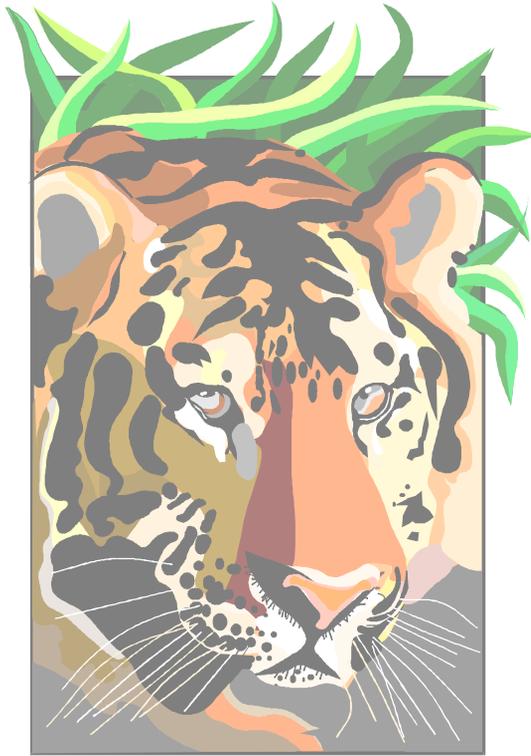


Chapter 6



The DrawPlus Window



Introduction

This chapter discusses the various elements which make up the DrawPlus Window.

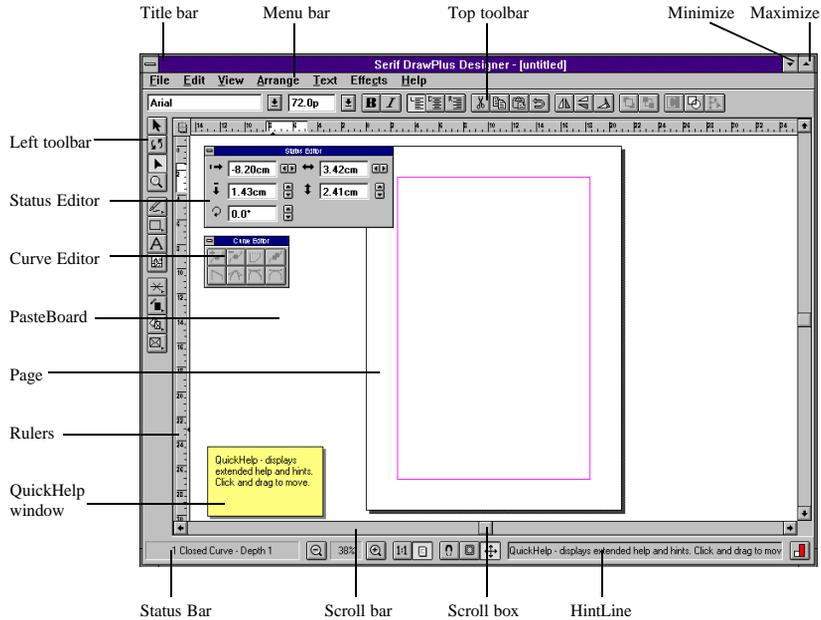
We start with *What's it Called?*, which shows annotated illustrations which form a reference of the terminology used when referring to the different elements of the Drawplus user interface. The illustrations show Drawplus operating at Designer Level.

It's worth remembering that if you have ToolHints switched on, you can always get help on screen elements and what they are called by moving the mouse over the element and pausing.

What's it called? is followed by a detailed description of all the elements, their purpose and how to use them. This includes details of standard windows elements, the page and pasteboard, rulers and guides, the top and left toolbars, and the Status and Curve Editors.

What's it called?

The DrawPlus window



Hints and tips

Several DrawPlus window elements are used as help in understanding other window elements. The learning aids can all be switched on or off by using the **View/Preferences/Ease of Use...** dialog.

Tool Hints

ToolHints provide a one or two word description of the screen element under the mouse cursor. They appear if the mouse pauses over a button and are very useful for reminding you of the use of that button.

The HintLine

The HintLine is part of the Status Bar, at the bottom right of the main window. It provides a short description of the purpose of the screen element under the mouse cursor. Click on the HintLine to show and hide the QuickHelp window.

The QuickHelp Window

The yellow QuickHelp window provides a longer description of the screen element under the mouse cursor.

To show QuickHelp, click on the HintLine in the Status Bar. To move it to a more convenient location on the screen, drag it with the mouse. To hide it, either click on it or click on the HintLine again.

Event Tips

Event Tips are helpful messages which appear when you first perform some specific operation. For example, the first time you create a QuickShape, DrawPlus displays an Event Tip which explains about adjusting the shape with the Node tool.

Normally each Event Tip only appears once. You can reset them with the "Reset tips" button in the **Views/Preferences/Ease of Use...** dialog, so that they appear again.

Double-click and right-click

Most window elements in DrawPlus do something when you double-click or when you click with the right mouse button with the mouse over them. Usually a dialog appears which gives you control of some aspect of the element's behavior. For example, right-clicking on the Zoom tool button brings up the Change Zoom dialog. Right-clicking on an object displays a popup menu to do with that object.

Standard Windows elements

Some elements, such as the menu bar of the Drawplus window are standard to virtually all Windows applications.

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In brief, you can use the menus, title bar, maximize and minimize buttons and scroll bars as you would with any other Windows application. For an explanation of the general operation of these elements, refer to your *Microsoft Windows User's Guide* or run **Help/Windows Tutorial** from within the Program Manager window.

The rest of this section covers Drawplus specific details related to the standard Windows elements of the Drawplus screen.

Title bar

The Title bar will show you the current Drawplus working level and the name of the drawing being edited. For example, if you are working on a drawing called "MYWORK.DPP" and working at Designer Level, the Title bar would display, "Serif Drawplus Designer - MYWORK.DPP".

If the current drawing is new and has not yet been saved to disk, the name will be shown as "UNTITLED".

You can hide the Title bar as part of the **CleanUp** button settings.

Menu bar

The Menu bar contains the main Drawplus menus. These work in the usual way and can be accessed by clicking or dragging on a menu entry. See *The Drawplus Menus* chapter for details of the operation of each of the menu options.

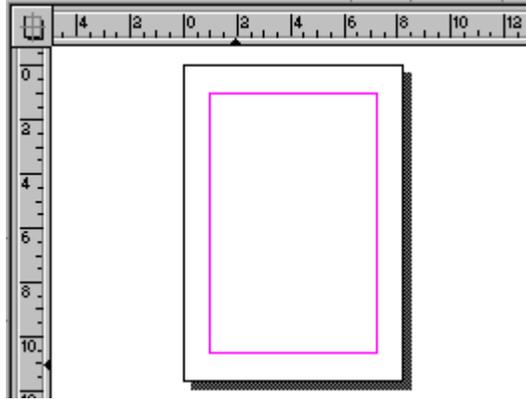
Remember, QuickHelp or the HintLine will display information about a highlighted menu option.

You can hide the menu bar as part of the **CleanUp** button settings.

Scroll bars

The scroll bars are used to navigate around the current page and the pasteboard. The scroll bars can be shown or hidden using **View/Preferences/General...** or as part of the **CleanUp** button settings.

The Page and Pasteboard Area



Most of the DrawPlus display is taken up by a "page" area and a surrounding "pasteboard" area.

The page area is where you create your drawing and is the area that will print. The pasteboard area is where you generally keep the Curve and Status Editors, and any text, curves and shapes which are being prepared or waiting to be positioned on to the drawing you are working on.

This page and pasteboard arrangement is very convenient. In fact, it is an electronic equivalent of the system used by traditional graphic designers: they kept design tools and bits of text and graphics on a large pasteboard, and then carefully pasted final arrangements of text and graphics onto a page pinned down in the middle of the pasteboard.

The maximum page size that Drawplus can handle is 22" x 22". In reality, you're likely to be limited to a far smaller size due to the capabilities of your desktop printer.

Views

The page and pasteboard may be viewed at any zoom level between 5% and 1000%. Generally the page and pasteboard will not fit on screen, so you will only see a portion at any one time.

Use the scroll bars to change the view area in order to see other parts of the page or pasteboard. Alternatively, use AutoScroll. To AutoScroll, hold the mouse button down on the page and drag off the edge of the window. DrawPlus will scroll the window to try to follow the mouse.

AutoScroll can be switched on or off from the **Views/Preferences/General...** dialog.

Reduce the zoom to bring a larger portion of the page and pasteboard into view. Increase the zoom to see an area in more detail. **View/Fit Page** tells Drawplus to automatically set the zoom so the whole page area can be seen. This is the view normally chosen when an "overview" of the page is required. Use the **CleanUp** button to remove other screen items to give a clean, uncluttered view.

To sum up, the view can be controlled in several ways:

- Using the **View** menu options.
- Using the Zoom area on the Status Bar
- Using the Zoom tool on the left toolbar
- Using the Scroll bars
- Using AutoScroll.

Popup Menus

If you click with the right-mouse button on the page or pasteboard area, DrawPlus brings up a short popup menu which will be specific to the object you clicked on, or to the page itself. Popup menus are often more convenient than the main menu bar, because they appear directly where you are working. They're especially useful when you have the menu bar turned off with the Clean Up view.

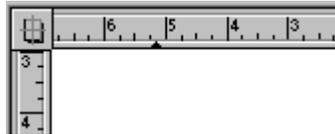
See the *DrawPlus Menu* section of this manual for more discussion of menu commands.

Layout Tools

Drawplus includes comprehensive layout tools for aiding the page design and make-up process. These tools provide help in achieving consistent sizing and positioning of objects as well as acting as visual guidelines.

The tools are covered in four areas: Rulers, Guides, the Layout Grid and Snapping.

The Rulers



The DrawPlus rulers mimic the T-square used by the paste-up artist. They have several purposes:

- To act as a measuring tool.
- To define a snap grid.
- To define a layout grid.
- To create guides for aligning and snapping.

The following section covers the technical details of rulers.

Ruler units

You can change the basic measurement unit used by the rulers by using **View/Preferences/General...**

The rulers have labeled graduation marks consistent with the ruler measurement units. The actual interval size of the ruler marks depends upon the current zoom. Drawplus selects sensible increments for the ruler marks. To handle work where you want finer control or smaller snapping increments, you should increase the view zoom.

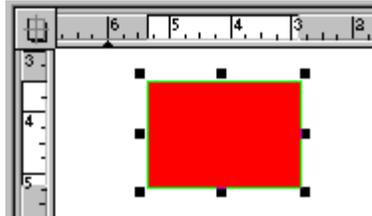
Changing the ruler origin

By default, rulers measure from the top left corner of the page, but you can change this by dragging on the ruler intersection.

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Double-click on the ruler intersection and the rulers will set the origin to the top left hand corner of the currently selected object. Double-clicking a second time on the intersection will reset the origin back to top left corner of the page.

Rulers as a measuring tool



The most obvious role for Rulers is as a measuring tool. As you move the mouse pointer, ruler markers track the current position of the mouse on the horizontal and vertical rulers.

When an object on the page or pasteboard is selected, a highlight appears in each ruler, corresponding to the size of the selected object.

Ruler layout grid

The rulers define a visible layout grid, which matches the ruler marks displayed. The larger the view zoom, the finer the layout grid. The display of the grid can be switched on or off using **View/Show Grid**. This grid does not effect snapping and is purely for use as a visual guide.

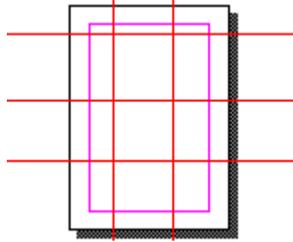
Ruler snap grid

The rulers define an invisible snap grid, matching the ruler marks displayed. The larger the view zoom, the finer the ruler snap grid. See the *Snapping* topic below for further details.

Creating ruler guides

Drawplus allows you to setup horizontal and vertical ruler guides to assist page makeup. Ruler guides are created by clicking or dragging on the rulers over the page area. See the *Guides* topic below for further details.

Guides



Guides are displayed as colored lines, but they do not appear on your printed page or exported drawings. They are useful as a visual reference and as snapping guides to aid alignment of objects. There are two types of guides, ruler guides and page margin guides.

Creating guides

To set up page margin guides, select **File/Page Setup...**

To create ruler guides, move the mouse over one of the rulers and click, or click and drag.

Moving and deleting guides

To move ruler guides, select the Pointer tool and then drag the guide. You do not select guides before moving as you do with objects. Instead, check that Drawplus displays the guide movement cursor and then drag.

If Drawplus does not display the guide movement cursor, it may be because the mouse is over a selected object.

To delete ruler guides simply drag them off the window altogether. To delete page margin guides, set the margins to zero in **File/Page Setup...**

Snapping

Typically when creating a drawing, you will first define your page structure, consisting of the basic page geometry and ruler guides to mark positions of key elements. This basic structure indicates where objects are to be placed.

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Drawplus helps ensure that objects conform to the page geometry by providing snapping. When snapping is on, an object being moved, sized or created, jumps to the nearest snap position.

Using snapping

Use **View/Snapping** or the **Snap on/off** shortcut button of the Status Bar to switch snapping on or off.

When snapping is on, an object being moved, sized or created, snaps using the currently displayed layout tools which form a snapping grid. The snapping grid can be made up of:

- Ruler increments
- Ruler guides
- Page margins

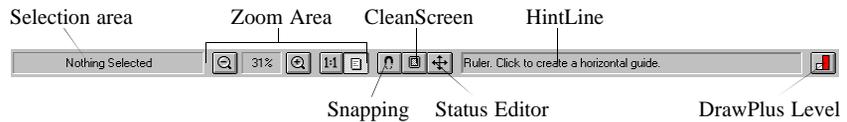
To snap to page margins only, for example, use the **View** menu to turn off the display of guides and rulers.

In order for objects to snap to guides, the objects must be close to the guide. The rule is that if an object is moved to within two ruler increments of a guide, it will snap to it.

Snapping occurs as an object is dragged, not when the object is released and will occur when:

- Moving an object
The handle nearest the mouse pointer will snap as the object is moved.
- Sizing an object
The handle being dragged to alter the size of the object will snap as the handle is moved.
- Creating an object
Both the start point and the end points of the drag will snap.

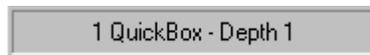
The Status Bar



The Status Bar provides a powerful array of shortcuts and functions, from left to right they are:

- Selection area
- Zoom area
- Shortcut buttons
- HintLine
- DrawPlus Level button

Selection area



This shows the number of objects in the current selection or, if only one object is selected, the name of the selected object and its depth. By depth we mean its layering number. The lower the layering number, the closer to the top the object is. An object with a lower depth will obscure an object with a higher depth number, when the two objects overlap. You can change an object's depth by using the options in the **Arrange** menu or the shortcut button on the top toolbar.

Double-clicking on the Selection area is a shortcut for **Edit/Select All**. If you hold the **SHIFT** key down while you double click, DrawPlus will select all objects with the same type as the currently selected object and ignore the others.

Zoom area



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The center of the Zoom area displays the current view zoom percentage. Clicking on this area brings up the Custom Zoom dialog, through which you can enter any value up to 1000% for the current zoom.

On the left of the zoom area is the **Zoom Out** button. Click on the **Zoom Out** button to reduce the current zoom to approximately two thirds of its current value.

To the right of the current zoom value display is the **Zoom In** button. Click on the **Zoom In** button to increase the current zoom by approximately half.

To the right of the **Zoom Up** button are two shortcuts for the most often used zooms: **View/Actual Size** and **View/Fit Page**.

Snapping button

The **Snapping** button, in the center of the Status Bar, toggles snapping between on and off. It is a shortcut for **View/Snapping**.

CleanUp button

The **CleanUp button**, also in the center of the Status Bar, toggles between normal view and your preferred CleanUp view. Click to switch between normal and Clean Up views. Double-click to set the screen elements to be hidden by CleanUp view.

If you use CleanUp view with the menu bar hidden, remember that many menu commands are accessible by clicking with the right mouse button. If you hide the scroll bars, remember that you can use AutoScroll.

Status Editor button

The **Status Editor** button displays the Status Editor "floating" dialog, which you can use to set the size, position and rotation of the currently selected object by entering numerical values. This allows exact values to be entered in 0.01 inch and 0.1 degree increments.

HintLine



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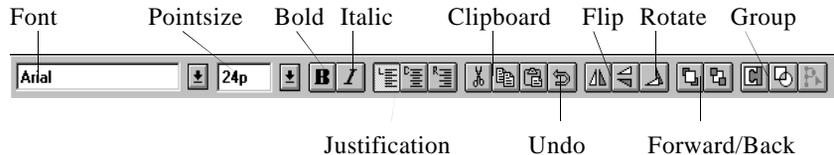
The right side of the Status Bar provides several functions:

- HintLine
The HintLine displays helpful information about the screen element under the cursor. Watch as you move the mouse cursor over the menu bar, rulers, Status Bar and Toolbars. Clicking on the HintLine switches QuickHelp on and off.
- Object and cursor position
When the cursor is over the page and pasteboard area, the HintLine is used to display information about the cursor position and about the size and position of any selected object.
- QuickShape handle information
When the mouse cursor is over a QuickShape handle, the HintLine area displays information about the handle.
- Progress bar
Drawplus displays a progress bar when performing time consuming operations such as importing.

Drawplus Level button

The **Drawplus Level** button allows you to switch between the two working levels of Drawplus. The two working levels of Drawplus are Intro and Designer.

The Top Toolbar



The top toolbar provides a variety of mouse driven shortcut buttons to make working with objects easier. It can be hidden as part of the **CleanUp** button settings.

Text font 

This drop-down combobox provides a quick way to change the font of selected text objects. It lists the available fonts, and displays the font name of the currently selected text object.

DrawPlus can use TrueType fonts and Adobe Type Manager fonts (if you have ATM V1.1 or higher). Other fonts will not be used by DrawPlus.

Text size 

This drop-down combobox provides a quick way to change the size of selected text objects. The size of the text is specified in points (72 points = 1 inch). You can type the size directly into the combobox.

Bold and Italic 

These two buttons set the **Bold** and *Italic* styles on and off for selected text objects. They are shortcuts for the **Text/Bold** and **Text/Italic** menu commands.

Double-click or right-click on them to get the **Text/Font...** dialog, which controls all text attributes.

Left, Center, Right 

These three buttons are shortcuts for the **Text/Left**, **Text/Center** and **Text/Right** alignment commands. Double-click or right-click on them to get the **Text/Font...** dialog, which controls all text attributes.

Cut, Copy and Paste 

These three buttons are shortcuts for the **Edit/Cut**, **Edit/Copy** and **Edit/Paste** clipboard commands.

Undo 

This button is a shortcut for the **Edit/Undo** command. Double-click or right-click on it to change the maximum number of undo levels.

Flip

These two buttons are shortcuts for the **Effects/Flip Horizontal** and **Effects/Flip Vertical** commands. They turn the current selection into its mirror image. For example, **Flip Horizontal** would make a "b" look like a "d". **Flip Vertical** would make a "b" look like a "p".

Rotate

This button is a shortcut for the **Effects/Rotate/90°** command. It rotates the currently selected objects through a right-angle. You can also rotate objects by using the Status Editor, the Rotate tool and the menus.

Forward One, Back One

These two buttons are shortcuts for the **Arrange/Forward One** and **Arrange/Back One** commands. They control which objects are drawn on top of which other objects for overlapping objects. DrawPlus shows the depth of the selected object in the **Selection Area** of the Status Bar. Objects with low depth values are drawn after objects with higher depth values.

Forward One moves the selected object forward one layer.

Double-clicking on this button is a shortcut for **Arrange/Bring To Front**; it makes the object cover all other objects in the drawing. **Back One** moves the object back one layer. Double-clicking on this button is a shortcut for **Arrange/Send To Back**; all other objects will cover the selected one.

Group

This button is a shortcut for the **Arrange/Group** and **Arrange/Ungroup** commands. If the current selection is not a group it acts as **Arrange/Group**, if the current selection is a group it acts as **Arrange/Ungroup**.

Use Group if you want to lock the selected objects together so that they select, move and resize as a unit.

Combine

This button is a shortcut for the **Arrange/Combine** and **Arrange/Break Apart** commands. If the current selection is not a combination it acts as **Arrange/Combine**, if the current selection is a combination it acts as **Arrange/Break Apart**.

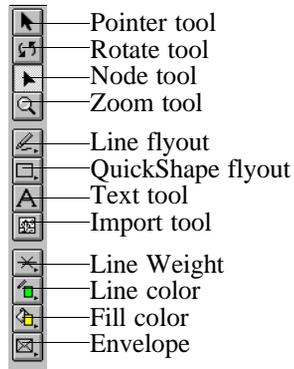
Combine joins objects together so that they have a single outline and interior. This means that "holes" appear where they overlap, where other objects can show through from underneath.

Convert to curves

This button is a shortcut for the **Effects/Convert to Curves** command.

Once an object has been converted into curves, its outlines can be edited with the Node tool.

The Left Toolbar



Using the left toolbar

The left toolbar provides a variety of mouse driven "tools" for creating, selecting and directly manipulating text, lines and shapes.

To select a tool, ready for use, click on the button representing the tool you require. Look at QuickHelp, the HintLine or use ToolHints to help

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you to recognize the tools. Some of the tool buttons have flyouts which provide a palette of tools that appear if you click and hold the mouse button down.

When you select a tool, its button remains down. When you move the mouse cursor over the page or pasteboard area the cursor display will change to remind you of the currently selected tool. Drawplus will respond to click, double-click, and drag, as appropriate for the currently selected tool.

The object creation tools will automatically be deselected, and the Pointer or Node tool reselected, after the object has been created on the page or pasteboard. To create multiple objects without needing to reselect the tool, hold the **SHIFT** key down when selecting the tool.

The F5 key will cycle through the Pointer tool, Node tool and the previously selected creation tool.

The left toolbar can be hidden as part of the **CleanUp** button settings.

Using flyouts

Several of the buttons on the left toolbar contain *flyouts* - palettes of tools or colors that appear only when the tool is clicked. You can tell which buttons have flyouts by looking for the little chevrons in the bottom right corner of the buttons.

The button's appearance reflects which of the tools in the flyout was last selected.

There are four ways to select a different tool from a flyout:

- Click on the flyout button and drag the mouse out over the required tool. The flyout will appear when you drag the mouse off the right side of the flyout, and disappear when you release it.
- Click on the flyout button and hold the mouse button down for a moment. The flyout will appear after a brief pause. You can then release the mouse and the flyout will remain visible, allowing you to select a tool with a second click.
- If the flyout button is already down when you click on it, the flyout will appear immediately.

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- The flyouts for color and line weight appear as soon as you click on them.

If a flyout appears when you don't want it to, you can remove it by clicking on another tool.

Pointer tool

The Pointer tool has five functions:

- Selecting objects.
- Moving objects.
- Copying objects.
- Resizing objects.
- Creating and moving ruler guides.

Selecting Objects

When you create an object it remains selected. If you want to work on existing objects, you must first select them.

Selected objects are shown by a small hollow handle. The whole selection is indicated by eight small black handles called *selection* handles. The selection handles allow you to stretch and size selected objects.

Selecting a single object

You can select a single object by clicking on it with the Pointer tool. If the object has a fill, then you can click anywhere on it. If the object has no fill (i.e. only an outline) then you must click on the object's outline to select it.

Where objects overlap, you can select the underneath object by clicking repeatedly. DrawPlus selects a different overlapping object with each click.

Selecting several objects at once

If the current selection is a multiple selection, most commands will affect all of the objects in the selection.

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You can create a multiple selection by dragging out a rectangle known as a marquee select, with the Pointer tool. All objects completely enclosed by the marquee select will be included in the selection.

Another way is to add objects to a multiple selection, one at a time, by holding down **SHIFT** while clicking on the objects to be selected.

These selections are temporary; if you select some other object the multiple selection is "lost" and the new object selected. You can group objects together permanently by using **Arrange/Group** or the **Group** shortcut button in the top toolbar.

You can create a multiple selection containing all objects in the drawing by using **Edit/Select All** or by double-clicking on the Selection area of the Status Bar.

Adding to and removing from a multiple selection

To add an object, hold the **SHIFT** key down and click on the object to be added.

To remove an object, hold the **SHIFT** key down and click on the object to be removed.

Deselecting objects

To deselect objects, click on a blank area of the page or pasteboard.

Moving Objects

To move selected objects, drag the mouse over one of the objects avoiding the selection handles.

While moving a selection DrawPlus displays a four-headed arrow cursor, and an outline of the selection. If you pause, before moving the mouse, a full representation of the objects will be displayed as they are moved.

Constraining a move operation

When you move a selection, you can constrain the movement to be vertical or horizontal, by holding down the **SHIFT** key while moving. If you start moving horizontally, then movement is constrained to left and right only. If you start moving vertically, then movement is constrained to up and down only.

Copying objects

Copying is done in the same way as moving, except that you hold down the `CONTROL` key when you start the drag. You can release the key any time after you start dragging.

Sizing Objects

To size a selection, move the mouse cursor over one of the selection handles and drag.

The top and bottom handles allow the selection to be stretched in the vertical direction, the left and right handles allow the selection to be stretched in the horizontal direction and the corner handles allows the selection to be resized.

Constraining a size operation

Hold down the `SHIFT` key while dragging the corner handles to constrain the selection to be "regular" in a way dependent on the object. For example an oval would be constrained to a circle.

Hold down the `CONTROL` key while dragging the handles to constrain the selection to maintain its current aspect ratio.

Creating and moving ruler guides

See the *Layout Tools* section of this chapter for details on creating and moving ruler guides with the Pointer tool.

Rotate tool

The Rotate tool is used in two ways:

- To rotate objects.
- To shear objects

The objects must be selected before you can rotate or shear them. You can select and move objects with the Rotate tool in the same way as the Pointer tool. The Rotate tool indicates the current selection by displaying *rotate* handles on the corners of the selection, and shear handles at the

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top, bottom and sides of the selection. The mouse cursor will change to a rotate or shear icon if you are over any of these handles.

By default DrawPlus rotates the selection around its center, which is marked by a handle which looks like a cross inside a circle.

Rotating a selection

To rotate a selection, click on one of the corner handles and drag the handle in the direction you wish to rotate. An outline represents the selection you are rotating. The angle of rotation is shown in the HintLine.

Holding down the **SHIFT** key while dragging will constrain the angle to 15 degree increments.

When the selection is rotated to its correct position, release the mouse button.

Unrotating a selection

Double-click with the Rotate tool to unrotate a rotated object. Double-click a second time to restore the previous rotation.

Changing the center of rotation

To rotate around a point other than the center of the selection, click on the center handle and drag the handle to a new position.

Shearing a selection

To shear a selection, click on one of the shear handles and drag the handle in the direction you wish to shear. An outline represents the selection you are shearing, and the HintLine will show the shear percentage.

When the selection is sheared to its new shape, release the mouse button.

Node tool

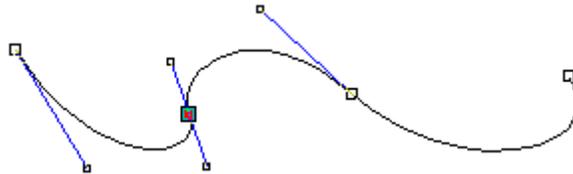
With the Node tool you can manipulate the shape of objects by dragging on the object's control nodes:

- Lines can be reshaped and the corners made sharp or smooth.
- QuickShapes can be adjusted.

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- Tracking and leading of text can be adjusted.
 - Text can be edited.
 - Objects can be reshaped (once converted to curves).
 - Envelopes can be reshaped.

The Node tool can also select and move objects, in the same way as the Pointer tool. Objects must be selected before the Node tool can manipulate them. The currently selected object is shown displaying control nodes. Only single objects can be manipulated with the Node tool.

Lines and closed shapes



A line object in DrawPlus is made up of line segments that meet at *corner* nodes. The line segments can be straight or curved, and the corner nodes can be smooth or sharp. Curved line segments have *attractor* nodes which influence their shape. If the line forms a complete shape outline, it is known as a closed shape.

When a line is selected with the Node tool, the Curve Editor appears. You use the Curve Editor to change the type of corner node, and to close or open shapes. The Curve Editor is explained in more detail later in this chapter.

The Node tool is used on lines in three ways:

- To select corner nodes.
- To reshape the line.
- To close lines to create closed shapes.
- To select points where the Curve Editor can add new corner nodes.

Selecting corner nodes

When a line or closed shape is selected with the Node tool, the Node tool draws node handles at every corner node. You select a corner node by clicking on it with the Node tool. The selected node is drawn slightly larger and is given a red center to identify it. You can reshape the object by dragging the node handles.

If the selected node is a smooth corner node, the Node tool will draw handles for the attractor nodes. Attractor handles control the shape of the curved line segment. They are drawn as smaller hollow handles attached to the corner nodes by a blue line.

Reshaping the line or closed shape

You reshape lines by dragging corner and attractor node handles. Corner node handles move their corner directly; they're very straightforward. Attractor node handles exert a more subtle influence over the curve. They act as magnets, pulling their line segment into shape. This is easier to do than to explain, so try it and see.

If you hold the `SHIFT` key down while you drag, the handle is constrained to only move in the horizontal or vertical direction.

Creating closed shapes

You can create a closed shape by dragging one end control node over the other. The mouse cursor changes when the two nodes are dragged near enough together, to reflect that dropping in that position will make a closed shape.

Adding new corner nodes

To add a new corner node, click on the line where you want the corner to be. You will notice a red marker appear on the line at that point. Then click on the **Add Node to Curve** button in the Curve Editor.

QuickShapes



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When a QuickShape is selected with the Node tool, handles appear which control the QuickShape's appearance. Different QuickShapes have different handles, according to their nature. For example, the QuickArrow shapes can adjust the appearance of their arrow-heads. To see what the handles for a particular QuickShape do, move the Node tool over the handle and look at the HintLine.

To alter the appearance of a QuickShape, click and drag on its handles. Each QuickShape will change in a different way. For example, dragging the handles on a QuickPolygon will change the number of sides to make a triangle, pentagon, hexagon or other polygon. Dragging the handles on a QuickBox alters the box corners to make them more or less rounded. Dragging the handles of a QuickOval will alter the oval into a "pie" shape.

Text



When a text object is selected with the Node tool, two handles appear which allow the leading (line spacing) and tracking (letter spacing) to be visually altered by dragging on the handles. To alter the text leading, drag the bottom left handle. You will need at least two lines of text to see any effect. If you want to set the leading to an exact percentage, use the **Text/Leading** menu command.

To alter the text tracking, drag the bottom right handle. If you want to set the tracking to an exact percentage, use the **Text/Tracking** menu command.

If you want greater control over the shape of the characters for the text, try converting it into curves. As curves, you can position every character individually and even edit the character shapes, exactly as if you had drawn the character shapes by hand using the Line tools. See **Effects/Convert to Curves** or the **Convert to Curves** shortcut button in the top toolbar for more information.

Double-clicking on text with the Node tool allows the text to be edited in the Text Edit window.

Envelopes

You can use the Node tool to edit an enveloped object outline and thus alter the warp effect. It is very similar to editing curved lines. The envelope outline has corner nodes and attractor nodes which are selected and dragged in the same way. The only difference is that you cannot add or delete corner nodes to an envelope. Envelopes always have exactly eight line segments, two on each side.

Zoom tool

The zoom tool allows you to change the magnification of your current view. You can use it in five different ways:

- Click on the screen. This has the same effect as clicking on the **Zoom In** button in the Status Bar, except that it also scrolls the view so that the position at which you clicked is now in the center of the screen.
- Click on the screen while holding down the shift key. This has the same effect as clicking on the **Zoom Out** button in the status bar.
- Drag to fill the screen with the dragged area.
- Drag while holding down the **SHIFT** key to fill the dragged area with the current screen, hence decreasing the magnification.
- Double click with the Zoom tool to toggle the magnification between the fit-page view and the last view used.

The range of magnification available is 5% to 1000%.

You can also change zooms without selecting the tool, by using the Zoom area of the Status Bar and the commands in the **View** menu.

Line flyout

The Line flyout contains three tools for drawing lines and closed shapes.

- The Freehand line tool.
- The Straight line tool.
- The Curved line tool.

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A line in DrawPlus is made of a number of line segments joined together by corner nodes. If the line forms a complete outline, then it is known as a closed shape. Once you've drawn a line or closed shape, you can reshape it by dragging the corner nodes with the Node tool.

A closed shape has an interior which can be filled with color; open lines just have line weight and line color. You can create a closed shape by drawing a line which has its end point over its start point, or by using the Curve Editor (see later in this chapter).

You can extend existing lines by first selecting them (with the Pointer or Node tool), then drawing a line which start at one of the existing line's end points. The end points will show as square handles and the cursor will change as the mouse moves over them, to show that the existing line will be added to.

Freehand Line tool

Use the Freehand Line tool to sketch lines in a freeform way. Select the tool, move the mouse over the page area and drag to draw. The curve will follow your mouse movements. When you release the mouse button the Freehand Line tool will automatically smooth out the line and insert a minimal number of corner nodes.

If you want to extend an existing line, start your drag at an end point of an existing line.

If snapping is switched on, the Freehand Line tool produces horizontal, vertical and diagonal straight line segments as opposed to a mixture of curved and straight line segments.

Straight Line tool

Use the Straight Line tool to create straight line segments. Select the tool and drag on the page. A straight line between the points where the drag started and ended is created. If you want to extend an existing line, start your drag at one of the existing line's end points.

Hold the **SHIFT** key down while dragging to constrain the angle of the created line to 15 degree increments. This is an easy way to make exactly vertical or horizontal lines.

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Curved Line tool

Use the Curved Line tool to draw a mixture of large, sweeping curves and straight line segments. This tool is unlike the others, in that the drawing happens between mouse clicks rather than when the mouse is being dragged.

To start drawing, click on the page where you want the line to start. If you want to extend an existing line, start the line at an existing line's end point. Now every following mouse click will add another line segment. If you want the segment to be curved, hold the mouse down while you click and drag out an *attractor* node. Attractor nodes act as magnets, pulling the curve into shape. If you want the segment to be straight, just click without dragging.

QuickShape flyout



QuickShapes are pre-designed objects, provided by DrawPlus to save you time. The QuickShape flyout contains a wide variety of commonly used shapes, including boxes, ovals, arrows, polygons and stars. QuickShapes have some intelligence and can be reshaped by the Node tool.

To create a QuickShape, select a shape from the flyout and then drag over the page. The QuickShape fills the area you drag. When you release the mouse button, the QuickShape tool reverts to the Node tool, ready for the shape to be altered by dragging on its handles.

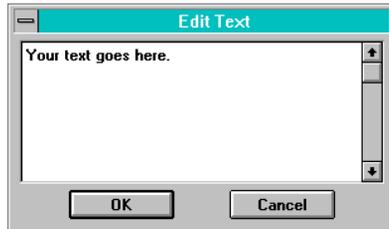
Text tool

Select the Text tool to create or edit text. Click on the page to create text at the current default pointsize or drag out an area to create text which will be automatically sized to the area dragged. The text font, style, line

color, line weight and fill color will all be set to the defaults at the time when the text is created.

To edit existing text, double click on it with the Node or Pointer tool. This will bring up the Text Edit window with the text ready for editing.

Text Edit Window



Click in the Text Edit window and type your text. You can use all the normal Windows editing keys, including cut and paste from the clipboard. Remember that DrawPlus does not word wrap text, if you want multiple lines of text in a text object, use the **ENTER** key to start new lines where desired in the Text Edit window. When you've finished click on the **OK** button or press **ALT+ENTER**. You can abandon the text entry or editing by clicking on the **Cancel** button or pressing **ESC**.

Clipboard

Here is a reminder of the standard Windows keys for cutting and pasting text from the clipboard. There are two alternatives for each operation.

SHIFT+DEL	CONTROL+X	Cut to clipboard
CONTROL+INS	CONTROL+C	Copy to clipboard
SHIFT+INS	CONTROL+V	Paste from clipboard

Bullets and special characters

A number of special characters are available via mnemonic keyboard shortcuts as shown in the table below. You must make sure the font in use has the required character - use the character map utility in the Program Manager *Accessories group* if you need to check the contents of a font. Due to windows font limitations some of the special characters will display as little bars in the text entry window but the page display will be correct.

CONTROL+ALT+.	•	Bullet
CONTROL+ALT+\	†	Dagger
CONTROL+ALT+/ CONTROL+ALT+-	‡	Double dagger
CONTROL+ALT+C	—	Em-rule
CONTROL+ALT+R	©	Copyright symbol
CONTROL+ALT+T	®	Registered symbol
CONTROL+ALT+(™	Trademark symbol
CONTROL+ALT+)	'	Single open quote
CONTROL+ALT+['	Single close quote
CONTROL+ALT+]	"	Double open quote
	"	Double close quote

Pressing ENTER in the text entry window starts a new line of text.

Import tool

Use the Import tool to import other pictures into your drawing.

Single-click to import Art & Borders pictures. This is a shortcut for **File/Import Picture/Art&Borders...**

Double-click to import other pictures. This is a shortcut for **File/Import Picture/Other....**

Either way, after choosing the desired picture, press **OK**. The dialog will disappear and the mouse pointer changes to the picture paste cursor. Click to drop the picture at its natural size or drag to set the size. If you hold down the **SHIFT** key while dragging, then the area will be constrained to the aspect ratio of the imported picture.

The imported picture is placed on the page as a permanent group. To alter the component objects which make up the picture, first ungroup it.

Line weight

Use this flyout button to set the weight (or thickness) of outlines for the current selection. The first entry in the flyout palette switch outlines off, the second selects "hairline" which is the thinnest line your printer can draw, and the others set various different line weights.

If the weight you require isn't in the flyout, double-click or right-click, on the **Line Weight** button. This brings up a dialog which allows you to set

any line weight. The new weight will be stored in the last entry of the flyout.

The Outline weight button is a shortcut for the **Effects/Line weight** command.

Line color

Use this flyout button to set the color of lines in the current selection. The flyout contains a palette of around forty commonly used colors.

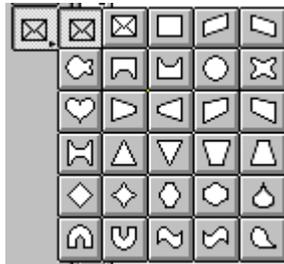
If you need a color which isn't in the palette, double-click or right-click, on the **Line Color** button to bring up the color dialog. This is a shortcut for **Effects/Edit Line Color...** The new color will be added to the flyout palette so that you can use it again in future.

Fill color

Use this flyout button to control the fill color of text, QuickShapes and closed curves. The first entry in the flyout palette switches the fill off, so that you just see the object outline. The other palette entries are a mixture of solid fills, linear fills and radial fills.

If you need a fill which isn't in the flyout, for example a custom radial fill, double-click or right-click on the **Fill Color** button. This brings up a dialog which is a combination of the **Effects/Edit Fill Color** dialogs. It has some extra "Fill Type" buttons which select between no fill, solid fill, linear fill and radial fill. See **Effects/Edit Fill Color** for more details. The new color will be added to the flyout palette so that you can use it again in future.

Envelope



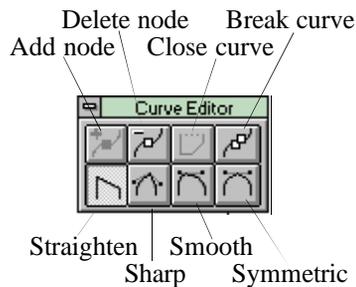
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This flyout button applies an envelope to the current selection. An envelope is a shape with an editable outline made up of curves. Envelopes are used as boundaries into which objects are stretched or squeezed. This can produce interesting effects. For example, you can use envelopes to bend text into a heart or just about any other shape.

To apply an envelope, first select the object or objects you want to be enveloped. Then click on the **Envelope** button and select an envelope from the flyout. The first palette entry removes an existing envelope from the selected object, a shortcut for **Effects/Remove Envelope**. The second palette entry is a "store" of the most recently selected "user" modified envelope. The third creates a plain envelope, which is used as a base for creating new envelopes. The rest of the palette is filled with predefined envelopes of various shapes.

When an envelope is applied to an object or multiple selection, a single envelope object is created. This object behaves in a similar manner to a permanent group, allowing most normal object operations to be used. DrawPlus selects the Node tool automatically when an envelope is applied.

The Curve Editor



The Curve Editor is a floating dialog which appears when you have a line, closed shape or envelope selected with the Node tool. It has a variety of uses:

- Adding and deleting corner nodes.
- Closing shapes and breaking them open.

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- Changing line segments from straight to curved (and vice-versa).
 - Changing corner nodes from sharp to smooth (and vice-versa).

The Curve Editor works in combination with the Node tool. Select the corner node or point on the line or closed shape which is to be affected by the Curve Editor and then use the buttons on the Curve Editor. If all the Curve Editor's buttons are grayed out, you need to select a part of the line or shape to work on.

You can move the Curve Editor to a more convenient place on the screen by dragging on its title bar. You can hide it altogether by clicking on its **Close** button, to the left of its title.

Adding corner nodes

The more corner nodes there are on a line or closed shape, the more control over its shape you have. To add a corner node, click with the Node tool at the point where you want the new node to appear and select the **Add Node** button. The new node will be created and selected, complete with attractor nodes if they are necessary. You can now use the Node tool to reposition the nodes, and reshape the line or closed shape, by dragging on the new handles.

You cannot add or delete corner nodes to an envelope, envelopes have a fixed number of line segments.

Deleting corner nodes

Deleting corner nodes makes the line or closed shape simpler. Click on the corner node you want to delete with the Node tool, so that it is selected, then use the **Delete Node** button of the Curve Editor. The node will be deleted, along with any associated attractor nodes, and the line or closed shape will jump to its new shape.

You cannot add or delete corner nodes to an envelope, envelopes have a fixed number of line segments.

Closing and breaking open closed shapes

Closed shapes have an interior which can be filled. Lines only have a line color and line weight.

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You can create a closed shape by using one of the line tools to connect the start and end points of an existing line. The **Close Curve** button on the Curve Editor automatically draws this line for you.

Before breaking open a closed curve, you must select the corner node where you want the break to be. Then select the **Break Curve** button. The closed shape will become a line, and the selected node will be split into two nodes, one at each end of the line.

You cannot break open envelopes, envelopes are always closed shapes.

Changing line segments and corner types

Line segments can be straight or curved. If they are curved, they can join other line segments at corners which are either sharp, smooth or symmetric. Symmetric means that the line has the same slope and shape on both sides of the corner node. Smooth means that the slope of the line is the same on both sides of the corner node, but the shape can be different. Sharp means that the lines either side of the node are completely independent so that the corner can be quite pointed.

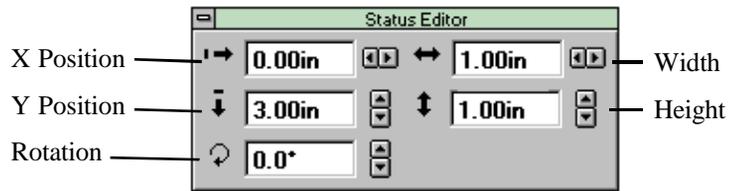
Making line segments straight or curved

To make a line segment straight, select the corner node anti-clockwise of it and then use the **Straighten Line** button. Straight line segments always join in sharp corners. To make a line segment curved instead, select one of the three corner node types:- **Sharp Corner**, **Smooth Corner** or **Symmetric Corner**.

Making corners sharp or smooth

To make the join between two line segments sharp and pointed, select the corner node and use the **Sharp Corner** button. To make the join smooth but asymmetric, use the **Smooth Corner** button. To make it smooth and symmetric, use the **Symmetric Corner** button.

The Status Editor



The Status Editor is a floating dialog which you can use to size, move and rotate objects numerically.

It appears when you click on the **Status Editor** button in the middle of the Status Bar. You can move it to a more convenient place on the screen by dragging on its title bar. You can hide it altogether by clicking on its **Close** button, to the left of its title.

The Status Editor has five controls: "X Position", "Y Position", "Width", "Height" and "Rotation". To use it, select the object or group you want to change, click on the appropriate control and enter the new value. Or click on the arrows to "nudge" the selection a small distance. If you hold the mouse button down on the arrows, the selection will move continuously until you release it.