce a calligraphic line even without adjusting the Pen Angle setting.

Adjusting the Pen Angle setting can enhance the effects created with the Width and Height settings. In a calligraphic line, the Pen Angle setting forces the pen tip to stay at the chosen angle, much as a calligraphic pen is held at particular angles to achieve certain effects.

RT_Creating_Calligraphic_Lines

RT_Creating_Calligraphic_Lines
Setting Line Styles
Setting Line Ends
Editing Line Ends
Using Weighted Lines
Setting the Line Thickness
Setting Join and Cap Options

To create calligraphic lines

1. Click the Format tool in the toolbox.
2. Click the Line Thickness button in the ribbon. The Line Thickness menu opens.
3. Click Thickness. The Line-Thickness dialog box opens.
4. Click Weighted and Calligraphic. Choices for Width, Height, and Pen Angle appear.
5. Type the Width, Height, and Pen Angle you want. The pen tip is shown in the preview area.
6. Click Apply.

Tip

You can drag the red needle in the preview area to set the pen angle.

Selecting a Solid Color Fill

You can choose a color for an object before or after you draw it. Selecting a color affects all selected objects. If no objects are selected, selecting a color sets the color for the next object you draw.

To choose an object's color from the Object Format dialog box

1. Select an object.
2. Click the Format tool in the toolbox.
3. Click the Solid Interior Fill button in the ribbon to change the color of the interior.

   or

   Click the Line Fill button to change the color of the line. A menu opens.
4. Click a color in the palette to choose the object's color.
5. Click Apply to change the object's line or interior color.

Tips

If no object is selected, you set a new default color.

To speed your work, the Solid submenu keeps track of the most recently used solid color fills. Click the solid fill in the submenu as you would any other command.

To select an invisible fill or line

1. Select the object you want to have an invisible fill.
2. Click the Format tool.

3 Click the Remove Interior Fill button or the Remove Line button.

Tips

Click the left mouse button for interior fill, right mouse button for line fill

Alternate method: Select the object, click the Format tool , click Interior Fill (or Line Fill), and click Invisible.

Alternate method: Select the object, click the Format tool , click Interior Fill, click Solid, and click Custom. When the Fill dialog box opens, click the current fill button (Solid , Gradient , Hatch , Image , or Object) to "turn off" the current fill.

Alternate method for lines: Select a line, click Line Style in the Style Ribbon toolbar, and click Invisible.

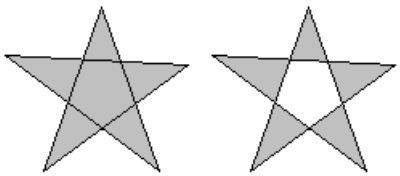
Alternate method for lines: Click the Lines Style button , click Style, and click the Invisible option in the Line-Style dialog box.

Using Fill Options

Designer lets you control whether overlaps or cut-outs are filled and whether the interior is filled before or after the line. For more information on overlaps and cut-outs, see Connecting Objects.

Filling Overlaps

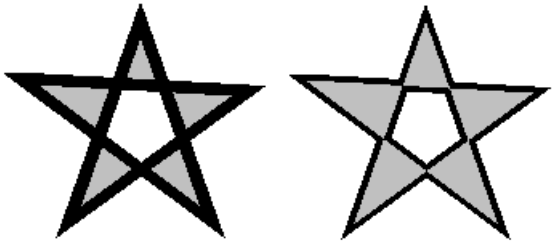
Designer lets you control whether the overlapping areas of an object are filled or skipped.



Overlaps filled and skipped

Fill Before or After Line

You can specify whether an object's interior is filled before or after its line is drawn.



Fill before and after

- The Fill Before Line and Fill After Line commands do not apply to hairlines. Objects with only hairlines are not affected. You can increase the thickness of the lines and then use either of the commands. If you apply either of the commands to an object that includes both hairlines and weighted lines, only the weighted lines are affected.
- The Fill After Line option can work well for shadow effects.

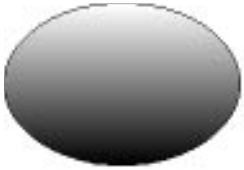
To set fill options

1. Open the Object Format dialog.
2. Click Fill Overlaps or Skip Overlaps to set the overlap fill option.
3. Click Fill Before Line and Fill After Line to set the fill draw sequence option.

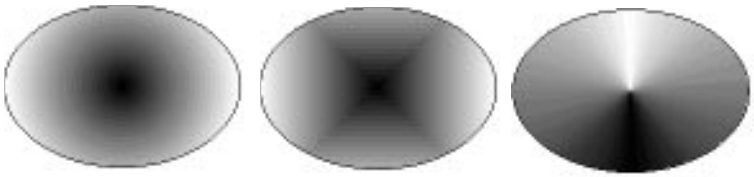
Using Gradient Fills

A gradient is a fill that makes a gradual transition between colors. Gradients can add more realistic depth to a drawing and provide a less mechanical feel to many illustrations. You can create linear, radial, conical, and square gradient fills.

Linear gradients are the simplest of the four, with a gradual fade of one color to another in a specified direction within an object.



Radial (circular) and square gradients fade from one color in the inner part of the fill to another color in the outer part of the fill. A Square gradient fades from one color in the inner part to the outer part in a square pattern.



A simple gradient fill fades from any one selected color to any other selected color. Designer even lets you use gradient fills made up of many colors. For example, you can easily create rainbow effects.

You choose the two or more colors used in a gradient fill in the Fill-Gradient dialog box.

To speed your work, the Gradient submenu keeps track of the most recently used gradient fills. Choose the gradient fill in the submenu as you would any other command.

Making Gradient Fills Draw Faster

Because gradient fills take time to draw on your screen, you can speed them by choosing a different display option.

Choosing Smooth produces the highest display quality on your screen but redraws more slowly, while Coarse produces the lowest display quality but redraws quickly. When None is selected, only the first color of the gradient is displayed. You always see a gradient when you print the document.

To make gradient fills draw faster

- On the View menu, point to Show Gradients. Then click Smooth, Average, Coarse, or None. All gradients in all documents draw using the options you choose.

To add a gradient fill to a selected object

1. Click the Format tool in the toolbox. The Format ribbon displays.
2. Click the Gradient Interior Fill button in the ribbon, or the Gradient Line Fill button. The Fill-Gradient pane opens.
3. Click a color in the Color Palette.
4. Click the point above the color band at 100%.
5. Click another color in the Color Palette.
6. Click a gradient button.
7. To edit, drag the end circles to control the angle. Move the origin square to control the gradient center.

Tip

Click Apply. The object redraws with the new gradient.As a shortcut, double click a gradient instead of choosing the gradient and then clicking Apply.

- You can use many colors in a gradient fill, instead of only two, to create multicolor gradients and rainbow effects. Click above the color band to create a new color point and then choose a color in the palette. You can continue to add additional color points in this way. You can drag each point to the desired location on the color band (try spacing them evenly) to control how the fill graduates from one color to another. To delete a color point, drag it off of the dialog box.

8 You can quickly change the first and last colors for a gradient fill in a selected object without using the Fill-Gradient dialog box. Select the object with a gradient fill, click one color in the color palette, press and hold **SHIFT**, and click another color in the palette.

Using Hatch Fills

You can fill objects with hatch patterns that are composed of vector-based lines.

Objects with hatch patterns have two interior colors: one for the hatch pattern (foreground) and one for the background.

Dense patterns show less of the background color, and sparse patterns show more background color. By experimenting with different patterns and colors, you can produce interesting effects.

To speed your work, the Hatch submenu keeps track of the most recently used hatch fills. Choose the hatch fill in the menu as you would any other command.

Making Hatch Patterns Draw Faster

If hatch patterns take too much time to draw on your screen, you can hide them by turning hatch fills off in the drawing.

To make hatch patterns draw faster

- On the View menu, click Show Hatch Fills to toggle whether hatch fills show in your drawing.

To choose a hatch pattern

1. Select an object.
2. Click the Format tool in the toolbox.
3. Click the Hatch Interior Fill button in the ribbon, or the Hatch Line Fill button. The Fill-Hatch dialog box opens.
4. Click a pattern.
5. To change the foreground color, select Foreground, point to a color in the palette, and click the left mouse button.

6 To change the background color, select Background, point to a color in the palette, and click the left mouse button.

7 Click Apply. The object redraws with the new hatch pattern and colors.

Tips

As a shortcut, double click a hatch pattern instead of choosing the pattern and then clicking Apply.

You can quickly change the foreground and background colors for a hatch fill in a selected object without using the Fill-Hatch dialog box. Select an object with a hatch fill, click one color in the palette in the Style Ribbon toolbar, and then press and hold **SHIFT** and click another color in the palette.

The background color is opaque by default. You can make the background color transparent by selecting the Background Transparent option in the Fill-Hatch dialog box.

Changing the Line Thickness and Spacing of Hatch Fills

You can change both the line thickness and spacing of hatch lines.

Line Thickness

The default value for hatch line thickness is 100%. Setting this value to 200% makes the lines twice as heavy; setting it to 50% makes the lines half as heavy.

Line Spacing

The default value for the spacing between hatch lines is 100% (no change). Setting this value to 200% doubles the space between hatch lines; setting it to 50% cuts the space between hatch lines in half.

To change the line thickness and spacing of hatch fills

1 Select an object.

2 Click the Format tool in the toolbox.

3 Click the Hatch Interior Fill button in the ribbon, or the Hatch Line Fill button . The Fill-Hatch dialog box opens.

4 Enter new values for the line thickness and spacing.

5 Click Apply. The object redraws with the new line thickness and spacing for the hatch pattern.

Using Image Fills

You can add image (bitmap) patterns to objects. You can create and save your own patterns with Picture Publisher.

The Interior Fill and Line Fill menus contain the Image command for image (bitmap) patterns. The Image command provides a set of patterns composed of individual pixels (dots).

You choose the pattern for a selected object in the Fill-Image dialog box.

If the image fill pattern is all one color (monochrome), you can change the foreground and background color. To set the foreground and background colors for a monochrome image fill in a selected object, select an object with an image fill, click one color in the color palette in the Style Ribbon toolbar, and then press and hold **SHIFT** and click another color in the palette. You also can select colors for the foreground and background color swatches in the Fill-Image dialog box.

To speed your work, the Image submenu keeps track of the most recently used image fills. Choose the image fill in the submenu as you would any other command.

To set the image pattern

1. Select an object.
2. Click the Format tool in the toolbox.
3. Click the Image Interior Fill button in the ribbon, or the Image Line Fill button.
4. Select a category from the pull-down list. The Fill-Image dialog box opens.
5. Click a pattern to select it.

6 Click Apply. The object redraws with the new pattern.

Tips

As a shortcut, double click an image pattern instead of choosing the pattern and then clicking Apply.

Plotters and many film recorders do not support bitmap patterns or opaque backgrounds.

Making Image Fills Draw Faster

If image fills take too much time to draw on your screen, you can hide them by turning image fills off in the drawing. Deselecting image fills has no effect on your drawing when it is printed.

To make image fills draw faster

- On the View menu, click Image Fills to toggle whether image fills show in your drawing.

Changing the Image Scale

The Fill-Image dialog box includes a scroll box to change the scale of the image.

The default value for Image Scale is 100%. Setting this value to 200% makes the image twice as large; setting it to 50% make the image half as large.

To change the image scale

1 Select an object.

2 Click the Format tool in the toolbox.

3 Click the Image Interior Fill button in the ribbon, or the Image Line Fill button. The Fill-Image dialog box opens.

4 Enter a value in the Image Scale area to change the size of the image.

5 Click Apply. The object redraws with the new image size.

Creating Image Patterns

You can create your own image (bitmap) patterns (such as a texture or part of a photo image) with a bitmap-editing program, and paste these patterns into the Fill-Image dialog box.

Tip

You can launch iGrafx *Image* from the Bitmap Ribbon.

To add image patterns

1 Create or import a bitmap pattern in your bitmap-editing program.

2 On the Edit menu, click Copy to copy your pattern to the Clipboard.

3 In Designer, click the Format tool in the toolbox.

4 Click the Image Interior Fill button in the ribbon, or the Image Line Fill button. The Fill-Image dialog box opens.

5 Click Paste. The image pattern you created is added to the gallery of patterns.

Removing Image Patterns

You can remove image (bitmap) patterns you created and pasted into the Fill-Image dialog box. You cannot remove patterns originally included with Designer.

To remove image patterns

1. Click the Format tool in the toolbox.
2. Click the Image Interior Fill button in the ribbon.

   or the Image Line Fill button . The Fill-Image dialog box opens.
3. Click the pattern you want to remove to select it.
4. Click Remove. The image pattern is removed from the gallery of patterns.
5. Click Apply. The selected object is filled with repetitions of the object chosen from the gallery in the dialog box.

Tips

Object fill patterns automatically increase or decrease in size when you scale (resize) the larger object that contains the object fill.

If the object fill pattern is all one color (monochrome), its color is the foreground color. To change the foreground color, select Foreground, point to a color in the palette, and click the left mouse button. To change the background color, select Background, point to a color in the palette, and click the left mouse button.

You can quickly change the foreground and background colors for a monochrome object fill in a selected object without using the Fill-Object dialog box. To change the foreground color, select an object fill and click a color in the color palette in the Style Ribbon toolbar. To change the background color, press and hold **SHIFT** and click another color in the palette.

Using Object Fills

You can fill an object with a pattern made of other objects.

You can fill a closed or connected object with a repeating pattern of other objects. Object fills draw in a grid pattern within the shape of the object you choose, extending to the borders of the object.

Designer's Fill - Object dialog box has a gallery of object fills from which to choose. You can use these object fills or create your own.

To speed your work, the Object submenu keeps track of the most recently used object fills. Choose the object fill in the submenu as you would any other command.

Objects with object fills can have two interior colors: one for the fill pattern (foreground) and one for the background. The background color is opaque by default. You can make the background color transparent by selecting the Background Transparent option in the Fill-Object dialog box.

Dense patterns show less of the background color, and sparse patterns show more background color. By experimenting with different patterns and colors, you can produce interesting effects.

Adding and Removing Object Fills

If you want to create an object fill and use it later, you can save it in the gallery in the Fill-Object dialog box.

To add an object to the gallery

1. Draw the object to be added to the gallery and select it.
2. On the Edit menu, click Copy to copy the object to the Clipboard.
3. Click the Format tool in the toolbox.
4. Click the Object Interior Fill button in the ribbon, or the Object Line Fill button. The Fill-Object dialog box opens.

5 Click Paste to paste the object into the gallery.

Tip

You also can remove objects that you have added to the gallery in the Fill-Object dialog box. (You cannot remove any of the original object fills that come with Designer.)

To remove an object from the gallery

1 Click the Format tool in the toolbox.

2 Click the Object Interior Fill button in the ribbon, or the Object Line Fill button. The Fill-Object dialog box opens.

3 Click the object fill you want to delete.

4 Click Remove. The object is deleted from the gallery.

Editing Object Fills

You can create fascinating effects by creating your own unique object fills. You can change the arrangement, flip characteristics, rotation, size, and spacing of an object fill. You can add a new object-fill pattern or replace a pattern you previously added with a new one. You can even use multiple objects of different shapes.

Note

You cannot replace any of the original object-fill patterns included with Designer.

To edit object fills

1 Click the Format tool in the toolbox.

2 Click the Object Interior Fill button in the ribbon.

or the Object Line Fill button . The Fill-Object dialog box opens.

3 Select the pattern that you want to edit from the gallery.

4 Click Edit. The Edit Object Fill dialog box opens.

5 Make your edits (arrangement, flip, rotate, size, and so forth).

6 Click Ok and then click Add or Replace to add the edited object fill to the object fill gallery.

Tip

You can click Replace to replace a selected object fill in the gallery.

Making Object Fills Draw Faster

If object fills take too much time to draw on your screen, you can hide them by turning object fills off in the drawing. Deselecting object fills has no effect on your drawing when it is printed.

To make object fills draw faster

- On the View menu, click Show Object Fills to toggle whether object fills show in your drawing.

To fill an object with other objects

1 Select the object you want to fill.

2 Click the Format tool in the toolbox.

3 Click the Object Interior Fill button in the ribbon, or the Object Line Fill button .

4 Select the category from the pull-down list. The Fill-Object dialog box opens.

5 Click the object you want to use for the fill.

Arranging Object Fills

You can Center an object, Tile (repeat) by Row, or Tile (repeat) by Column. You must choose one of the tiling options to use many of the other features in the Edit Object Fill dialog box. You must choose a Flip option or change the value for Stagger % to see a difference between Tile by Row and Tile by Column.

Rotating Object Fills

Selecting the Pattern option rotates the whole object-fill pattern; selecting Object rotates each individual object.

The Angle value sets the angle of rotation. You can either enter a value in degrees directly or drag the red needle in the dial control.

Note

You can use a bitmap in an object fill, but it cannot be rotated.

Scaling and Positioning Object Fills

You can change the size of the object by changing the value of Width % and Height %. The default values are 100%, which is the original size. Changing both these values to 50% makes the object half the original size; changing the values to 200% makes the object twice the original size. To scale the object proportionally, change Width % and Height % the same amount.

You can adjust the spacing of tiled objects by changing the values for X Spacing % (height) and Y Spacing % (width). Entering a negative value causes objects to overlap; entering a positive value creates space between objects. A value of zero makes the bounding boxes of the objects flush with one another.

You can pan the entire object fill pattern within the larger object by adjusting the values for X Shift % (height) and Y Shift % (width). These values let you control how the fill pattern looks at the edges of the larger object.

Adjusting the Stagger % lets you stagger the position of every other row or column. For example, to illustrate a brick wall, you might set the Stagger % to 50.

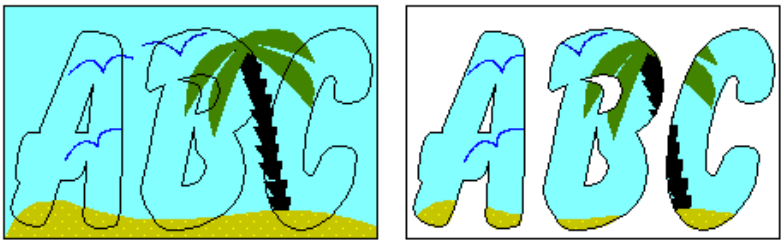
Flipping Object Fills

To flip objects, you must select either About X (vertical) or About Y (horizontal). This specifies the coordinate axis about which the objects are flipped.

Masking Objects

You can mask an object to the shape of any other object.

You can paste an object or bitmap into another closed or connected object in Designer. The object you paste is masked by the other shape. In the example below, a drawing is masked by text that has been converted to curves and connected closed.

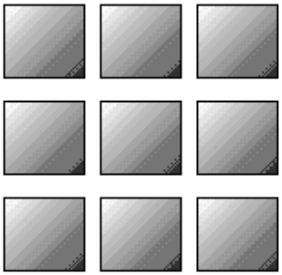


To mask an object

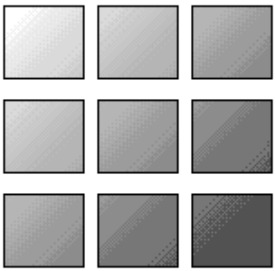
1. Select an object that you want to mask.
2. On the Edit menu, click Copy to copy the object to the Clipboard.
3. Select an object that you want to use as a mask outline.
4. On the Effects menu, select Masking and then click Paste Inside. A blue edit border appears around the mask-outline object.
5. Press and hold the left mouse button until an outline of the object to be pasted inside appears.
6. Position the object and release the mouse button. A copy of the first object is pasted inside the second one.

Filling Several Objects with a Continuous Fill

You can create a continuous fill across several objects that do not touch. All types of fills can span objects, but gradients, object fills, and masked objects are the most interesting.



Not connected



Connected

When you connect objects with the Connect Closed command, the objects fill with the current color and pattern. If you fill a set of connected objects with a gradient, masked object, or object fill, the fill spans the set of connected objects, even if the component objects of the overall connected object do not touch. The example above shows connected objects filled with a single diagonal gradient.

Using the Style Toolbar

From the Style toolbar, you can add, modify, import, and apply styles. A style consists of any or all of the follwing attributes.

- Both interior and line fill
- Fills (solid, image, gradient, hatch, and object)
- Line thickness, cap and join options, and calligraphic lines
- Line ends and line style
- Text attributes

To apply a style

1. On the Style toolbar, select a style from the drop list.
2. Select one or more objects.
3. Click the Apply Style button on the Style toolbar. The style attributes are applied to the selected object(s).

Note

You can select either the style or the object first.

To modify a style

1. On the Style toolbar, click the Modify Style button. The Style dialog displays.
2. On the Style dialog, click corresponding button for the attribute you want to modify. The Object Format dialog displays.
3. Make the modifications and click OK to save.
4. Click Apply and then click OK. The style is modified.

To add a style

1. On the Style toolbar, click the Add Style button . The Style dialog displays.
2. In the Style List, enter a name for the new style and press Enter. The Fill, Line, and Text Style buttons become active.
3. Using the Fill, Line, and Text Style buttons, create the new style.
4. Click OK. The new style now appears in the style drop list.

To import a style

1. On the Style toolbar, click the Style Options button . The Style dialog displays.
2. Click the Import button. The Import Styles dialog displays.
3. Click the Open File button. The Open dialog displays. Select the file you want to import and click the Open button.
4. The style isimported and available for selection.

Reusing Style Attributes

Copying and Applying Styles

Any of the following style attributes, once applied to an object, can be reapplied to other objects.

- Both interior and line fill
- Fills (solid, image, gradient, hatch, and object)
- Line thickness, cap and join options, and calligraphic lines
- Line ends and line style

If you spend time applying several style attributes to a single object, you may want to apply all of the same styles to other objects all at once. To do this, you can use the Copy Style and Apply Style commands.

To copy style attributes from one object to another

1. Select an object with the style attributes you want to copy.
2. On the Format menu, click Pick Up Object Style.
3. Select the object to which you want to apply the style attributes.
4. On the Format menu, click Apply Object Style. The style attributes are copied from the first object and applied to the second object.

Note

If more than one object is selected and the objects have different style attributes, the Pickup Object Style command is not available.

Setting Default Styles

When you set a new default fill or color, the next object you draw will have these style attributes. Designer gives you several ways to set default styles.

One way to set a new default fill or line style is to deselect all objects and then choose any fill pattern or line style from the Fill dialog box, Line dialog box, or the Format Ribbon. The default fills and styles for interior and line are shown in the status bar (if displayed).

Tip

If you want to set new default styles based on an existing object, just select the object and click Set Default Style on the Format menu. All of the style attributes of the selected object, including interior fills, line fills, and line styles, become the new defaults.

Using Text

Designer's text features are easy to use and give you a high degree of flexibility. For example, you can design brochures, logos, charts, slides, posters, technical illustrations, scale drawings, product specs, schematics, blueprints, and even newsletters with Designer.

Installing Fonts

Designer recognizes fonts that are loaded with the iGrafx installer, fonts installed with Adobe Type Manager, and TrueType fonts installed with the Windows Control Panel.

In addition to being used by Designer, the fonts you add with any of these methods are used by other Windows applications such as Microsoft Word and Wordpad.

Adding many fonts gives you more choices, but a large number of fonts uses more memory and increases the time needed to load Designer and other Windows programs.

Selecting Fonts, Sizes, and Styles

You can specify type characteristics before you enter text, or you can change them for existing text. A text object can contain any combination of fonts, font sizes, and styles.

You can select fonts, font sizes, and styles with the Text ribbon, the Text dialog box, or the shortcut menu.

Fonts

The available fonts are listed in the Font List box. The icon preceding the font name describes the type of font.

Icon	Type of font
	TrueType font
	Adobe Type 1 font
	Printer (device) font

Notes

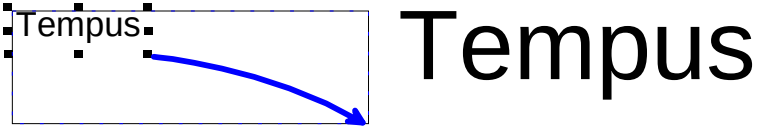
If a blue question mark icon appears, it indicates that selected text saved in the document is in a font that is not currently installed on your computer.

To locate a font in the Font list box quickly, open the list box and type the first letter of the font name.

Font Sizes

You select the size of the font in the Font Size list box. You can select a size from 2 to 3,000 points by clicking the arrows beside the box, or you can type a custom size (10.5, for example).

You also can resize a selected text object using the corner handles, or stretch it with the middle or side handles. The new size appears in the Font Size list box.



Tip

You can also click the Font Recall button and select one of the last ten fonts used.

Font Styles

The following styles are available in Designer.

bold	underline	superscript
italic	SMALL CAPS	subscript

To apply text attributes with the Text ribbon

1. Click the Text tool in the toolbox.
2. Select the text object or highlight the text you want to change.
3. Click the attribute in the Text ribbon that you want to apply. The changes are made to the selected text.

Tip

You can use keyboard shortcuts for applying attributes to selected and highlighted text. Press the keyboard shortcut once to apply the style. Press it again to remove the style.

Action	Keyboard shortcut
Bold	**CTRL+B**
Italic	**CTRL+I**
Underline	**CTRL+U**
Small Caps	**CTRL+M**
Superscript	**CTRL+K**
Subscript	**CTRL+SHIFT+K**

To select text attributes with the Text dialog box

1. Click the Text tool in the toolbox.
2. Select the text object or highlight the text you want to change.
3. Click the Text Attributes button in the Text ribbon. The Text dialog box opens.
4. Click the Fonts button to display the Fonts panel, if necessary.
5. Choose the attributes you want to apply and click Apply. The changes are made to the selected text.

Tips

Press **CTRL+SHIFT+T** to open the Text dialog box quickly.

You do not need to close the dialog box to apply the changes.

To apply a defined style to text

1. Highlight the text you want to change.
2. Click the right mouse button. A shortcut menu opens.
3. Choose the desired style from the menu.

To apply a text attribute using the shortcut menu

1. Select the text object or highlight the text you want to change.
2. Click the right mouse button. The shortcut menu appears.
3. Choose the attribute you want to apply on the shortcut menu. The changes are made to the selected text.

To change text line and interior color

1. Select or highlight the text you want to change.
2. Point to a color in the Color Palette and click the left mouse button to change the interior color.
3. Point to a color in the Color Palette and click the right mouse button to change the line color.

Tip

To set a color to invisible or unfilled, click the X in the Color Palette toolbar.

Note

You can use the Fonts panel of the Text dialog box to set the text foreground color (fill color) and background color (color outside the text itself) of a selected text object, but not of text you have highlighted.

To change text background color

1. Select or highlight the text you want to change.
2. Click the Format tool.
3. Click the Background Color button. A palette displays.
4. Point to a color in the palette and click the left mouse button.

5 Click Apply.

Tip

You do not need to close the dialog box to apply the changes.

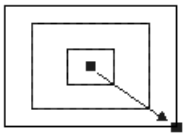
Using Freeform Text and Block Text

There are two types of text in Designer: freeform text and block text.

Freeform and block text let you create text objects (any object composed of text) in slightly different ways. Block text is created inside a container, while freeform text has no container.

Adding Freeform Text

Use freeform text when you want to create titles, short sentences, or labels, for example. To create freeform text, click the Text tool, click the Text Mode button (if necessary to display the text pointer), click in the drawing area to insert the text cursor, and type the text.



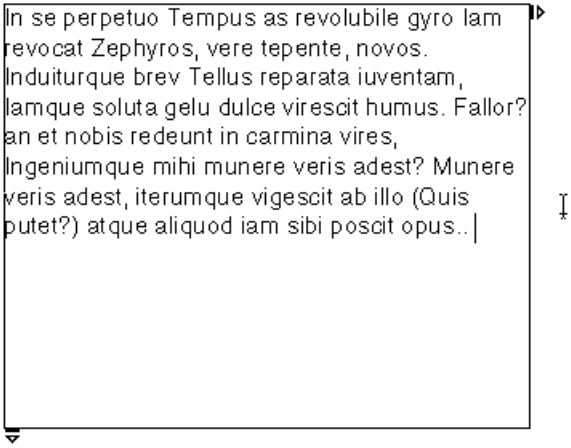
Freeform text cannot flow from one text object to another, nor does it use margins, "word wrap," or indents. Resizing a freeform text object changes the size of the text. You cannot wrap freeform text around an object (repel text).

To add freeform text

1. Click the Text tool in the toolbox.
2. Click the Text Mode button to display the text pointer, if necessary.
3. Point where you want the text to begin. Click the left mouse button to display the text cursor.
4. Type the text. If you make a mistake, press **BACKSPACE** to erase it.
5. Press **ESC** or double click the left mouse button away from the text when you finish entering the text.

Adding Block Text

Block text is useful when you want to create large blocks of text. To create block text, click the Text tool, click the Text Mode button (if necessary to display the text pointer), draw a box to contain the text, and type the text.

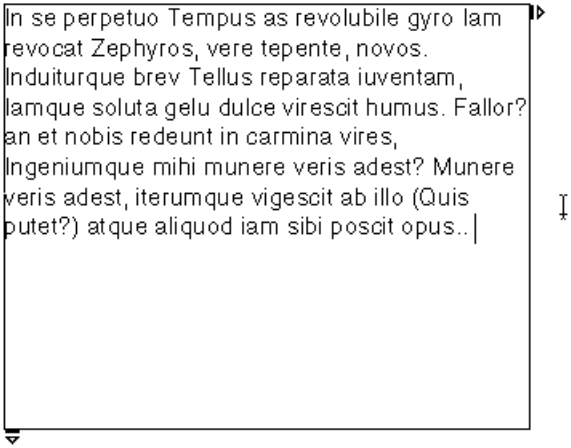


You can connect text blocks so that the text flows from one container to another, and you can assign margins. Resizing block text changes the size of the container, but not the text.

You add block text by creating a container and typing text inside it. If you add more text than can fit in the text container, it extends below the box and is invisible. Enlarge the container or flow the extra text to another container to see it. See Flowing TextFlowing Text for more information.

You can enter or edit text only when the text cursor is visible. All text is entered in the drawing area. Zoom in to view and edit the characters, if necessary (or use the Edit Text window as described in Editing TextEditing Text.

The appearance of the text depends on the font, size, and style settings. To set new defaults for text attributes, deselect all objects and then choose the desired font, size, style, and so on.



To add a text block

1. Click the Text tool in the toolbox.
2. Click the Text Mode button to display the text pointer, if necessary.
3. Point where you want the text to begin.
4. Press and hold the left mouse button, and drag the pointer to create a box with dashed lines. The box is the text container.
5. Release the mouse button when you finish the box. The text cursor appears inside the container.
6. Type the text.
7. Press **ESC** when you finish entering the text.

Converting between Block and Freeform Text

You can use the Clipboard to convert block text to freeform text and freeform text to block text. Each paragraph of block text converts to a single line of freeform text.

To convert between block text and freeform text

1. Highlight the text you want to convert.
2. On the Edit menu, click Copy (or Cut) to place the text on the Clipboard.
3. Double click anywhere outside the text area to deselect all text.
4. Click the Text tool A in the toolbox.
5. Move the text pointer where you want to place the freeform text, and click the left mouse button to place the text cursor.
6. On the Edit menu, click Paste. The text appears in the new format.
7. Press **ESC** when you finish editing.

Tip

In step 5, you can draw a container to contain the text. Press and hold the left mouse button, and drag a container in which to place block text. Release the mouse button.

Editing Text

HT_Editing_Text_in_a_Window

The Edit Text window provides a method of editing text that can be quicker and more convenient than editing text in the drawing area. The Edit Text window makes it easy to edit text to which you have applied graphic effects such as warping, because it displays the text without those effects. You can also use the Edit Text window to edit text that is too small to view without zooming in.

The Edit Text window shows and lets you apply style attributes such as bold and italic.

You can edit both freeform and block text in the Edit Text window. To open the Edit Text window for all text except warped text, press and hold **SHIFT** and click the text with the text pointer. To open the Edit Text window for warped text, just click the text with the text pointer (without pressing **SHIFT**).

HT_Editing_Text_in_a_Window
To edit text
To apply a defined style to text

To edit text

1. Click the Text tool in the toolbox.
2. Click the Text Mode button to display the text pointer, if necessary.
3. Point to the text with the text pointer.
4. Press and hold **SHIFT**, and click with the left mouse button. The Edit Text window opens.
5. Edit the text in the window.

Tip

If the text cursor is positioned within text, press **ESC** before following the procedure given above.

RT_To_open_the_Edit_Text_window

RT_To_open_the_Edit_Text_window

To apply a defined style to text

To paste text as freeform text

1. Copy the text you want in another program.
2. Change to Designer.
3. Press **CTRL+V** to paste the text into Designer
4. Press **ESC** when you finish editing the text.

RT_To_import_text_from_a_text_file

RT_To_import_text_from_a_text_file

To apply a defined style to text

Importing Text

To paste text as block text

1. Copy the text you want in another program.
2. Change to Designer.

3 Click the Text tool in the toolbox.

4 Click the Text Mode button to display the text pointer, if necessary.

5 Point where you want the text to begin.

6 Press and hold the left mouse button, and drag the pointer to create a box with dashed lines. The box is the text container.

7 Release the mouse button when you finish the box. The text cursor appears inside the container.

8 Press **CTRL+V** to paste the text into Designer

9 Press **ESC** when you finish editing the text.

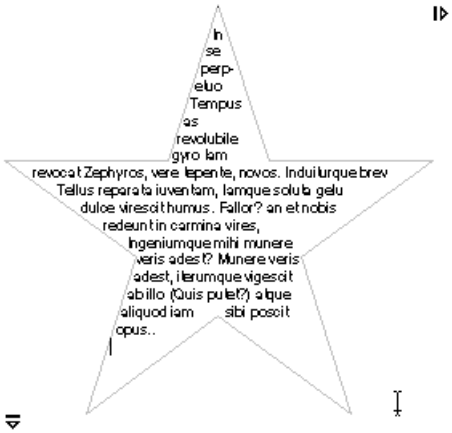
RT_To_import_text_from_a_text_file

RT_To_import_text_from_a_text_file
To apply text attributes with the Text ribbon
To apply a defined style to text
Importing Text

Pasting Text inside an Object

To paste text inside an object

You can paste text inside a container that matches a closed object's outline.



1 Copy or cut text to the Clipboard.

2 Select a closed object.

3 Click the Text tool in the toolbox.

4 Click the Shape Text button on the Text ribbon.

5 On the Edit menu, click Paste.

6 Press **ESC** when you finish editing the text.

RT_To_paste_text_inside_of_an_object

RT_To_paste_text_inside_of_an_object

Importing Text

Changing Paragraph Spacing

You can change the amount of space between paragraphs with the paragraph spacing options in the Spacing panel of the Text dialog box. Spacing is measured in the currently selected unit (points, for example).

Note

If Before Paragraph or After Paragraph is set to zero, Designer automatically uses the current leading for the paragraph, which results in no extra space before or after the paragraph.

Changing Line Spacing

Each font in designer has its own default line and character spacing. You can change the spacing between characters, words, lines, and paragraphs.

The space between lines of text is called *leading*. Leading is measured (in points) from baseline to baseline. The default is the current font size plus approximately 15% of the font size (the percent may vary from font to font). For example, if the current font is 10 points, then the default leading is approximately 11.5 points.

You can change the leading in selected block text or specify leading for block text you are going to enter. If a selected block text contains different sizes of text, Designer displays leading for the largest font.

Note

You cannot change the leading of freeform text.

Line spacing is called leading. The leading here is two points less than the font size.	Line spacing is called leading. The leading here is two points more than the font size.
Line spacing is called leading. The leading here is the same as the font size.	Line spacing is called leading. The leading here is four points more than the font size.

To change text leading

1. Click the Text tool in the toolbox.
2. Select or highlight the text you want to change.
3. Click the Text Attributes button in the Text ribbon. The Text dialog box opens.
4. Click the Spacing button to display the Spacing panel, if necessary.
5. Click the button beside the line leading box and type a new number for the amount of leading.

6 Click Apply to change the leading.

Tips

You do not need to close the dialog box to apply the changes.

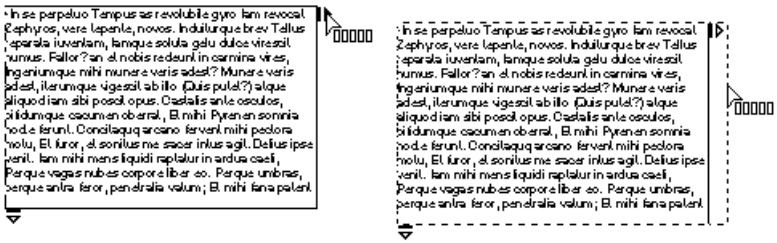
You also can change block text leading manually. Insert the text cursor into the block and press and hold **SHIFT** while dragging the bottom container handle up or down. Press **CTRL** while dragging to change the spacing between paragraphs.

Changing Character Spacing

You can increase or decrease the spacing between words and characters by changing the "normal" spacing percentage. The default for words is 100% spacing; the default for characters is 100% spacing. Decreasing the percentage decreases the spacing between letters or words; increasing the percentage increases the spacing.

Tip

You can also manually change character spacing in block text. Insert the text cursor into the block and press and hold **SHIFT** while dragging the right container handle left or right. Press **CTRL** while dragging to change the spacing between words.



To change word and character spacing

1 Click the Text tool A in the toolbox.

2 Select or highlight the text you want to change.

3 Click the Text Attributes button in the Text ribbon. The Text dialog box opens.

4 Click the Spacing button to display the Spacing panel, if necessary.

5 Type a new number in the Inter Word or Inter Character spacing box.

6 Click Apply to change the spacing.

Tips

You do not need to close the dialog box to apply the changes.

Kerning

To kern text

1 Click the Text tool in the toolbox.

2 Click the Text Mode button to display the text pointer, if necessary.

3 Point to the characters to kern, and press the left mouse button to place the text cursor between them.

4 Press and hold **CTRL** and press the **LEFT ARROW** or **RIGHT ARROW** to move the characters closer together or farther apart, respectively.

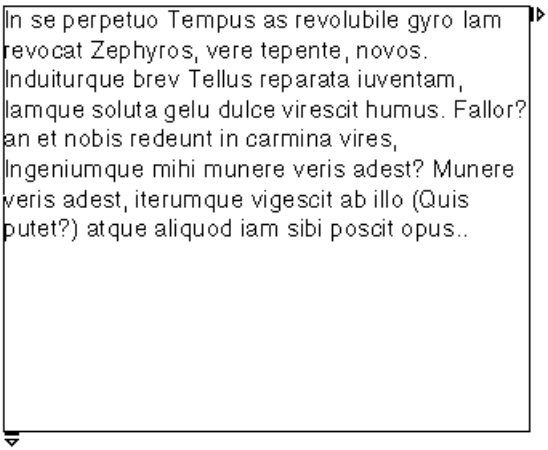
Tip

Use the View tool to zoom in on the text you want to kern. The closer you zoom, the easier it is to see the kerning effect.

Resizing a Text Container

You can resize the text container around block text to change the text flow. Resizing a text container does not otherwise change the appearance of the text.

To display the text container around block text so that you can resize it, click the text block once with the text pointer, or double click the text block with the select pointer.



Dragging a container handle resizes the container. The text reflows to accommodate the new container size, but the text size and style attributes do not change.

To resize a text container

1. Display the text container, if necessary.
2. Move the pointer to a container handle.
3. Drag the handle to a new position.
4. Release the mouse button.
5. Repeat steps 2 through 4 to adjust the other handle, if desired.
6. Press **ESC** when you finish resizing the container.

Importing Text

You can compose text in a word processing or other Windows program and import it into your Designer drawing.

There are two ways to bring text into Designer. You can paste text into Designer from the Clipboard, or you can import text as a plain (ASCII) or Rich Text Format (RTF) text file.

Text can be imported as freeform or block text. If you import ASCII text (for example, a TXT file), it appears in the current font and style. If you import RTF text, it appears in the font and style in which it was originally created.

To import text from a text file

1. Click the Text tool in the toolbox.
2. Click the Text Mode button to display the text pointer, if necessary.
3. Click a text object to insert the text cursor.

   or

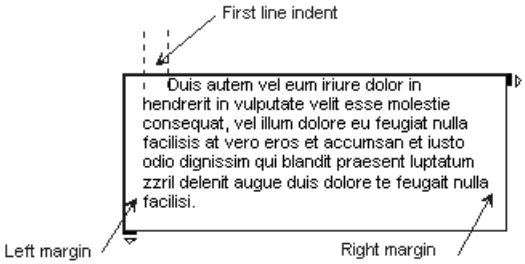
   Begin a new text object (click for freeform, drag for block text).
4. On the Tools menu, click Import. The Import dialog box opens.
5. Select Files of type ASCII Text (*.TXT) to import regular ASCII text or select Rich Text Format (*.RTF) to import RTF text.
6. Highlight the file to import and click Import. The text appears.
7. Press **ESC** when you finish editing.

Tip

You can press **CTRL+1** to open the Import dialog box quickly.

Setting Indents, Tabs, and Leaders

You can move the first line of selected paragraphs in block text to the left or right of the left margin by changing the first line indent. If you select a text object, the first line of each paragraph separated by a return is indented. If you highlight a portion of one or more paragraphs, only the first lines of those paragraphs are indented.



A positive indent moves the text toward the right (away from the left margin); a negative indent moves the text toward the left (inside of the left margin).

To indent the first line of a paragraph

1. Click the Text tool in the toolbox.
2. Select or highlight the text you want to change.
3. Click the Text Attributes button in the Text ribbon. The Text dialog box opens.
4. Click the Margins button to display the Margins panel, if necessary.
5. Type a positive number in the First Indent box to indent the first line of each paragraph to the right; type a negative number to indent to the left.

6 Click Apply to indent the text.

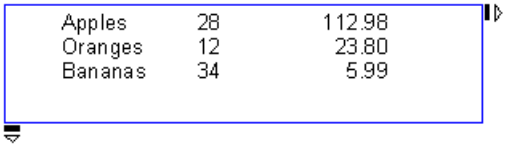
Tip

In step 3, if you prefer you can open the Text dialog box by clicking Margins in the Format menu.

- You do not need to close the dialog box to apply the changes.

Setting Tabs

Tab stops are relative to the text object. For example, if the first tab stop is.5 picas, the first tab is .5 picas from the left margin. If the second tab stop is 1.0 picas, it is 1.0 picas from the left margin, and so on. Text objects maintain their original tab positions even if you move the object.



To set tab stops

1 Click the Text tool in the toolbox.

2 Click the Text Attributes button in the Text ribbon to open the Text dialog box.

3 Click the Tab Stops button to display the Tab Stops panel, if necessary.

4 Select the type of tab stop, if you want.

5 Type a position for the tab stop in the Position box.

6 Click the Add Tab button to add a single tab stop, or click the Repeat Tab button to add repeating tab stops.

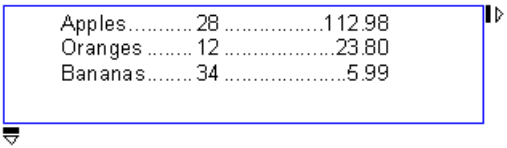
7 Click Apply to enter the tab stops.

Tip

You do not need to close the dialog box to apply the changes.

Setting Leaders

Leaders are characters such as periods (.), hyphens (-), and underscores (_) that appear to the left of tabulated text.



To set leaders

1 Click the Text tool in the toolbox.

2 Click the Text Attributes button in the Text ribbon to open the Text dialog box.

3 Click the Tab Stops button to display the Tab Stops panel, if necessary.

4 Select a current tab in the Current Tabs area.

5 Select a leader in the Leader box.

6 Click the Add Tab button. A dialog box appears asking if you want to overwrite the existing tab.

7 Click Yes. The previous tab is replaced with the new one with the leaders you chose associated with it

8 Click Apply to put the new tab stops in selected text.

Tip

You do not need to close the dialog box to apply the changes.

Using Automatic Hyphenation

Designer can automatically hyphenate words to help decrease the raggedness of left justified text, and to help maintain character and word spacing in justified text.

To use automatic hyphenation

1 Click the Text tool in the toolbox.

2 Select or highlight the text you want to hyphenate.

3 Click the Text Attributes button in the Text ribbon. The Text dialog box opens.

4 Click the Spacing button to display the Spacing panel, if necessary.

5 Select the Use Automatic Hyphenation option.

6 Click Apply to change the spacing.

Tip

You do not need to close the dialog box to apply the changes.

Using Drop Caps

A drop cap is an enlarged first capital letter in a selection of text. A drop cap is created by lowering the baseline of the first character in a paragraph so that it aligns with the baseline of the last indented line.

You create drop caps by increasing the percentage of the current font height. For example, 200% doubles the size of the first letter of the paragraph.

To create an initial drop cap

1. Click the Text tool in the toolbox.
2. Select or highlight the text you want to change.
3. Click the Text Attributes button to open the Text dialog box.
4. Click the Spacing button to display the Spacing panel, if necessary.
5. Select the Use Drop Caps option.
6. Change the percentage for the drop cap size.
7. Click Apply.

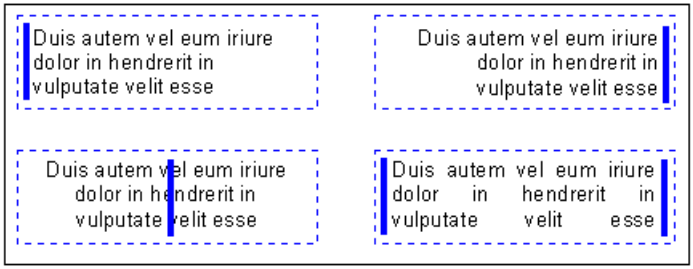
Tip

You do not need to close the dialog box to apply the changes.

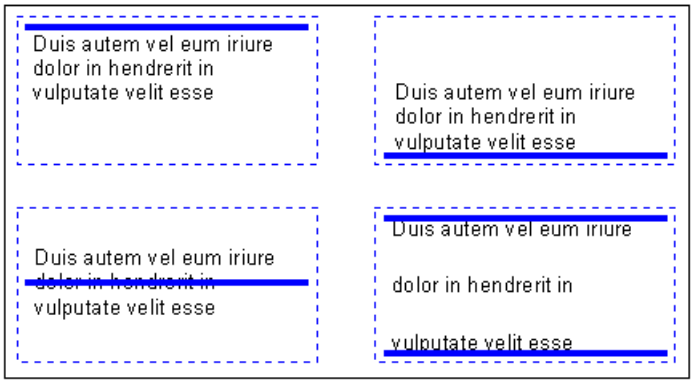
Aligning Text

Text Alignment Options

You can align text horizontally or vertically. Horizontal text alignment aligns text from left to right and vertical alignment aligns text from top to bottom.



Horizontal alignment options



Vertical alignment options

The keyboard shortcuts for aligning text are listed in the table below.

Action	Keyboard shortcut
Align to left	**CTRL+SHIFT+L**
Align to center	**CTRL+SHIFT+C**
Align to right	**CTRL+SHIFT+R**
Align to top	**CTRL+SHIFT+O**
Align to middle	**CTRL+SHIFT+M**
Align to bottom	**CTRL+SHIFT+B**
Full justify horizontal	**CTRL+SHIFT+J**
Force justify horizontal	**CTRL+SHIFT+F**

Note

Vertically justified text ignores previous leading settings.

Aligning Freeform Text

You can choose an alignment option before or after you enter freeform text. If you select an alignment option before entering text, the text is aligned to the cursor's position. For example, if the text is aligned at the right, the cursor does not move and text appears to the left of the cursor as you type.

If you select a freeform text object or highlight only the text you want to align, the alignment is based on the bounding box that surrounds the text. The bounding box is as wide as the longest line of text and as tall as the number of lines of text.

Note

Freeform text cannot be justified vertically or horizontally.

Aligning Block Text

You can choose an alignment option before or after you enter block text. You can set the alignment option before entering text or select a text block and change the alignment of the entire block. You also can highlight only the paragraphs you want to align. Text is aligned to the container.

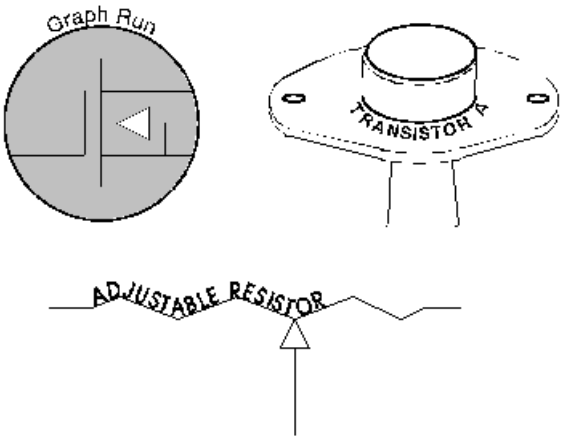
Text in a shape is aligned after it is pasted into the shape. The text is aligned within the edges of the shape.

Fitting Text to a Path

Designer's fit-to-path features let you align text to any shape, including curves, circles, and angles to create complex effects. You can either enter the text directly onto a path or fit existing freeform text to a path. After fitting text to a path, you can still edit the text and change text attributes.

It is easy to get the text fit that you want because Designer previews on your page the effect of alignment settings as you choose or change them.

Because Designer remembers the path that you used to align the text, you can reshape the path object, or even delete it, without affecting the aligned text.



You can edit text on a path just as you would any other text. For example, you can change the path alignment, color, font, or kerning of the text. You can also delete the shape used to arrange the text if you do not want the object to be visible.

Entering Text along a Path

The Path Text button lets you type text directly onto an object's path. The text is fitted to the path using the current settings. After entering text, you can easily change the fitting options to get the text alignment that you want.

To enter text directly along an object's path

1. Select the object along which you want to place the text.
2. Click the Text tool in the toolbox.
3. Click the Path Text button. The text cursor appears on the path.
4. Type the text, which appears along the object as you type.
5. Press **ESC** when you finish.

Using the Path Fit Palette

The Path Fit palette makes it easy to produce quickly the text effects that you want when aligning existing text to a path or when editing the alignment of text already fit to a path. The Path Fit palette provides "quick choice" buttons that let you specify combinations of the following.

- Text alignment: left, right, or center
- Text position: above (outside) or below (inside) the path
- Text orientation: normal or upside down

If you are fitting freeform text to a path, you must select both the freeform text and the path object to enable the Path Fit button. If you are editing the alignment of text already fit to a path, you can enable the Path Fit button either by selecting the fitted text or by selecting the fitted text and path object.

The quick choice buttons show a sample path and an arrow to indicate the text arrangement. The location of the arrow in relation to the sample path indicates the text alignment and position. The direction of the arrow indicates the text orientation (which side is up).

Using the Choose Position Ribbon

If the quick choice buttons do not provide the text alignment that you want, you can custom align the text with the buttons in the Choose Position ribbon. The buttons in the Ribbon let you set separately the alignment, position, offset, direction, and pitch of the text. The Choose Position button also lets you manually adjust the alignment point by dragging it along the path.

Click Choose Position in the Path Fit palette to display the Choose Position ribbon. After creating the path fit that you want, double click the left mouse button or press **ESC** to clear the Choose Position ribbon.

To set text alignment for text on a path

1. Select the text you want to align.
2. Click the Text tool in the toolbox.
3. Click the Path Fit button. A palette opens.
4. Click Choose Position. The Choose Position ribbon opens.
5. Click an alignment button for the alignment you want.

6 Press **ESC** when you finish.

Tips

The Left Align button positions text so the left edge of the text aligns to the alignment point.

The Center Align button centers text around the alignment point.

The Right Align button positions text so the right edge of the text aligns to the alignment point.

You can press **TAB** to cycle through the Left, Center, and Right alignment settings.

You can click Choose Position in the Path Fit palette and click to specify a custom alignment point.

To set text position for text on a path

1 Select the text you want to change the position of.

2 Click the Text tool in the toolbox.

3 Click the Path Fit button. A palette opens.

4 Click Choose Position. The Choose Position ribbon opens.

5 Click the Above Path button or Below Path button to specify the position for the text.

Tips

The Above button positions the text above an open path object or outside of a closed path object.

The Below button positions the text below an open path object or inside of a closed path object.

To change the offset of text on a path

1 Select the text you want to change the offset of.

2 Click the Text tool in the toolbox.

3 Click the Path Fit button. A palette opens.

4 Click Choose Position. The Choose Position ribbon opens.

5 Enter the offset percentage you want in the Offset Percentage box.

Tips

An offset of 0% aligns the text on the path.

The alignment offset is relative to whether the text is positioned above or below the path. A positive offset (to the limit of 500%) shifts the text away from the path. A negative offset 0% (to the limit of -50%) shifts the text past the path.

To change the direction of text on a path

1 Select the text you want to change the offset of.

2 Click the Text tool in the toolbox.

3 Click the Path Fit button. A palette opens.

4 Click Choose Position. The Choose Position ribbon opens.

5 Click the Reverse button or Forward button to set the direction you want.

Tips

The Reverse button aligns text in a counter clockwise direction for most simple paths. This generally displays the text upside down in relation to the top of the path.

The Forward button aligns text in a clockwise direction for most simple paths. This generally displays the text upright in relation to the top of the path.

To change the alignment pitch of text on a path

1. Select the text you want to change the alignment pitch of.
2. Click the Text tool in the toolbox.
3. Click the Path Fit button. A palette opens.
4. Click Choose Position. The Choose Position ribbon opens.
5. Click the alignment button to set the alignment you want.

Tips

The Rotate button aligns the text by rotating the characters along the path.

The Skew Vert button aligns the text by skewing the characters vertically.

The Skew Horz button aligns the text by skewing the characters horizontally.

The No Rotation button aligns the text without skewing or rotating the characters. This produces the fastest redraw. Use this pitch as a draft mode while you are modifying the alignment point. After the alignment point is set correctly, choose the pitch setting you want.

Dragging a container handle resizes the container. The text reflows to accommodate the new container size, but the text size and style attributes do not change.

To resize a text container

1. Display the text container, if necessary.
2. Move the pointer to a container handle.
3. Drag the handle to a new position.
4. Release the mouse button.
5. Repeat steps 2 through 4 to adjust the other handle, if desired.
6. Press **ESC** when you finish resizing the container.

Importing Text

You can compose text in a word processing or other Windows program and import it into your Designer drawing.

There are two ways to bring text into Designer. You can paste text into Designer from the Clipboard, or you can import text as a plain (ASCII) or Rich Text Format (RTF) text file.

Text can be imported as freeform or block text. If you import ASCII text (for example, a TXT file), it appears in the current font and style. If you import RTF text, it appears in the font and style in which it was originally created.

To import text from a text file

1. Click the Text tool in the toolbox.
2. Click the Text Mode button to display the text pointer, if necessary.
3. Click a text object to insert the text cursor.

   or

   Begin a new text object (click for freeform, drag for block text).
4. On the Tools menu, click Import. The Import dialog box opens.
5. Select Files of type ASCII Text (*.TXT) to import regular ASCII text or select Rich Text Format (*.RTF) to import RTF text.
6. Highlight the file to import and click Import. The text appears.
7. Press **ESC** when you finish editing.

Tip

You can press **CTRL+1** to open the Import dialog box quickly.

Setting Indents, Tabs, and Leaders

You can move the first line of selected paragraphs in block text to the left or right of the left margin by changing the first line indent. If you select a text object, the first line of each paragraph separated by a return is indented. If you highlight a portion of one or more paragraphs, only the first lines of those paragraphs are indented.

To remove text from a path

1. Select the text you want to remove from a path.
2. Click the Text tool in the toolbox.
3. Click the Path Fit button. A palette opens.
4. Click Remove Curve. The text is removed from the path. It is now freeform text.

To place existing freeform text along an existing object's path

1. Select both the freeform text and the object to which you want to align it.
2. Click the Text tool in the toolbox.
3. Click the Path Fit button. The Path Fit palette opens.
4. Click the desired quick choice button. The text is put along the path.

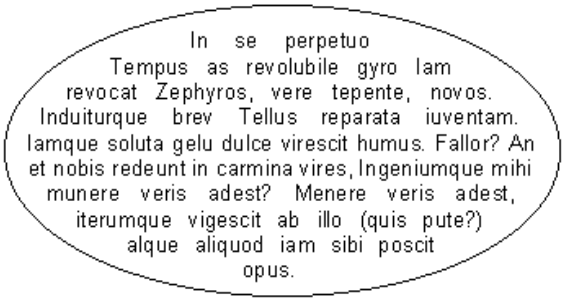
Tips

You can click Choose Position and specify a custom alignment.

Subscripts, superscripts, and small caps are not retained in text that is fit to a path.

Text Inside of an Object

Text inside of an object is a form of block text. A container is created that matches the edges of the object. You can create margins based on the distance of the text from the container.



You can flow text inside of an object from one container to another. For example, you can flow a block of text inside an object to a block of text outside the object. See Flowing Text for more information.

To place text inside of an object

1. Select a closed object.
2. Click the Text tool  in the toolbox.
3. Click the Shape Text button in the Text ribbon. The text cursor appears inside the selected object.
4. Type, paste, or import the text.
5. Press **ESC** when you finish.

Tip

After you place text inside of an object, you can move or delete the object without affecting the text. Point inside the object, press **ALT** and click the left mouse button. *Text Object* appears in the status bar at the bottom of the Designer window when the text is selected; the type of object (shape) appears when the object is selected. Press **DEL** to delete the object when it is selected.

Splitting and Joining Text

You can break multi-line text objects into individual objects, or join multiple text objects into a single, multi-line object.

Splitting and joining text is useful when you want to quickly enter or import several lines of text and position them later. For example, if your drawing has a dozen labels, it is easier to enter the labels as a single object, and then split it and move the labels individually.

To split a multi-line text object

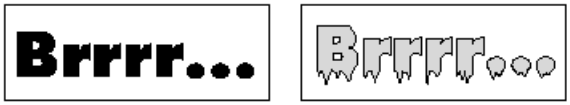
1. Select the text object.
2. On the Change menu, point to Text and click Split Text. Each line of text becomes a separate text object.

To join text objects

1. Select the text objects to join.
2. On the Change menu, point to Text and click Join Text. The text becomes one object based on the location of the first text object.

Reshaping Text

You can convert text to curves to reshape it like a non-text object. To convert text to curves, select the text object, open the Change Menu, and click Convert To Curves.



Note

After you convert text to curves, you cannot convert it back to text.

To reshape a warped object

1. Select the object.
2. Click the Edit tool in the toolbox.
3. Click the Warp button in the ribbon.
4. Click the Warp Type button.
5. Click the Bezier Warp button.

Reshaping Block Text

You can reshape a block text container to change its text flow. Text containers are reshaped as curved objects using the Curve Reshape button in the Edit ribbon. The options available for reshaping a text container include adding and deleting anchors, creating corners and symmetrical curves, and creating locked or unlocked cusps.

Reshaping a text container does not change the size or style of the text in the container.

To reshape a block text object with anchors

1. Select the block text you want to reshape.
2. Click the Edit tool in the toolbox and click the Curve Reshape button in the Edit ribbon.
3. Point to an unselected anchor.
4. Press the left mouse button and drag the point to a new location. The text container's shape changes.
5. Release the mouse button when you finish. The text reflows to maintain its margins.
6. Repeat steps 3 through 5 to reshape other edges of the container.

Tip

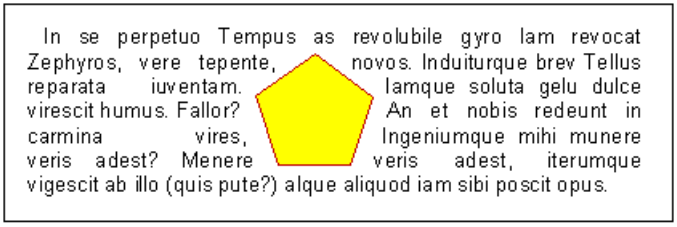
You can also reshape a text container by dragging its control points.

To reshape a block text object with control points

1. Select the block text you want to reshape.
2. Click the Edit tool in the toolbox and click the Curve Reshape button in the Edit ribbon.
3. Click an anchor to select it. It turns solid.
4. Drag a control point. The text container's shape changes.
5. Release the mouse button when you finish. The text reflows to maintain its margins.
6. Repeat steps 3 through 5 to reshape other edges of the container.

Wrapping Text around an Object

You can force block text to automatically wrap around an object by setting the object to repel block text



Note

You cannot repel freeform text or text inside an object. Also, you cannot repel text from grouped objects or bitmaps.

To repel text

1 Select the object for the text to wrap around.

2 On the Change menu, point to Text and click Repel Text. The text wraps around the object.

Note

You cannot repel freeform text. You cannot repel text from bitmaps or objects inside a group.

Tips

Objects repel text *regardless of the layer*. For example, an object on layer one repels text on layer two. Even objects on layers that are not visible repel text.

To turn off repel text mode for a particular object, select the object and repeat the steps above.

Flowing Text

Block text is always surrounded by an invisible boundary called a container. You can connect text containers so that block text flows from one container to another. You can flow text among any number of text containers (including text in shapes). You can either connect existing text containers or create a new text container that flows from an existing one. You cannot flow to a different page.

Text overflows a container when there is more text than can fit into the container. When you edit text, an overflow handle (a small "+") appears at the lower right border of the container to show that there is overflowing text. Text flows from the back object to the front object. If you don't reorder the objects, text flows from the first drawn to the last drawn object.

To create a new flowing text container

1 Click the Text tool A in the toolbox.

2 Click the Text Mode button to display the text pointer, if necessary.

3 Click the text with the text pointer.

4 Click the overflow handle to create a second block of the same size near the original.

Tip

If you wish, you can point to the overflow handle, press and hold the left mouse button, and drag a second block of the same size to a new location.

Flowing Text between Containers

If you have already created two or more text blocks, you can connect them so that text flows from one to the other. If you add or delete text in one container, the other text blocks also adjust.

To flow text from one container to another

1 Select the text containers to connect.

2 On the Change menu, point to Text and click Flow Text. The text containers are connected.

Tip

You can flow text through any number of text containers at the same time. Text flows from the back container (the one drawn first) to the front container.

Checking Spelling

You can check the spelling in all of your drawings and documents created in Designer.

Designer can check the spelling of all the text in the document, or just the text you select. For example, if you want to check one word, highlight the word and click the Spelling button.

Designer checks spelling by comparing words in your document with words in a dictionary. The default dictionary is a file containing thousands of words. If Designer finds a word in your drawing that is not in the dictionary, the word is displayed as a possible misspelling.

There are many types of words that are not in the dictionary. Proper names, words with numbers, foreign words, and some abbreviations are commonly displayed as possible misspellings. You can use the Add button to add a displayed word to the dictionary so that it will not be considered a misspelling in the future.

To check spelling in a drawing

1. Select the text you want to check.
2. Click the Text tool in the toolbox.
3. Click the Spelling button in the Text ribbon. If a misspelled word is found, Designer opens the Spelling dialog box.
4. Type the correct spelling for the word in the Change To box and click Change; or
5. Click Ignore or Ignore All to ignore the word or every instance of the word, respectively; or
6. Select one of the words in the Suggestions box and click Change or Change All.

7 Click Add to add the word to the dictionary and continue.

Tips

Designer checks the spelling of text objects only. Text that has been converted to curves is not checked.

To check the entire document, leave all text unselected.

As a shortcut for steps 2 and 3, click the Spelling button on the Standard toolbar.

To ignore misspelled words

- Click Ignore to skip the word in the Not in Dictionary area without changing it.

To change the misspelled word

- Click the Change button to change the highlighted word in your document to the word in the Change To box.

To add the misspelled word to the dictionary

- Click Add to add the word in the Change To box to the currently selected dictionary.

Tip

The currently selected dictionary appears in the Add Words to list box.

Using Dictionaries

The default dictionary is called the standard dictionary. You can enlarge the standard dictionary by adding words with the Add option.

You can create additional dictionaries, or *custom dictionaries*, to use with the standard dictionary. For example, if you are working on a drawing containing chemical names and abbreviations, you can create a custom dictionary called "CHEMICAL.DIC" to use in addition to the standard dictionary.

To create a new custom dictionary

1. Click the Text tool in the toolbox.
2. Click the Spelling button in the Text ribbon. The Spelling dialog box opens.
3. Click the Options button to open the Options - Spelling dialog box.
4. Click New. The Save As dialog box opens.
5. Type a name for the dictionary. (Designer automatically adds the "dic" extension.)
6. Click Save. Designer adds the dictionary to the list of Custom Dictionaries.

Tip

If someone has given you a custom dictionary with their words in it, you can add it using the Add button in the Options - Spelling dialog box, selecting the dictionary, and choosing Open. Designer adds the dictionary to the list of Custom Dictionaries.

To use a custom dictionary

1. Click the Text tool in the toolbox.
2. Click the Spelling button in the Text ribbon. The Spelling dialog box opens.
3. Click the Options button to open the Options - Spelling dialog box.

4 Click the check box in front of the dictionary you want to use.

Tip

Designer consults *all* dictionaries in the Add Words to list box.

Using Special Characters

Special characters such as umlauts, trademark symbols, fractions, and open and close quotation marks do not appear on most keyboards. When you want to use a special character, you either must insert them by entering their code on the numeric keypad or by using the program called Character Map that accompanies Windows.

Although most fonts contain a complete set of special characters, some fonts do not. For example, if you are using a font that does not contain the special symbol "µ," you must change to a font that does contain it in order to insert that object.

Using the Keypad

Each character in a font is associated with a number. For example, "µ" has the number 0181, regardless of the font. The number is called an ANSI (American National Standards Institute) character code.

Dingbats

Text fonts use the standard ANSI character codes. Non-text fonts such as dingbats are assigned character codes, but there is no standard. You must use either the keypad or the Windows Character Map to insert non-text characters.

The Windows Character Map

The Windows Character Map is a program included with Windows 3.1. You can use it to select characters to copy to the Clipboard and paste into your text. Consult your Windows documentation for more information.

To insert a character with the keypad

1. Select the font to use.
2. Place the text cursor where you want the special character.
3. Turn on **NUM LOCK** on the keypad, if necessary.
4. Press and hold **ALT** and type **0** (zero) and the three digit character code. For example, to insert the copyright symbol, press and hold **ALT** and type **0169** on the keypad.
5. Release **ALT**. The special character is inserted in the text.

Tip

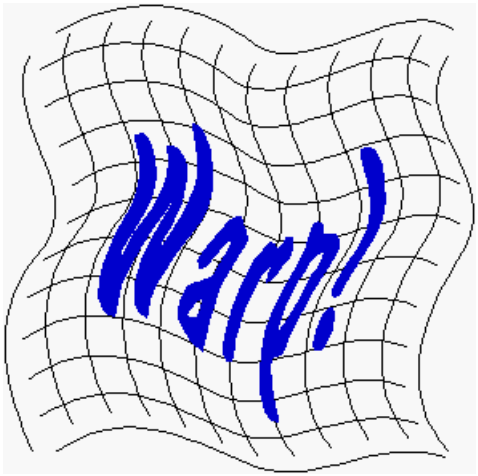
You must use the numeric keypad in step 4. You cannot use the number keys that are above the letters on your keyboard.

Creating Special Effects

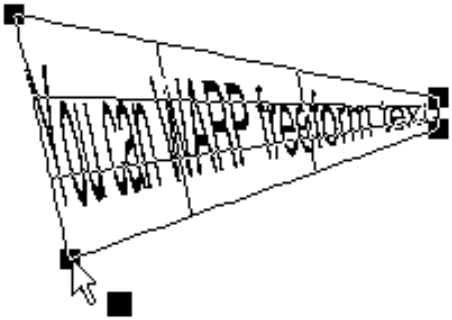
Warping Effects

Warping lets you distort an object by changing the surface on which it was drawn. For example, if you write your name on a deflated balloon and then inflate the balloon, your name becomes warped.

You can use warping to create effects that are difficult to draw, such as a water droplet or a hilly surface. You can also use warping to create unusual text effects, such as text being pulled down a drain. A warped effect can be edited like any two-dimensional object. You can warp grouped or connected objects.



When you warp an object, Designer places a warp envelope over it. The envelope appears as a blue warping grid. As you change the envelope, the object changes underneath.



You can reshape the warp envelope with lines, curves, or Bezier control points. The default reshape method is the last one used.

You can add an unwarped, rectangular envelope to an object. The previous, warped envelope is replaced with a new envelope. The object underneath is unchanged.

You can use the Remove Warp button to remove the last warp envelope you added. Removing a warp envelope restores the object underneath to its previous shape. If you have applied a series of warp envelopes to an object, you can remove them one at a time in reverse order with the Remove Warp button.

You can increase the number of horizontal and vertical lines in a warp envelope to give you more control over the warp.

To warp an object

1 Select the object to warp.

2 Click the Edit tool in the toolbox.

3 Click Warp button in the menu. A blue warp envelope appears over the object.

4 Point to a handle and drag it to change the envelope.

5 Repeat step 4 to create the desired warp.

6 Double click or press **ESC** when you finish to remove the envelope.

To reshape the warp envelope

1 Select the object to warp.

2 Click the Edit tool in the toolbox.

3 Click Warp in the menu. A blue warp envelope appears over the object.

4 Click the Warp Type button and choose how you want to reshape the warp envelope.

5 Click Line Warp from the menu to reshape the envelope with lines and no curves.

6 Click Curve Warp from the menu to create curving lines when you reshape points on the envelope.

7 Click Bezier Warp from the menu to reshape the envelope with Bezier control points. You can use the Cusp, Curve, and Symmetrical Curve buttons to modify the control points' movements, if you want.

8 Point to a handle and drag it to change the envelope.

9 Repeat steps 4 and 5 to create the desired warp.

10 Double click or press **ESC** when you finish to remove the envelope.

To add a new warp envelope

1 Select the object to warp.

2 Click the Edit tool in the toolbox.

3 Click Warp on the menu. A blue warp envelope appears over the object.

4 Point to a handle and drag it to change the envelope.

5 Repeat step 4 to create the desired warp.

6 Click the Add Warp button on the ribbon. The previous, warped envelope is replaced with a new envelope. The object underneath is unchanged.

7 Repeat steps 4 through 6 to create the desired warp.

8 Double click or press **ESC** when you finish to remove the envelope.

To remove a warp envelope

1 Select the object to warp.

2 Click the Edit tool in the toolbox.

3 Click Warp on the menu. A blue warp envelope appears over the object.

4 Point to a handle and drag it to change the envelope.

5 Click the Remove Warp button. The object is restored to its previous shape.

6 Double click or press **ESC** when you finish to remove the envelope.

To increase the density of a warp envelope

1 Select the object to warp.

2 Click the Edit tool in the toolbox.

3 Click Warp on the menu. A blue warp envelope appears over the object.

4 Click the Add Horizontal Lines button to double the number of horizontal envelope grid lines; or

5 Click the Add Vertical Lines button to double the number of vertical grid lines.

6 Point to a handle and drag it to change the envelope.

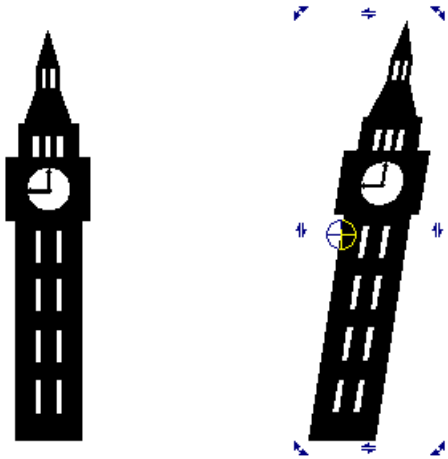
7 Repeat step 5 to create the desired warp.

8 Double click or press **ESC** when you finish to remove the envelope.

Skewing Effects

Skewing Manually

The manual method lets you use the pointer to skew (slant) an object. You manually skew by dragging a side handle.



Note

Bitmaps cannot be skewed.

To skew an object manually

1. Click the Rotate/Skew tool in the toolbar.
2. Point to a side handle of the object.
3. Drag the handle to skew the object.

4 Release the handle when you are done.

Tip

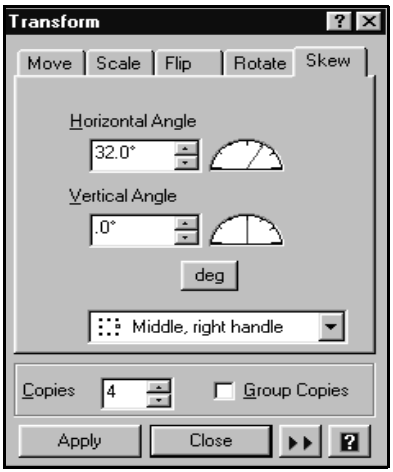
Press and hold **CTRL** while dragging a side handle to constrain the skewing of an object to 45-degree increments. Press and hold **SHIFT** while dragging a side handle to skew a copy of an object.

You can cancel a skew by pressing **ESC** before releasing the left mouse button The object returns to its original position.

Skewing Numerically

You can use the Skew panel of the Transform dialog box to precisely skew a object by specifying the degree of skew. Open the Arrange menu, choose Transform, and choose Skew to display the Skew panel.

The Skew panel lets you skew a object based on its current shape. For example, if you skew a square 45 degrees and then type **45** to skew it another 45 degrees, the object is skewed on additional 45 degrees.



To skew an object numerically

1 Select the object you want to skew.

2 From the Arrange menu, click Transform.

3 Click Skew to display the Skew panel.

4 Type an angle from **-89** to **89** in the Horizontal Angle box, or drag the dial to specify an angle.

5 Type an angle from **-89** to **89** in the Vertical Angle box, or drag the dial to specify an angle.

6 Select a different pivot point for the slant in the Origin list box, if you want.

7 Click Apply to skew the object.

To specify a degree of slant

1 Select the object you want to skew.

2 On the Arrange menu, click Transform. A submenu opens.

3 Click Skew to display the Skew panel.

4 Type an angle from -**89** to **89** in the Horizontal Angle box, or drag the dial to specify an angle.

5 Type an angle from -**89** to **89** in the Vertical Angle box, or drag the dial to specify an angle.

6 Select a different pivot point for the slant in the Origin list box, if you want.

7 Click Apply to skew the object.

Transparency

Applying Variable Transparency

HT_Transparency

You can apply variable transparency to a closed object. You can apply the transparency evenly across the object or apply a linear, radial, square, or conical transparency gradient.

Note

Transparency is not supported in objects exported to vector formats. However, it is supported in bitmap formats.

Tips

Although you can apply gradient transparency to an object that has a gradient color-fill, it's a good idea to experiment with gradient transparency on objects that have solid color fills.

If you apply transparency to an object with invisible color fill, the transparency is apparent only along the object's line. Fill the object with an opaque color.

RT_Transparency

RT_Transparency
HT_Transparency
To apply variable transparency to an object
To remove transparency from an object

To apply variable transparency to an object

1 Select a closed object.

2 Click the Format tool in the toolbox to display the Format ribbon.

3 On the ribbon, click either the Solid Transparency button or the Gradient Transparency button. The Object Format dialog box appears.

4 If you want a dynamic preview, click the Preview button.

5 Drag the Transparency Control slider to adjust the transparency.

6 Click the Apply button when you have finished.

Tip

If no object is selected, you set a new default transparency.

To remove transparency from an object

1 Select the object.

2 Click the Format tool in the toolbox to display the Format ribbon.

3 On the ribbon, click the Remove Transparency button

or

Drag the Transparency Control slider all the way to the left.

Magnification

Using an Object to Magnify Other Objects

HT_Magnification

You can use a closed object as a lens through which you view other objects. You can specify the level of magnification, and you can specify the portion of the drawing that is magnified.

Note

This tool magnifies only those objects that are farther toward the back than the magnifying object.

RT_Magnification

RT_Magnification
HT_Magnification
To apply magnification
To remove an object's magnification

To apply magnification

1. Create or select the object that will become a magnifying object.
2. Move the object to the area you want to magnify.
3. On the Tools menu, click Magnify. The Magnify dialog box appears.
4. Click the Enable checkbox to specify that you want to make the currently selected object a magnifying object.
5. Set the magnification amount as desired. A setting of less than 1.0 shrinks the viewed area instead of magnifying it.
6. Click the Apply button to update the magnifying object with the area being magnified.
7. Move and resize the shape as required to show the desired viewing point within it.

8 When you are satisfied with the viewing point, click the Freeze Viewpoint checkbox, and click Apply to lock the view. After freezing the viewing point, you can move the magnifying object and change its shape, size, and magnification level without changing the viewing point.

Tip

To update the viewing point, clear the Freeze viewpoint checkbox, click Apply, and move the magnifying object to the new desired position.

RT_To_Apply_Magnification

RT_To_Apply_Magnification
Using an Object to Magnify Other Objects
To remove an object's magnification

To remove an object's magnification

1 Select the object.

2 On the Tools menu, click Magnify. The Magnify dialog box appears.

3 Click the Enable checkbox to clear it.

4 Click the Apply button.

RT_To_remove_an_objects_magnification

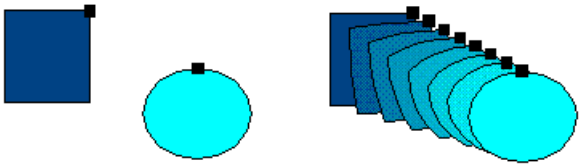
RT_To_remove_an_objects_magnification
Using an Object to Magnify Other Objects
To apply magnification

Blending Effects

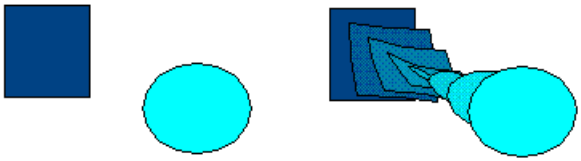
Blending lets you blend one shape and color into another. You can produce two types of effects by blending objects: Transformation Effects and Highlighting Effects.

You can specify the number of transformations, or *steps*, between the two objects in the Blend dialog box. Each step is a different object slightly changed to look more like the second object. The more steps you use, the closer (and smoother) the transforming objects are. You can use as many as 1000 steps.

Designer blends a point on the first object to a corresponding point on the second object. You can change the origins of the objects before blending.



Objects are drawn either clockwise or counterclockwise from a starting point. For example, closed objects are drawn counterclockwise. When Designer blends objects, it matches corresponding points of the two objects so that the order the points were drawn determines the appearance of the blend. You can reverse the way Designer normally compares points if you don't like the results of the blend



Objects blend from the back to the front object (the object in front is the one you drew last). (You can change the order of objects.) Designer cannot blend patterns, but it blends the pattern color and places the pattern in all the transformations.

If the objects have different patterns (for example, a hatch and a gradient), Designer places the pattern of the front object in all the transformations. Designer does not place bitmap patterns in transformations.

Tips

Blending results are usually better with uncomplicated objects.

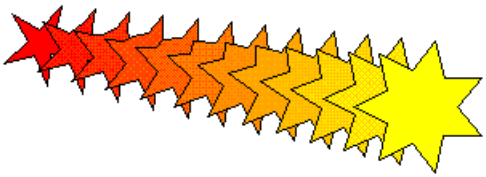
Large numbers of steps can slow redraw time.

You may have to try several different settings to find the ones that give the effect you want.

Designer cannot blend grouped, bitmap, or text objects. You can Convert Text to Curves and then blend it.

Transformation Effects

This blending effect gives the illusion of one object changing into another.



Highlighting Effects

This blending effect lets you give "spot" highlights and shadows to your drawings to help give them depth. Blending to create a highlight gives a gradient-like effect, but it lets you create highlights and shadows with more transitions.

To blend two objects

1. Select the objects you want to blend.
2. Click Blend in the Effects menu. The Blend dialog box opens.
3. Choose the settings you want.
4. Click Apply. The objects are blended. The dialog box stays open so you can continue to blend objects.

Tip

You may have to try several different settings to find the ones that give the effect you want.

To change the origins before blending

1. Select the objects you want to blend.
2. On the Effects menu, click Blend. The Blend dialog box opens.
3. Click Choose Origins.
4. On the back object, click a hollow box to select that position as the origin.
5. On the front object, click the hollow box in the position you want to correspond to the point you clicked on the back object.
6. Click Choose Origins again to deselect it.
7. Choose the other settings you want.
8. Click Apply. The objects are blended. The dialog box stays open so you can continue to blend objects.

Tip

You may have to try several different settings to find the ones that give the effect you want.

To reverse the blend direction

1. Select the objects you want to blend.
2. Click Blend in the Effects menu. The Blend dialog box opens.
3. Click Reverse Direction.
4. Choose the other settings you want.
5. Click Apply. The objects are blended. The dialog box stays open so you can continue to blend objects.

Tip

You may have to try several different settings to find the ones that give the effect you want.

Special Text Effects

Designer lets you create a variety of special effects, including wrapping text around an object and flowing text from one container to another.

Converting Text to Curves

You can convert outline fonts into standard Designer objects. This lets you reshape text just as you would any other Designer object.

Converting text to curves is useful when you want to reshape text or create a drawing that can be opened on a computer that does not have the original typeface. You can convert both freeform and block text to curves.

All fonts included with Designer are scalable outline fonts. The most common outline fonts are TrueType and Type 1. If you try to convert a non-outline font, Designer substitutes the default font before converting it.

You can change the default font by modifying an entry in your system registry. On the Registry tab of the Options dialog box, add the Value Name DefaultFont to the Mgxgre key, and set its value to the name of the font you want to use (for example, Times New Roman).

After you convert text to curves, the objects are no longer text objects. You cannot insert or delete text, check the spelling, change any of the paragraph options, or make any other text edits. Text converted to object outlines can be changed back to text only with the Undo command.

To convert text to object outlines

1. Select the text to convert.
2. Click Convert to Curves in the Object menu.
3. On the Arrange menu, click Disconnect. You can now click individual characters to select them. The text converts to an object outline.

Working with Bitmap Images

Overview of Working with Bitmap Images

You can move, resize, delete, reorder (move it to the front, for example), flip horizontally or vertically, duplicate, and crop a bitmap. You can also color a bitmap image if you have imported it as monochrome.

Use iGrafx Business *Image* when you want to edit a bitmap image extensively (for example, if you want to change a frown to a smile in a photograph).

Tips

You cannot rotate or skew bitmap images in Designer. Use Picture Publisher to rotate or skew a bitmap image.

You cannot edit bitmap images like vector drawings. However, you can trace a bitmap to produce a Designer object that you can edit.

Bitmaps can add variety and visual appeal to your drawings. Here are some examples of what you can do with bitmaps.

- Add scanned photographs to a report or presentation.
- Use a bitmap as a background for your illustration.
- Create a library of bitmap images to use in your drawings.
- Trace bitmaps and then edit the tracing like an ordinary Designer object.

- Add text, borders, or a drop shadow to enhance the bitmap.

Tip

You can print a bitmap on a printer, but not on a pen plotter.

Bitmap Import Options

You can import the following bitmap formats into a Designer document: BMP, DIB, GIF, JPG, PCD, PCX, RAS, TGA, and TIF.

You can click Setup in the Import dialog box to change how a bitmap looks when you import it. For example, you can import a color image as a grayscale image if you intend to reproduce it on a non-color printer. Changing an import option does not change the original bitmap file.

By default, Designer imports the image as it was originally saved. If you change the import options by using Setup in the Import dialog box, the new import options become the new default for all bitmap images.

To learn more about importing, see Importing and Exporting Files

Editing a Bitmap Image

You can edit a bitmap image by selecting it, clicking the Bitmap tool , and choosing an editing option in the Bitmap ribbon. If you want to make more extensive edits to an image, you can use a bitmap-editing program such as Picture Publisher.

You can use Designer to crop or trace a bitmap image that is not an OLE object. When you double click a non-OLE bitmap image, Picture Publisher opens to edit the bitmap image.

If you want to edit a bitmap image that is an OLE object (as indicated in Designer's status bar), you cannot edit it with Designer's cropping or tracing tools. When you double click the OLE object, the program that supplied the object automatically opens to edit the object.

You can open iGrafx Business *Image* with the Edit Bitmap button in the Bitmap ribbon. You can also move pictures between Picture Publisher and Designer using the Clipboard or the Import and Export commands.

Note

A bitmap image that is pasted as an OLE object (that is, it is embedded or linked) cannot be edited in Designer.

Coloring Monochrome Images

You can change the foreground and background of a selected monochrome bitmap image with the Foreground button and Background button. Select the image, click the Foreground button or Background button, and click a color from the color palette.

The foreground color changes the color of the image itself. The background color changes the color of the surrounding area.

Tip

To import an image as monochrome, select Monochrome from the setup options in the Import dialog box. The newly imported image is black (foreground color) and white (background color).

Cropping a Bitmap Image

Cropping lets you show only the part of the bitmap image you want; the rest is hidden. Cropped portions of the bitmap are retained so you can uncrop them later.

Cropping is an editing technique that can improve your final drawing. For example, you can eliminate distracting areas of an image to help focus on the center of interest. You also can crop to eliminate errors or to help fit the bitmap into the layout.

Cropping an image in Designer involves two steps: creating a rectangular mask large enough to show the desired area, and moving the image so that the correct area shows through the mask.

Tip

In Designer 3.1 and before, you moved the mask instead of the image.

To crop an image in Designer

1. Select the bitmap image you want to crop.
2. Click the Bitmap tool in the toolbox.
3. Click the Crop button in the ribbon. The bitmap is highlighted and handles appear around the crop mask.
4. Resize the crop mask until it is the size you want.
5. Move the pointer onto the image. Press and hold the mouse button, and position the image under the crop mask.
6. Release the mouse button when you finish.
7. Repeat steps 4 through 6 to adjust the crop, if necessary.
8. Double click or press **ESC** to stop cropping.

Tracing Bitmaps

Tracing a bitmap image creates a vector copy that closely resembles the original image. When using a simple bitmap image, it is often easier and less space consuming to trace it and then edit the vector tracing.

Vector drawings use less disk space and memory than bitmaps. Since drawing files containing bitmaps can be quite large, converting bitmap images to vector drawings saves disk space.

You can create interesting visual effects by tracing. For example, with a little experimentation, you can create stylized graphics or drawings that look like etchings.

Basics of Tracing

Designer traces an image by searching it for color or grayscale variations. When the color difference is great enough, Designer draws a line between the different colors.

When Designer finishes tracing, the original bitmap image is behind the tracing and the tracing is selected.

Tracing an Entire Bitmap Image

Press and hold **SHIFT** and click the bitmap image.

Tracing the Rectangular Area of a Bitmap Image

Select the bitmap image and drag a rectangle over an area of the image. The area in the rectangle is traced.

Tracing an Object in a Bitmap Image

Well-defined areas in an image are called *objects*. For example, in an image containing a beach ball in the ocean, the beach ball is an object. The more an object contrasts with its surrounding area, the more successful the tracing will be.

To trace an object, select the image and click inside the object to trace it.

Stop Tracing

Press **ESC** to stop a trace before it is completed.

Setting Tracing Options

Tracing options let you determine the method and degree of detail Designer uses to trace bitmap images. You set tracing options in the Bitmap ribbon. Options remain in effect until you change them.

Showing and Hiding the Bitmap

Use the Show Bitmap button to show or hide the bitmap. Choose Show (the default) to display the original bitmap image as it appeared before the trace. Choose Hide to conceal the bitmap image after it is traced so that only the traced objects appear.

Setting the Trace Quality

Use the Trace Quality button to adjust how accurately and smoothly Designer traces a bitmap.

Choose Fine for the highest quality trace. Fine tracings use the largest number of reshape points. Fine tracings can use a lot of memory and be difficult to edit because they create a large number of anchors.

Average setting is the default. In most situations, average tracing is the best choice.

Coarse produces the least accurate tracing because it uses the fewest points. Coarse tracings use the least memory and are the easiest to edit.

Setting Noise and Color Controls

You can restrict the number of colors in the result of a trace. Click the Colors box on the Bitmap ribbon, and then click the maximum number of colors that you want the trace to have.

The noise control on the Bitmap ribbon helps eliminate stray pixels introduced by a poor-quality image. You can enter a value ranging from 1 through 100. Larger numbers exclude larger groups of stray pixels.

Setting the Line Type

Use the Line Type button to choose whether Designer uses lines or curves to create the tracing.

Choose Lines to create tracings with straight line segments (no curves). Use this setting when the image has few curves.

Choose Curves to create tracings with curves. It is slightly more accurate than using lines.

Tips for Tracing

Keep the following in mind when tracing images.

- Bitmaps with few colors generally trace best. Use Picture Publisher to reduce the number of colors in a bitmap image before you trace.
- Grayscale images trace better than color images. Monochrome images, however, trace best of all.
- Don't trace bitmap text. Add text to a drawing with Designer's Text tool A. Scanned text and text added with an image editor are of lower quality.
- Simple, uncomplicated images trace better than complicated ones.
- Dark objects on light backgrounds are best. If you have a dark background, use iGrafx Business *Image* to lighten it before tracing.

Tips

Remember, you can press **ESC** at any time to stop the trace.

For details on reducing the number of points in traced bitmaps, see Smoothing an Object.

To trace a bitmap

1. Click the Bitmap tool in the toolbox.
2. Select the bitmap image you want to trace.
3. Drag a rectangle over an area of the image. The area in the rectangle is traced. A border appears around the image, and Designer draws the tracing in front of the original image.
4. After tracing, click outside of the border, point to the image and drag the tracing off of the bitmap, if necessary.

Printing Your Work

Adding, Removing, and Connecting Printers

Windows uses a software program called a printer driver that communicates with your printer or other output device. Printer drivers are provided with Windows.

The Windows Control Panel lets you add, remove, and set up printer drivers. You can add multiple printer drivers if you use more than one type of printer.

If you want to use a printer that is not connected to your computer, you can force the driver to send its output directly to a file on disk by specifying FILE as the printer port. You then can take the disk to a computer that is connected to the desired printer and copy (using the COPY command in DOS) the output file to the printer.

See your Windows documentation for instructions on adding or removing a printer and connecting a printer to a port.

Selecting and Setting Up Your Printer

After you add a printer, you can select and set up the target (default) printer with the Windows Control Panel, or you can select a printer and change the setup as needed in Designer. Setup choices vary from one printer to another, but common options include changing the orientation (portrait or landscape), paper size, and paper source.

You can select the target printer and change the setup of the printer from the Print Document dialog box.

Selecting the Target Printer

To change the target printer, click the printer name in the Print Document dialog box. The box opens to show the list of installed printers. You can then choose a different target printer.

Setting the Printer's Properties

To open the property sheet for the selected printer, click Properties in the Print Document dialog box. You can make changes such as changing the orientation (portrait or landscape) and scaling the printout.

RT_To_print_the_current_page

HT_Selecting_and_Setting_Up_Your_Printer
To select a target printer
To set up a target printer

To select a target printer

1. On the File menu, click Print. The Print submenu opens.
2. Click Target Printer. The Target Printer dialog box opens.
3. Select the printer you want to use.

Tip

If your printer is not listed in the Target Printer dialog box, open the Windows Control Panel and add it.

To set up a target printer

1. On the File menu, click Print. The Print submenu opens.
2. Click Target Printer. The Target Printer dialog box opens.
3. Select the printer you want to use.
4. Click Properties. The property sheet for the selected printer driver opens.
5. Select the options you want. Make sure the orientation (portrait or landscape) matches the on-screen orientation.

Tip

If your printer is not listed in the Target Printer dialog box, open the Windows Control Panel and add it.

Using a Pen Plotter

If you are using a pen plotter instead of a printer, you should be aware of a few differences.

- Bitmaps and bitmap fill patterns do not plot.
- To avoid plotter pen damage (due to staining), you may want to use the Vector Clipping option in the Print Document dialog box.
- You should create a special color palette that matches the colors of the pens used by your plotter.

Scalable Fonts

Scalable fonts are fonts that can be sized or rotated as needed. TrueType fonts are an example of scalable fonts. They give you WYSIWYG (what you see is what you get) printed output. Windows handles the tasks of displaying, scaling, and printing TrueType fonts so that separate screen fonts are not necessary.

Adobe Type Manager, if you have it installed, handles the display, scaling, and printing of Type 1 fonts and also ensures that these fonts are treated as scalable fonts and are not limited to PostScript printers.

If, however, you use non-scalable, device-dependent printer fonts (such as cartridge fonts with an HP LaserJet printer), you should read and understand the next section, "Device-Dependent Fonts."

Device-Dependent Fonts

Device-dependent printer fonts, including cartridge fonts and soft fonts, are limited to the set of typefaces, point sizes, and styles supported by your printer. If you create a document with one printer specified, use its printer fonts, and then change to a different target printer, the fonts displayed in the document change. This may not be evident from the on-screen appearance.

For example, suppose you specify a PostScript printer and have 12-point Bookman text with 20-point Avant Garde headlines in your document. If you change to a printer that does not support these fonts, Designer chooses the closest available fonts, which will not display or print as you expect. You can either change back to a PostScript printer or change the fonts in the document to fonts supported by the new printer.

Designer also substitutes the closest available font when you use a device-dependent font and then rotate the text.

Basic Printing Methods

You can use the Print Document dialog box to choose printing options. The Print Document dialog box lets you print the document in the active window. You can specify the current page, all pages, or selected pages from the document; the number of copies to be printed; whether to collate the copies; whether to include page labels; and whether to use vector clipping (for use with a pen plotter).

You also can print multiple documents.

To use crop marks, select the Show Page Crop Marks option in the Page Setup dialog box.

You can use Current Page to print only the currently displayed page, no matter how many pages are in your document.

You can use Selection to print only the selected objects on the current page. Selected objects do not change in size or position in the printout.

You can use View to print an area that you define (by dragging a rectangle). The area is scaled to fit the printable area of the printer page.

Printing Selected Objects

1. Select the object on the current page you want to print.
2. On the File menu, click Print. The Print submenu opens.
3. Click Selection. The selected object is printed.

Printing a Defined Area

1. On the File menu, click Print. The Print submenu opens.
2. Click View. The print view pointer appears.
3. Position the print view pointer at one corner of the area you want to print, and press and hold the left mouse button.
4. Drag a bounding box around the area you want to print. Release the mouse button. The selected area is printed.

Printing Page Ranges

If desired, you can print only the pages or page tiles you need. For example, if you have a ten-page document, you can type **1,3-5,10** to print pages 1, 3, 4, 5, and 10.

In the Print Document dialog box, enter a page number separated by a comma to print a page; enter a range with the first and last pages separated by a hyphen to print a sequence of pages. To specify a page tile, enter a page number, a colon, and a tile number.

To print this:	Type:
Pages 1, 2, 6, 7, 8, 9	**1,2,6-9**
Pages 6, 7, 8, to end of document	**6-**
Page 1, tile 2	**1:2**
Page 1, tile 4 and page 2, tile 6	**1:4,2:6**
Page 3, tile 8 through 4, tile 9	**3:8-4:9**

Collating Printed Pages

The Collate option in the Print Document dialog box prints a complete copy of a document before printing the next copy. Collate is only available when you print more than one copy of a multiple-page document. Collating can slow the print speed on some printers.

Printing Mirror Images

The Mirror option flips a drawing so that it prints reversed—as though you were viewing it in a mirror. Use this option to print T-shirt transfers or other drawings that must be given to a print shop reversed.

The Mirror option is available in the Print Document dialog box only with certain printer drivers. This option is gray if the printer driver does not support mirroring.

Vector Clipping

Vector clipping improves the output of drawings on pen plotters by causing the top object of overlapping drawings to completely cover the back object (this is done automatically with non-plotting printers).

Vector clipping also prevents the damage to plotter pens that can occur when different colors are drawn over each other. For example, a yellow line drawn over a black line can permanently stain the yellow pen.

The Vector Clipping option in the Print Document dialog box is available only when you are using a plotter. This option increases the time it takes to plot your drawing.

Fitting a Document to the Page

If the page size is too large for the target printer's paper size, Designer reduces the drawing proportionally so that all of it fits inside the printable area when Fit to Page in the Print Document dialog box is selected. If this option is not selected, the drawing is tiled on as many pages as necessary to print the drawing.

Centering a Printout on the Page

The Center on Page option causes the contents of each page in the document to be aligned to page center and page middle for this printout only. Center on Page in the Print Document dialog box is especially useful if your page size is smaller than your paper size; for example, an on-screen presentation that you want to print out on 8.5" x 11" paper.

Darkening or lightening printed RGB bitmaps

When you print to an EPS file from Designer and select the Output for Separator printing option, you can darken or lighten RGB bitmaps in the EPS file by setting a key value in your registry. For darker RGB bitmaps, set the MGXGRE key name EnableCMYKBlackOpt to a value of **1** For lighter RGB bitmaps, set the key name to a value of **0**.

To set the RGB color value

1. Click Options in the Tools menu. Click the Registry tab.
2. In the Key list box, locate and select Mgxgre as the key.
3. Click New Value, and then enter **EnableCMYKBlackOpt** as the Value Name.
4. Click Numeric Value Type.
5. Enter the value (**0** or **1**), and click the Accept entry button.

To print the current page

1. Click Print in the File menu. The Print submenu opens.
2. Click Current Page. All objects on the current page are printed.

Tip

The keyboard shortcut for Current Page is **CTRL+P**.

RT_To_print_the_current_page

RT_To_print_the_current_page

Printing Page Ranges

To print a selection

1. Select the objects on the current page you want to print.
2. Click Print in the File menu. The Print submenu opens.
3. Click Selection. All selected objects are printed.

Tip

The keyboard shortcut for Selection is **CTRL+SHIFT+P**.

RT_To_print_the_current_page

RT_To_print_the_current_page

Printing Page Ranges

To print a defined area

1. Click Print on the File menu. The Print submenu opens.
2. Click View. The print view pointer appears.
3. Position the print view pointer at one corner of the area you want to print.
4. Drag a bounding box around the area you want to print. When you release the mouse button, the selected area is printed.

RT_To_print_the_current_page

RT_To_print_the_current_page
Printing Page Ranges

To print the active document

1. Click Print on the File menu. The Print submenu opens.
2. Click Document. The Print Document dialog box opens.
3. Type the number of copies you want to print.
4. Choose the options you want.
5. If you wish, click Target Printer, choose the printer you want to use, and click OK.
6. If you wish, click Setup, make any changes to printer settings, and click OK.
7. Click Print. The document is printed.

To print selected pages with the Page Manager

1. Open a document.
2. Click the Page Manager tool in the toolbox. Thumbnail images are displayed for each page in the document.
3. Select the thumbnail of each page you want to print. A rectangle appears around each selected page. Press and hold **CTRL** to select more than one page; press and hold **SHIFT** to select more than one consecutive page.

4 Click the Print button in the ribbon. The Print Document dialog box opens. The range of pages you selected is automatically entered.

5 Type the number of copies you want to print.

6 Choose the options you want.

7 Click Print. The selected pages are sent to the target printer.

To print multiple documents

1 Click Print in the File menu. The Print submenu opens.

2 Click Multiple Files. The Print Multiple Files dialog box opens.

3 If necessary, change to the desired drive and directory.

4 Choose the name of a document you want to print.

5 Click Print. The selected document is sent to the printer.

6 Repeat steps 4 and 5 until you have chosen all the documents you want to print.

Tip

While you are printing multiple documents, all commands in the Print submenu are gray.

To remove files from the print queue

1 Click Show Tasks in the View menu.

2 Click the name of the file (or files) you want to remove from the queue.

3 Click the Stop button .

Note

You can use this method only if you are printing multiple files.

iGrafx Designer 1.0 Tutorial

Getting Started

This chapter provides step-by-step instructions on using the most popular and fundamental tools in the new iGrafx Designer 1.0. Notwithstanding your current Designer skills, these tutorials will have you working like a Designer pro in no time. Novice or veteran users alike can comfortably progress along the Designer curve to complete proficiency at any pace they choose.

With Designer, it's easy to edit drawings to get the results you want. Objects created in Designer are vector-based, using points and mathematical calculations to create shapes, or objects, that can themselves be manipulated to any design specification imaginable.

Before starting the tutorials, you should know how to open menus and choose commands, and select objects using a mouse.

Managing a Designer Project

Before starting a Designer project it is important to define and set your user preferences. Since every Designer illustration is unique and evolves from a unique specification, it is important that your Designer environment adapt according to each project. In this tutorial you will prepare your Designer workspace according to the specifications of your current project, which is to illustrate, to scale, a suspension bridge while keeping track of a specified project component.

After you complete this tutorial, you will be able to:

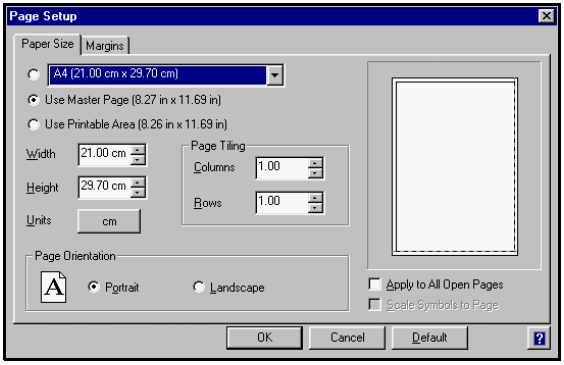
- set page options

- set general options
- set display options
- set rulers options
- set snap options
- set rotation options
- define user profile information
- define and edit Designer registry data
- name an object
- define object fields and values

Setting Page Options

Your client has asked that all drawings comply with metric standards. To do so, you will need to set up your page with metric measurements.

1 From the File menu, click Page Setup. The Page Setup dialog box opens.



2 Click the arrow key to display the paper size settings.

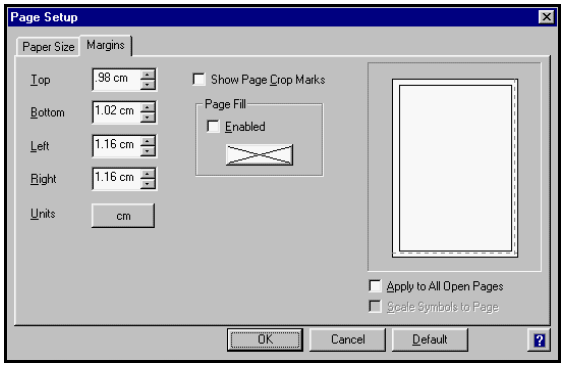
3 Select A4. This will give you a paper size of 21 cm x 29.7cm.

4 Click the Units button and select cm as your standard unit of measure.

5 Leave the other settings as they are and click the Margins tab.

6 In the Margins dialog box, click the Show Page Crop Marks button.

7 Type the following new margin sizes in the Top, Bottom, Left, and Right Margin list boxes: .98, 1.02, 1.16, and 1.16.

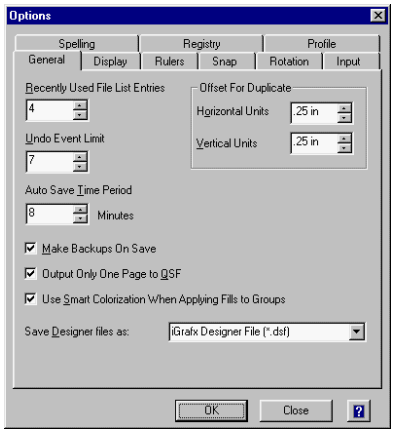


8 Click OK

Setting General Options

The drawing you plan to do is very complex and utilizes a number of overlapping shapes and colors. And since many shapes will be duplicated, you will need to set the offset preferences.

1 From the Tools menu, click Options. This opens the Options dialog box. The General options are displayed.



2 Type 7 in the Undo Event Limit box. Designer will now allow you to undo the last seven actions.

3 Type 8 in the Auto Save Time Period box to automatically save your work every eight minutes.

4 Type .25 in the Horizontal Units box and the Vertical Units box. When you duplicate a selected object, its *duplicate* will appear at these offset coordinates.

5 Make sure that the box, Use Smart Colorization When Applying Fills to Groups is checked. This will prevent grouped objects from loosing color definition when changing color.

Setting Display Options

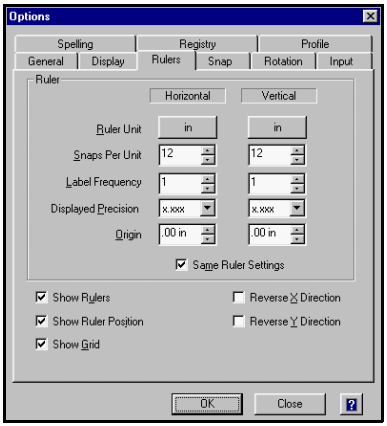
1 Click the Display tab to reveal the display settings.

2 Select Anti-Alias Full Screen View. This will display an anti-aliased view of your bridge while viewing the full screen.

Setting Ruler Options

You will want to choose a unit of measure for your drawing workspace as well as the way in which the rulers are labeled. You will also want to select the number of snap divisions for each ruler unit.

1 Click the Rulers tab to open the Rulers dialog box.



2 Type 12 in the Snaps Per Unit boxes. This sets the number of snap points to 12 per inch and affects the number of grid dots that appear on your workspace.

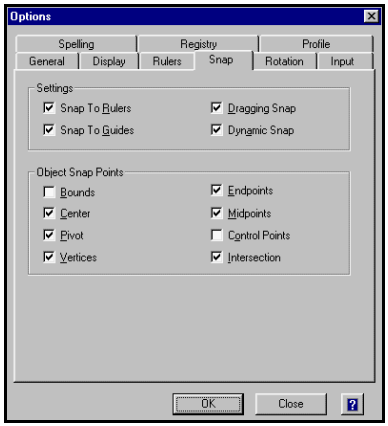
3 Leave the Label Frequency at 1. The Label refers to the actual unit number that appears on the rulers, e.g. 1, 5, 10. The Frequency refers to the amount of times the label (or number) appears in the given unit of measure.

4 Click the arrow in both Displayed Precision boxes and select x.xxx. This value sets the decimal precision of the coordinates displayed in the status bar.

Setting Snap Options

Snap options let you select or deselect where Designer places snap points on an object. Snap points act as magnets to attract an object to a given reference such as a guide or ruler. Using Designer's snap feature wisely can make aligning objects easy and accurate.

1 Click the Snap tab. The Snap dialog box opens.



2 In the Settings section, select Snap to Rulers and Snap to Guides to align objects precisely along the ruler and the guides, respectively.

3 Select Dragging Snap to allow an object's bounding box (its selection frame) to snap to a ruler or guide while being moved.

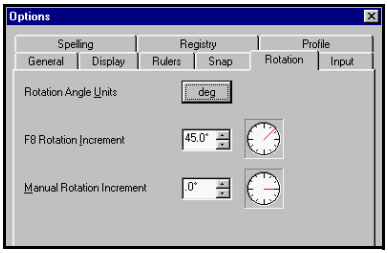
4 Select Dynamic Snap to link object lines together. This is a great way to make accurate extensions of one object to another or from one point to another point.

5 In the Object Snap Points section, select where you want a snap point to appear on an object. Click to select the following locations: Center, Pivot, Vertices, Endpoints, and Intersection.

Setting Rotation Options

If you foresee the need to use Designer's rotation features, you can adjust the rotation presets according to your own preferences. You can set the rotation angle increment for rotating an object by pressing the F8 key. You can also define the rotation units as either radians or degrees.

1 Click the Rotation tab to display the Rotation dialog box.



2 Type 45 in the F8 Rotation Increment box.

Defining Custom Units

This procedure illustrates the use of the Custom Units dialog box to define a scale of 5 meters per centimeter.

Note

You can also define custom units using the Scale Drawing Wizard. Simply click Scale Setup from the File menu and follow the instructions on the screen.

1 On the Tools menu, click Custom Units. The Defined Custom Units dialog box opens.

2 Click Add Unit. The Add Custom Unit dialog box opens.

3 Type METERS (SCALE 5) in the Unit Name box. Adding SCALE 5 to the name makes it easy to identify the scale in the units list.

4 Under Designer Units, type 5 in the Scale spin box, or click the arrows beside the box to select a value.

5 Under Designer Units, type m in the Label box.

6 Under Real World Units, click the arrow beside the label list box, and choose centimeters.

7 Click Ok, then click Ok again.

Tip

The unit you entered above only defines a primary unit. If needed, you also can specify a secondary unit. Yards and feet, feet and inches, and weeks and days are all examples of definitions with primary and secondary units.

To change the rulers to the new scale

1 Right-click on the ruler.

2 Select Ruler/Snap Options.

3 Click the Units button.

4 Select More Units from the menu. This opens the Available Units dialog.

5 Select your new scale. It will have an asterisk by it.

Setting Object Names, Fields and Values

You can assign names to objects and groups of objects in your drawing. This lets you create a list of objects, and select objects by name. You will now assign names, costs, and other fields to a part of your suspension bridge drawing.

Fields and Values

Fields are like categories of information about the objects in your drawings. You can define your own fields and assign values to them. For example, you could use fields and values for a part in an engineering drawing as follows.

Field	Value
Cost	3.25
Name	Cable Flange

Field	Value
Part Number	TL805 0072-3
Primary Vendor	Acme Flanges
Secondary Vendor	Nut'n but Flanges, Inc.

To name (or rename) an object:

1. On the File menu, click Open.
2. Navigate to the Tutorials folder and click Bridge.dsf.
3. Select the Cable Flange (highlighted yellow).
4. On the Object menu, click Properties. The Properties dialog box opens.
5. Type Cable Flange in the Object Name box and click Apply.
6. Click Close.

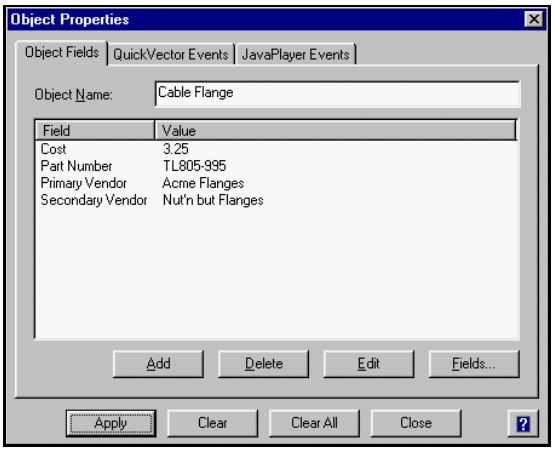
Note

If the object already has a name, it appears in the Object Name text box. If you want to change the name, highlight it and type over it.

To add fields and values:

1. Select the Cable Flange.
2. On the Object menu, click Properties. The Properties dialog box opens. Notice that Cable Flange appears in the name box.
3. Click Add.
4. Type Cost in the Field box and press the tab key.
5. Type 3.25 in the Value box and click Add.
6. Type Part Number in the Field box and press the tab key.
7. Type TL805-995 in the Value box and click Add.

8 Type the remaining information in the appropriate Field and Value box as illustrated.



9 Click Apply and then click Close.

Note

You can delete the values of any field you have created by choosing the field and value and clicking the Delete button in the Properties dialog box. Any field you have added remain until you close Designer so that you can assign them to other objects. If there are fields with no values when you close Designer, the new properties are not saved.

Assigning Values to Other Properties

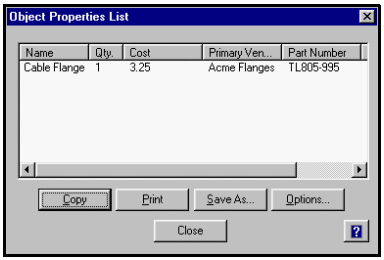
If other properties (besides Name) have been created for a document, you can select an object, choose one of its properties, and then assign a new value to that property or find out what value has already been assigned.

After you have used the Properties dialog box to create the properties you want to use, you can access them quickly through the Property toolbar or through the Properties dialog box.

To list objects

You can create a list of objects in your drawing. This lets you create a named parts list of all the pieces of your drawing, plus a list of other defined properties.

On the Objects menu, click List. The List Objects dialog box opens which alphabetically lists the names (the values assigned to the property "name") for the objects selected in the current drawing, and shows the number of times each object appears (quantity).



Note

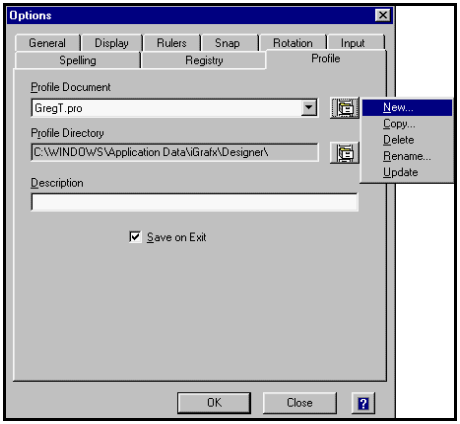
If no objects are selected, the list contains the names for all the objects in the drawing. Objects without names are listed as "unnamed."

Managing User Profiles

Profiles are a collection of all of your preferences, e.g. customized toolbar buttons and location, status bar settings, snap and ruler settings, etc. Generally, you may want to use a different profile for different kinds of work (such as graphic design or technical illustration). For now, all of the preferences you have set to this point will be saved in a profile named GregT, a fellow employee who will be helping you render the drawings for your current project.

1 On the Tools menu, click Options and then the Profile tab. The Options dialog box opens.

2 Click the Profile button and then click New.



3 Type GregT in the Profile Document list box. Click Ok.

4 Type Monroe Account/CC#2256 in the Description list box.

5 Click OK.

Note

Use the Profile dialog box to select, create, copy, delete, and update all user profiles.

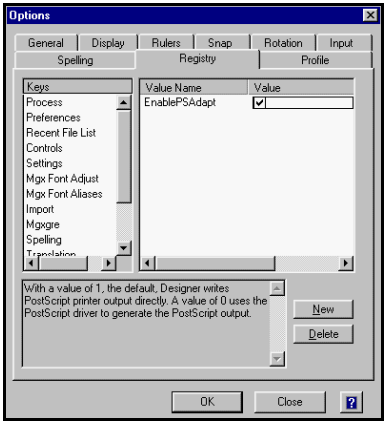
Managing the Designer Registry

Most programs save status information in a file called the system registry. Changes in the registry are detected by the Windows operating system and programs that monitor the registry. The registry entries for Designer reflect your system's hardware and operating system specifications. Several entries are created by the iGrafx installer when you install Designer. You will now use the Registry tab of the Options dialog box to edit those entries.

To change the value of a registry key

iGrafx Designer will generate its own Post Script output to a Post Script printer. For this project you want your Post Script printer driver to control the output in stead of Designer. To allow this, you must change a registry key in the Registry dialog box.

1. On the Tools menu, click Options and then the Registry tab. The Registry dialog box opens.



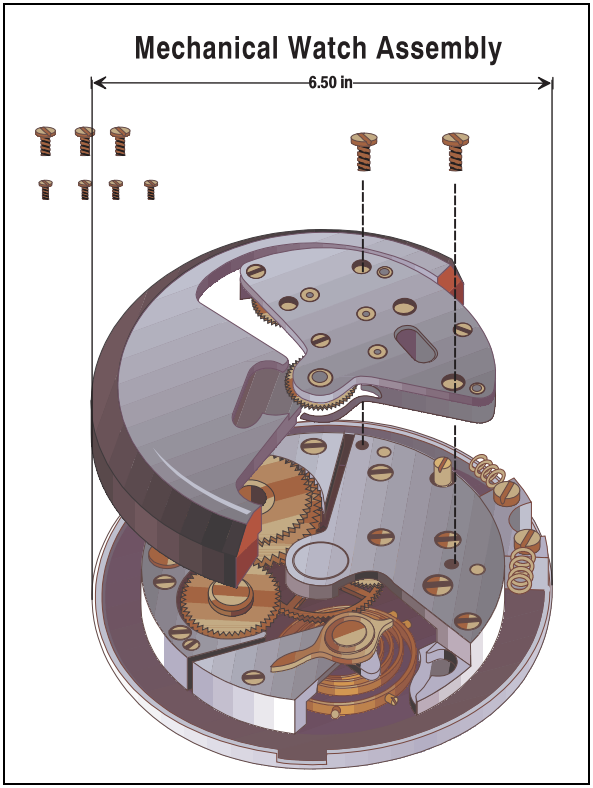
2. Click to highlight the Mgxgre key name from the Key list box.
3. Click New.
4. Select Boolean Value from the menu.
5. Type EnablePSAdapt and press ENTER.
6. In the Value list, click in the value box beside EnablePSAdapt. A box with a check mark will appear.

7 Click the check mark so it disappears. This will change the value from 1 to 0 which means your printer driver will control the output of a drawing and not Designer.

8 Click OK to confirm the change and to close the Options dialog box.

Creating a Technical Illustration

This tutorial shows you how to create an illustration of the inside of a mechanical wristwatch.



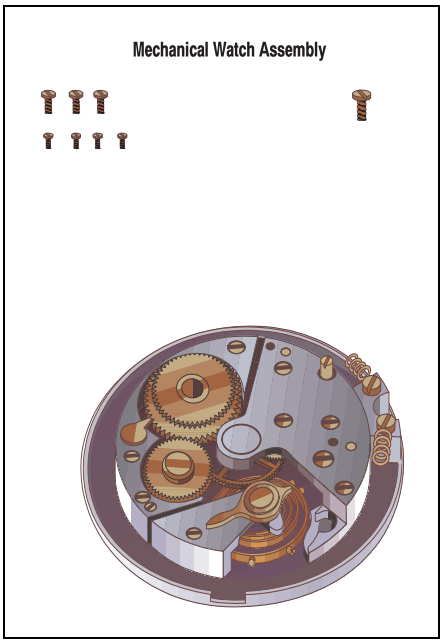
After you complete this tutorial, you will be able to:

- import non-Designer files
- use guides to help position and align objects
- move to different layers
- change line styles and ends
- enter coordinates to draw objects
- cut lines
- assign properties and names to a drawing
- list the parts within a drawing

Opening the Designer File

1 From the File menu, click Open.

2 Double click the file WATCH.DSF. The drawing appears in the drawing area.



3 From the File menu, click Save As. The Save As dialog box opens.

4 Type MYWATCH in the text box and press enter. The file is saved as MYWATCH.DSF.

Changing the Page Color

In this part you change the background page color from invisible (the default) to light gray.

1 From the File menu, click Page Setup. The Page Setup dialog box opens.

2 Click the Margins Tab.

3 Click Enabled in the Page Fill dialog.

4 Click the Page Fill button to open the Object Format dialog box.

5 Click the Solid Fill button and double click a light gray color swatch in the Color Palette.

6 Click OK in the Object Format dialog box. The page preview becomes gray.

7 Click OK in the Page Setup dialog box.

Dragging a Guide

Guides can help you with the placement of objects in your drawing. Guides do not print and can be removed any time.

In this exercise you drag a guide to help position the top watch assembly correctly above the bottom assembly.

1 Point to the vertical ruler at the left.

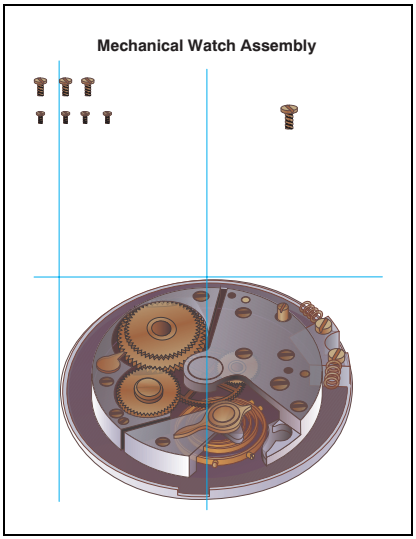
2 Press and hold the left mouse button and drag toward the right. A vertical guide appears.

3 Move the vertical guide line so that it passes through the center of the bottom watch mechanism. Release the left mouse button.

4 Point to a horizontal ruler at the top of the Designer window.

5 Press and hold the left mouse button and drag downward. A horizontal guide appears.

6 Move the horizontal guide line so that it rests on the top of the bottom watch mechanism. Release the left mouse button.



7 Press CTRL+S to save your work.

Importing an AutoCAD File

You can use the Import command to import drawings and text that were created in other programs, or to import drawings that may be too large for the Clipboard.

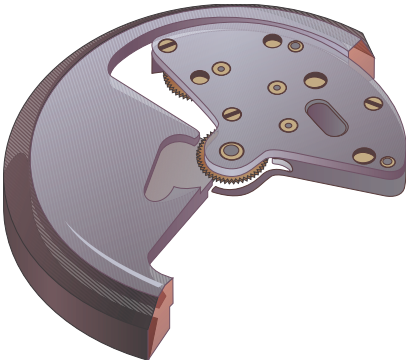
In this section, you import a drawing that was saved in the AutoCAD file format.

To import a DXF File

1 From the File menu, click Import. The Import dialog box opens.

2 Click the down arrow in the Files of Type box and click the DXF format to select it.

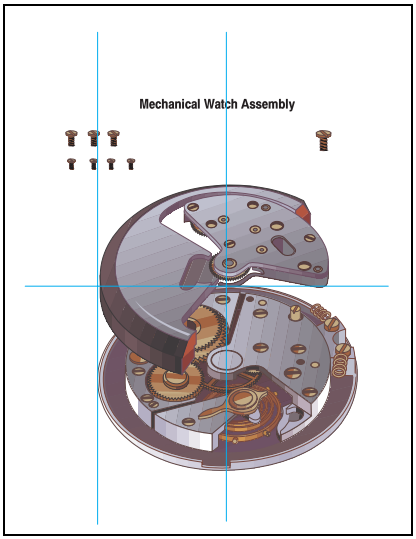
3 Double click the file WATCHTOP.DXF. The imported drawing of the watch's top assembly appears in the drawing area.



4 Line up the watch top against the guides you created earlier.

Tip

Press and hold the space bar while tapping the appropriate arrow key to nudge, incrementally, the selected object.



Changing to a Different Layer

This illustration was created on four different layers. Layers can help organize your drawing so that, for example, you can more easily select objects.

In this part you change to the layer named Screws so you can add elements to this layer.

- Click the Screws tab at the bottom of the drawing area. (The selected tab currently reads Bottom Assembly.) The layers used in the drawing appear with the current layer highlighted.

Drawing Two Lines Using Exact Coordinates

In this part you use the Coordinate dialog box to draw two lines. These lines show the path of screws through the top and bottom assemblies.

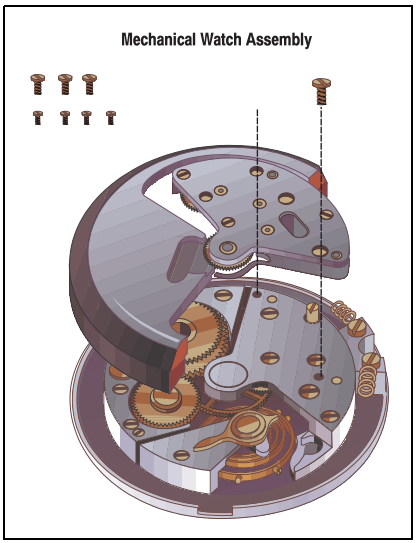
This method is extremely precise. With it, you use on-screen coordinates to position and move the pointer exactly—you do not use the mouse. The pointer uses the currently selected drawing method.

To draw the first line

1. From the Object menu, click Coordinates. The Coordinates dialog box opens.
2. Click the Create a New radio button.
3. Click the arrow button and select Jointed Line from the list of objects.
4. From the Method list box, click the arrow button and select Range.
5. Highlight the number in the X1 coordinate box. Type 4.8.
6. Press tab to highlight the Y1 coordinate box. Type 2.56.
7. Press tab to highlight the X2 coordinate box. Type 4.8.
8. Press tab to highlight the Y2 coordinate box. Type 6.14.
9. Press enter. The line is created at the specified location.

To draw the second line:

1. In the X1 coordinate box, type 6.07.
2. In the Y1 coordinate box, type 2.56.
3. In the X2 coordinate box, type 6.07.
4. In the Y2 coordinate box, type 7.83.
5. Press enter. The line moves to the specified location.
6. Click Close to close the Coordinates dialog box.



Changing Line Styles

You must now set the default weight (width) and end styles for the two lines.

1. Select both lines by clicking the first line, holding down the shift key, and then clicking the second line. Both lines are now selected.

2. Click the Simple Line tool in the toolbox.

3. Click the Line Style button in the status bar. The Object Format dialog box opens.
4. Click the Line Style tab.

5 Click the Line Style button to display the available lines.

6 Click a "dash-dot" style to choose it (you can choose any style you prefer).

7 Click Apply and then Close to close the dialog box.

Changing the Line Weight and Cap Style

In this exercise you change the default thickness and cap style of lines. You also select the Scale with object option so that lines maintain their proportions if they are resized. For example, if you enlarge the line, its width increases.

1 Click the Simple Line tool in the toolbox.

2 Click the Line Style button in the status bar. The Object Format dialog box opens.

3 Click the Line Style tab.

4 Click the Line Thickness button.

5 Select Thick as the line weight.

6 Type 2.00 in the Width box.

7 Click the Round Join button.

8 Click Apply and then Close to close the dialog box.

Moving and Duplicating Objects

In this section, you make a duplicate of the screw in the upper right portion of the drawing. Then you move each screw above its line.

1 Select the screw in the upper right corner of the drawing.

2 From the Arrange menu, point to Transform and click Move. The Transform dialog box opens.

3 Type 1 in the Copies list box.

4 Click Apply.

5 Drag the screw so that the duplicate is above the first (left) dotted line.

6 Click Close.

7 If necessary, select and drag the original screw so that it is above the second (right) dotted line.

Note

The dotted lines will appear as though they are passing through the holes on the top part of the assembly.

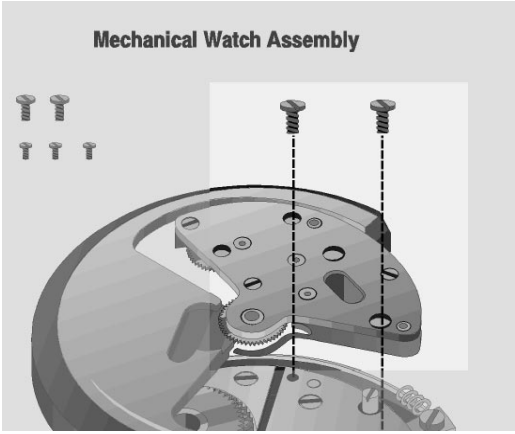
Slicing Lines

In this part you slice the lines and delete the portion that would be covered by the assembly.

To zoom in and slice the lines

1 Click the View tool in the toolbox and click the Zoom In tool.

2 Zoom in to the top right portion of the drawing by dragging the pointer over the area you want to magnify.



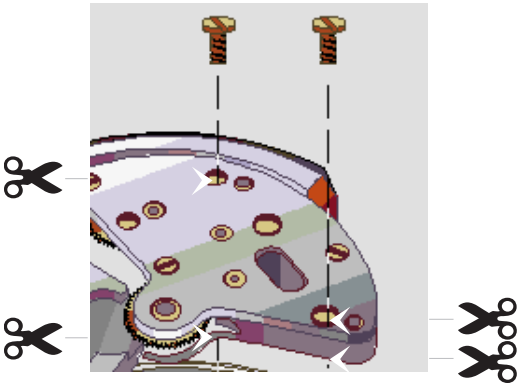
3 Select the first (left) dotted line.

4 Click the Edit tool in the toolbox.

5 Click Reshape Points from the menu.

6 Click the Cut at Point button in the ribbon.

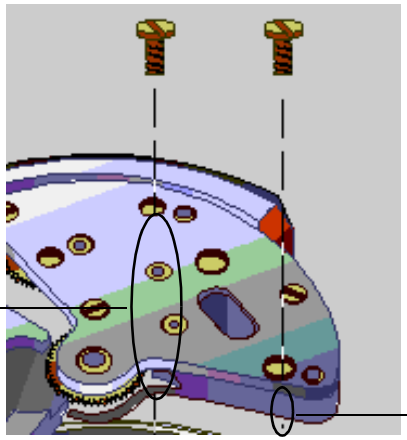
7 Drag across the dotted line where the line crosses the first hole. (See the illustration for where to cut.) The top line section is now selected.



8 Press esc to leave the reshape points mode.

9 Select the bottom section of the line and repeat step 5.

10 Drag across the dotted line where it intersects the bottom of the top assembly. The cut section is now selected.



11 Press del to delete the selected line.

12 Select the second (right) dotted line.

13 Repeat steps 4 through 9.

14 Click the View tool and click Full Page to view the entire drawing.

15 Press CTRL+S to save your work.

Showing Dimensions

In this part, you measure the width of the watch by drawing a horizontal dimension line that is as wide as the widest portion of the watch.

1 Click the Bottom Assembly layer tab at the bottom of the screen.

2 Click the Dimension tool and click the Horizontal Dimension Line button in the ribbon.

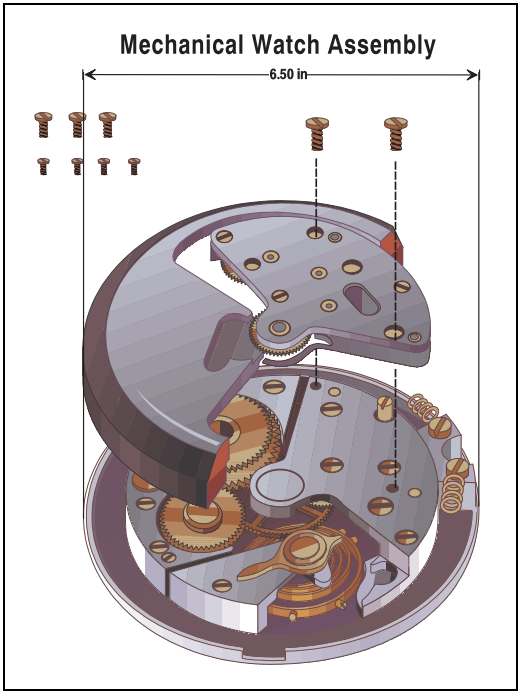
3 Click the Dimension Line Ends button in the ribbon. Choose an arrow end style that displays arrows at both ends of the line.

4 Click the Center Text button in the ribbon.

5 Point to the left edge of the bottom assembly of the watch, and press and hold the left mouse button.

6 Drag the pointer horizontally to the right edge of the bottom assembly and release the mouse button. A dimension line appears between the two points.

7 Move the mouse to the top of the drawing, just under the title, "Mechanical Watch Assembly."



8 Click the left mouse button.

9 If you make a mistake while drawing a dimension line, you can press esc to start over.

10 Press ctrl+s to save your work.

11 Assigning Names, Fields, and Values to Objects

12 You can use Designer to help keep track of the number and names of parts in a drawing. In this exercise you assign names, fields, and values to the two screws at the top of the drawing and generate a list of parts for the drawing.

13 From the File menu, click Open.

14 Navigate to the Tutorials folder and double-click WATCH9.DSF.

15 Select the large screw at the top right portion of the drawing.

16 Point to the Object menu and click Properties. The Object Properties dialog box opens.

17 In the Object Name box, type Screw.

18 Click the Fields button, select Size, and click OK.

19 In the Value area, type Large.

20 Click Apply.

21 Select a medium sized screw on the left portion of the drawing.

22 In the Object Name box, type screw.

23 In the Value area, type medium.

24 Click Apply.

Listing the Parts in a Drawing

You can list all the named objects in a drawing. You can then print the list or copy it to the Clipboard. In this exercise you view the parts list and copy it to the Clipboard.

1 From the Object menu, click List. The Object Properties List dialog box opens.

2 Click Copy to copy the list to the Clipboard, and click Close to close the Object Properties List box.

Adding a New Page

1 Click the Pages button at the bottom left of the drawing window. The Pages dialog box opens.

2 Click Add to add a second page to the drawing. The second page displays.

3 Click Close to close the Pages dialog box.

4 From the Edit menu, click Paste. The list of parts appears in the center of the page.

5 Click the Page 1 tab to return to the first page.

6 Press ctrl+s to save your work.

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