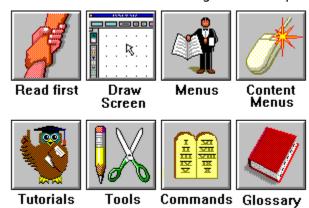
Help index (Contents)Click on the button below to go to that topic.

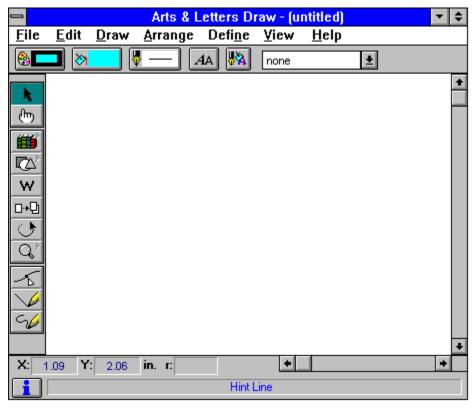


■ Introducing the Official Arts & Letters Handbook.



The Draw window

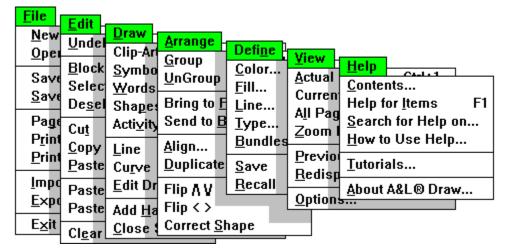
The *Draw* window contains a Toolbox, Style Buttons Bar, Numeric Bar, Menu Bar, Hint Line, and other useful buttons and indicators. Click on the area of interest below. Remember that the Help buttons can return you to the **Contents** or to this **Screen** display.



Click below to display menu drop-downs.

<u>File Edit Draw Arrange Define View Help</u>

Click on the menu in question below. Remember that the Help buttons can return you to the **Contents** or take you **Back** to your last topic.





Menu Bar/Style Buttons

The Menu Bar is the strip under the Title Bar that contains the names of the seven standard **menus**, each of which drops down when clicked on.

<u>F</u>ile <u>E</u>dit <u>D</u>raw <u>A</u>rrange Defi<u>n</u>e <u>V</u>iew <u>H</u>elp

The Draw menus

Just under the Menu Bar are five Style Buttons:

The Color Palette button



The Color Fill button



The Line Style button



The Type Style button



The Style Bundles button

Menu commands: **1** perform a function, **2** provide a tool, **3** display a **dialog box** (for commands followed by an ellipsis [...]), or **4** display a sub-menu (for commands followed by a pointer [>]).



Commands

Clicking on the keypad or scrolling below moves you in the list. Once there, click on the word to see it defined.

Functions of menu commands.

Α

About

Activity Manager

Actual Size

Add Handle

Align

All Pages

В

Block Select

Bring to Front

Bundles

C

Clear

Clip Art Manager

Clipboard

Color

Copy

Current Page

Curve

Cut

Cvt to Freeform

D

Deselect All

Draw Curve

Draw Line

Duplicate

```
Ε
Edit Freeform
Exit
Export
F
Fill
Flip Horizontally
Flip Vertically
Freeform Text Editing
G
Group
Н
Help for Help
Help for Items
Help Index
Import
Joining open shapes
Line
Line Styles
N
New Document
0
Open
Ρ
Page Setup
Paste
Paste Behind
Paste in Front
Previous View
Print
Print Setup
```

R

Recall Styles

Redisplay View

S

Save

Save As

Save Styles

Select All

Send to Back

Styles

Symbol

Т

Text

Type Styles

U

Undelete/Undo

<u>UnGroup</u>

V

View Options

W

Words

Work Area

Ζ

Zoom In





The Toolbox is located to the far left of the drawing area. It contains tools, or **icons** that enable **commands**, with each tool having a specific purpose. Click on any tool to find out about it.

For three tools in the Toolbox with an arrow in the upper right of the button, flyout options appear when pressed. For example, the tool displays three tools and a pushpin when given a sustained press of the mouse button.

Note that some buttons and boxes have pushpins

The pushpin is a **toggle** that lets you choose whether to keep the box on your screen during other operations.



Draw Glossary

Clicking on the keypad or scrolling below will move you in the glossary list. Click on a word to see its definition.

A

Activity Manager

Apply

Application

Aspect (Condense/Extend Value)

Attributes

В

Banners

Bitmap images

Bounding box

C

Cancel

CGM file format

Click

Clip-Art collections

Clip-Art Manager

Clipboard

Clipboard formats

Closed shape

Color palettes

Command

Complex curve

Content menu button

Control handles

Control menu

Control point handle

CSP file format

Current page

Cursor Curve segment D **Default Dialog box DIF files Dither Document Precision Dragging the cursor** Ε **Enter EPS file format Erase/Delete Exit** F **Files Fill** Fill styles **Fixed disk** Flexible diskette Flip Horizontal (<>) Flip Vertical (V/\) **Freeform object Freeform points Flyout** G **GED** file format **Gradient fills Graphic attributes Group** Н **Hairlines Halftone Handles Hint Line Hues color model Icon**

```
Imagesetter
Importing
<u>Italics</u>
Justified
Κ
Kerning
Leading
Line pattern
Line width
М
Margins
<u>Menu</u>
Metafile
N
New
Non-proportional (sizing)
0
Object
Object handles
On-screen Help
Open shape
Р
Page orientation
Page size
PIC
<u>Pica</u>
PostScript
Printer fonts
Pushpin
R
Raster patterns
Rollup menu
S
SCODL
Secondary (content menu) mouse button
```

Scroll bar Selecting Objects Using Shift+Click Shortcut keys Styles Style Buttons Bar SYLK Files Т **Text attributes Text baseline Thumbnails** TIF **Toggle Troubleshooting Type spacing Type styles** U Undo **UnGroup Unit of measure** V **Vector drawing Viewing levels** W **Wildcard characters Windows Clipboard WMF file format Word alignment Word attributes Word baseline** Words Ζ

Zoom

How to use Draw

Click on a topic below for more information.

Most of these topics discuss the use of the *Draw* commands. For procedures on using specific commands, click on the command name in the **List of Commands**.



Using Activities
Using Help
<mark>∛ —</mark> Using Symbols
Using the Activity Manager
Using the Clip-Art Manager
Using the numeric bar

No entries for this letter.

The Toolbox is the column of icons on the left of your screen.

Menus are command lists. They appear in a row beneath the Arts&Letters Draw Title Bar.



Troubleshooting common problems

This section lists the most commonly asked technical questions about Arts & Letters Draw:

Why isn't my printer in the list of printers?

Arts & Letters displays all the printers made available to it from Windows. You can add more printers to the list by:

- 1. Selecting the Control Panel from the Program Manager then the Printers icon.
- 2. In the Printers dialog box, click on Add>>.

The Printers dialog box expands to show the List of printers.

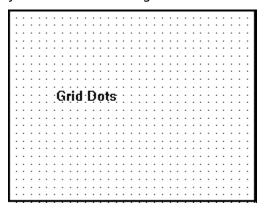
If you find your printer name in the list of printers, click on install and follow the instructions. You will possibily need to insert one of your Windows installation diskettes.

For more information about printers, see your Windows User's Guide.

Why are tiny black dots all over my screen?

Draw has a drawing "Grid" which allows you to size and place objects on the drawing area. The grid serves as and "expanded ruler" stretched from the top to the bottom of your drawing area.

Draw's grid can be adjusted to several increments. You can make these adjustments by selecting the View menu and and chooseing Options. From the Viewing Options dialog box you can choose the grid increment desired.



When I print a document to a high resolution printer such as a Linotronic, why do some or all of the lines disappear from my drawing?

This is the result of the default setting in the Define Line dialog box.

The default setting is hairline or 0.0 points. The width of a hairline depends upon the printer you are using. Since a hairline is the smallest possible line width a printer can produce, the exact measurement of the width varies from printer to printer.

To increase the line width, change the default setting from 0.0 to a higher number, for example 0.5 points.

Why is there a black line down the middle of my drawing area?

Draw's drawing area is divided into pages. Each of these "black lines" represents a page border. If you select the View menu and choose All Pages you can see the exact number of pages available for your document. Depending upon your page settings, you could have four or six pages as well as ten times that amount. Also the margin has been removed. This is the actual, printable area.

How can I delete GEDs without leaving Arts & Letters?

To delete a document, go to the File Manager under the Program Manager in Windows, highlight the file and press the Delete key on your keyboard.



Go to Windows Help

If I draw a GED in one resolution and then later edit the document in another, for example (800x600 to 1024x768), will I notice any difference in my drawing? Will I loose line weight, fills?

Because Arts & Letters does not save screen resolution information, you can work on your drawings in any screen resolution and still have the output you specified from your printer.

At a lower screen resolution, the drawing will appear "fuzzier." However, the final output depends upon printer resolution, which is not related to screen resolution. Arts & Letters prints at the highest resolution specified by your output device.

Line weights and fills will not change. If you specify a line of 6 points, a 6 point line will print on your printer.

What is a YAL file?

YAL files are how *Draw* stores and organizes clip-art. (Each YAL file is a clip-art collection.) When you access clip art from the Clip-Art Manager, you are selecting clip art images stored in YAL files or clip-art collections.

However, YAL is the default extension. You can name it with any extension you desire.

What are DEF files?

Draw comes with two preset or default files: Startup.def and Chart.Def

When you install and open *Draw*, the default fill color for objects is Cyan, line weight is 1.0 points, and fill pattern is Solid. These settings for color, line weight, fill patterns, type styles, viewing preference and several other settings can be changed.

If you make a chart for presentations, the Chart.def file predetermines what type of chart, colors, and elements.



More on DEF files

What is an ALL file?

An ALL file is how *Draw* stores and organizes symbols. When you enter a number in the Symbol dialog box, you are selecting symbols stored in ALL files.

How do I find Symbols?

The Clip-Art Manager provides a complete list of all the symbols available in the Arts & Letters drawing packages. You can choose to show a **thumbnail** representation of these symbols at the bottom of the Clip-Art Manager dialog box (accessed by pressing **Ctrl+M**) in order to assist in identifying the symbol you want.

Why does my computer show out of memory when I use Draw?

Draw requires a minimum of 2 megabytes of RAM memory to function. However 4

megabytes is recommended (8 megabytes provides better performance).

Why are some commands dimmed on my screen?

When *Draw* cannot excute a command against an object on the drawing area, that command appears as grey or dimmed on the pulldown menu. For example if you put a circle from the Shapes tool on the drawing area and select the Arrange menu, the Break Apart command is dimmed. This command cannot be executed against the circle because there is only one object within the object handles.

Why does Help disappear when I start to work on the drawing area?

When you select Help from the Help menu, read a topic about *Draw,* then begin drawing, the help window will "disappear" each time, unless you select **Always On Top** from the Help Window's Help menu.

The window does not actually go away; it is still open. Windows allows you to overlap or overlay windows, one on top of the other.

You can toggle between windows by pressing and holding the Alt key then press the Tab key.

Why doesn't a 2x2 inch box drawn on the screen actually measure 2x2 on the screen?

The Numeric bar indicates the exact width (w) and height (h) of the currently selected object. When you print it on your laser or dot matrix printer, it will measure exactly 2x2 inches, though the size on the screen might not measure 2x2.

The monitor size cannot be controlled. The monitor could be, for example, 9, 11, 17 inches. The software cannot determine the size.

Because of the differences between monitor types, video cards, and resolutions, *Draw* approximates the size for layout purposes. To ensure that your object is sized to your needs, use the grid markings or observe the x and y windows in the numeric bar as you size the object.

I can't print my document. Why?

Is your printer cable connected properly?
Your printer should be turned on and "online." Also check your paper supply and toner, ink, or ribbon depending on your printer.

Ensure you are using the appropriate printer driver for you printer. Try printing from another Windows product that has not given you trouble. In general, Arts & Letters can print to any device accessible through the Windows Print dialog box.

You should be able to see your printer name when you select the Printer icon from the Control Panel. See your Windows User's Guide about installing printer drivers if the name does not match or is missing.



How can I access fonts other than Arts & Letters?

There are many fonts on the market that can be used with *Draw.* For example, PostScript and TrueType are popular fonts.

Draw accesses the font names from the printer drivers currently selected for Draw. In the

Define Type dialog box (accessible with a **content menu mouse button** click on select the Printer name button for the fonts available to the chosen printer.

A reminder

At any time while using Help you can click the $\underline{\text{content menu mouse button}}$ to display a list of often-used Help items.



Things you should know first

Before using Help, look at the <u>Hint Line</u> at the bottom of your screen. It will give information about the item currently under your cursor and suggest Search topics. In *Draw* press **F1** anytime to see more detailed help about <u>Toolbox</u> and <u>menu</u> items under your cursor. First-time users should click on the **Draw Screen** button to explore the basic elements of the *Draw* screen.

For help on a particular item, look it up using the **Search** button above. If you are less

certain about where to search, click on any blue highlighted word or on this button If you want to return to your last topic, click the **Back** button above. If you get lost, the **Contents** button above will return you to this screen.



Find out how to use *Draw*



Common problems



Unresolvable problems

At any time while using Help you can click the **<u>content menu mouse button</u>** to display a list of often-used Help items. Try it now.

The Official Arts & Letters Handbook

The Official Arts & Letters Handbook, by noted author Michael Utvich, is a complete reference about Arts & Letters drawing products. This handbook goes beyond documentation by making available to you tips and techniques that you can immediately put into production. The Official Arts & Letters Handbook is available at the fine bookstores listed below.



Print the list below.

Anderson News Audobon Court

Co.

Baker & Taylor Barnes & Noble Book Tech Bookazine Co.

Borders, Inc. Codvs Coliseum Coles Computer Cornell Literacy University Cromland Crown Books

International

Dartmouth Elliot Bay

Bookstore

57th Street **Folletts**

Books

Harry Schwartz Harvard Coop Golden Lee Ingram Book

Book Dist. Co.

Irvine Science

& Technical

I&R Computer

Softpro

Wordsworth

Koen Book Krochs & Dist., Inc. **Brentanos** Little Professor McGraw-Hill Media Play MIT Coop Nacscorp, Inc. Olssons Oxford Books Pacific Pipeline

Powells Princeton University

San Diego Technical

Tattered Cover Tower

University of O of Delaware

Connecticut

Coop

University of University of Hawaii Toronto UWM Bookstore Village Green Waldenbooks Western Merchandi

Waterstones

Yale

Warbirds Table of Contents

This command opens the Arts & Letters Warbirds database in Viewer, displaying an iconographic table of contents. The Warbirds database shows information about the great airplanes of the two world wars, and about the people who flew them.

Warbirds in Battle

This command opens the Arts & Letters Warbirds database in Viewer and displays a list of important air battles of the two world wars. Select from the list to be taken to the sights and sounds of aerial combat.

Famous Aces

This command opens the Arts & Letters Warbirds database in Viewer and displays a list of the most decorated pilots of the two world wars. Select from the list to learn about their daring lives, often in their own words, and about the tactics they used.

Greatest Warbirds

This command opens the Arts & Letters Warbirds database in Viewer and displays almost two dozen of the most famous warplanes that flew during the two world wars. Select one to discover details and to hear it fly overhead.

Aircraft Specifications

This command opens the Arts & Letters Warbirds database in Viewer and displays the five major categories of warplanes that flew during the two world wars. The details of dozens of individual fighting aircraft are listed within each category.

Where To See Aircraft

This command opens the Arts & Letters Warbirds database in Viewer and offers maps and a list that cover the globe, detailing all the significant museums and displays of aircraft from the two world wars.

Appendix

This command opens the Arts & Letters Warbirds database in Viewer and offers topics on the history and manufacture of aircraft from the two world wars, as well as movies and books about them.

Glossary

This command opens the Arts & Letters Warbirds database in Viewer and offers an extensive definition of terms related to aircraft from the two world wars.

Warbirds Special Effects

This command opens the Arts & Letters Warbirds database in Viewer and offers a list of sound effects related to warplanes of the two world wars.

Warbirds Flybys

This command opens the Arts & Letters Warbirds database in Viewer and offers a list of profiles in sound of the most important warplanes of the two world wars.

War of Words

This command opens the Arts & Letters Warbirds database in Viewer and offers a list of historical speeches made during the two world wars.

Warbirds Help

This command opens the Help for the Arts & Letters Warbirds database.

New drawing area

The New command in the File menu clears the drawing area to let you start a new drawing. When you choose the New command, you are prompted, "Save changes to (untitled)?" You can choose **Yes** to <u>save</u> the current drawing, **No** to clear the drawing area, or **Cancel** to keep the current picture on the drawing area.

Open

The Open command in the File menu displays the Open dialog box. (If you forget to close your current work, don't worry: you will always be given a chance to save before proceeding.) Use this dialog box to open **GED** files.

Select the desired file from the filename list in the dialog box. To view only GEDs in the list, choose the "Graphics Files (*.GED)" option. To view other files, edit the Filename text box, entering the desired drive, directory, and filename specification. **Wildcard characters** can be used if desired.

If "As New" is checked, the chosen document replaces the current one on your *Draw* screen.

If "As New" is **not** checked, the selected document is added, merging the two. It is added at its default location and size if "Drag to place" is not checked. If "Drag to place" is checked, you will be given the Add object cursor, which allows you to size and place the second document. To avoid losing merged objects among objects of the current document, **group** all of the objects in the document to be merged and **save** the document before this operation.

After selecting the desired document, click on Open to load the document into *Draw*. The file must be a valid Arts & Letters document. If it contains the more advanced features of *Express*, it will still be added, although these features cannot be edited in *Draw*.

The "Show Thumbnail" checkbox allows you to see a thumbnail, or small sketch, of the selected file's contents, if the file was saved with one. This is a kind of "preview of contents" that will help in finding your work.



More about thumbnails

Save As

The Save As command in the File menu displays the Save dialog box. Use this dialog box to save **GED** files to disk.

Choose **Include Thumbnail** to create a **thumbnail** image for the GED. The thumbnail image allows you to preview the document before opening it.

If the document has been saved previously, choosing the **Make Backup** option will retain the old document when the new one is saved. The old document will be given an extension of BAK.

Enter a file name (up to 8 characters) and click on Save to save the document to disk.

Save (F9)

The Save command in the File menu saves the current document to the path and name shown in the title bar. If the document has not been named, the Save As dialog box appears.

When you save your drawings and pictures, a copy is actually written onto the computer disk. The computer can then read that copy back onto the *Draw* drawing area using the **Open** command.



Page setup

The Page Setup command in the File menu displays the Page Setup dialog box. Use this dialog box to set the page size and margins.

Enter a <u>page size</u> in the two fields for width and height, or leave this dialog box and change the page size in the Print Setup dialog box.

Choose <u>margins</u> by entering values in the Margin boxes, or click on "Get Printer minimums" to automatically set the margins to the minimum allowed by the currently-selected printer.

The <u>page orientation</u> can be changed by clicking on the Tall (Portrait) or Wide (Landscape) buttons in the Print Setup dialog box.



The Print Setup dialog box

Topic deleted.

Print

The Print command in the File menu allows you to print your *Draw* document.

First set up your printer by using the **Print Setup** dialog box. (See button below.)

Choose **Print**. Tell *Draw* which part of the drawing you want to print by clicking on **Current Page**, **All Pages**, **Selected Objects**, or a specified range of pages. (*Draw* counts pages all the way across before moving down to the next row.)





Printing to a File

Import

The *Draw* Import command in the File menu lets you import text and the following clip-art image formats: **TIFF, WMF,** or **PIC,**

To import an image, select the file type desired. Choose the file desired from the list box and click on OK. The Add Object cursor appears. Click to add the image at its **default** size, or **drag** the mouse to size a **bounding box** for the image.

Text files (typically with the **TXT** or **DOC** extension) are created by word processors, text editors, and desktop publishing software. Text must be in ANSI or ASCII format to be imported into *Draw*.

WPG file format

WPG is the file extension for the Word Perfect Graphic	nics file format, which <i>Draw</i> can expe	ort.
--	--	------

CSP file format

CSP (Computer Support Packed) files are used by PC Emcee, Computer Support Corporation's presentation application, which *Draw* can export.

CGM file format

CGM (Computer Graphics Metafile) files are used by assorted graphics applications. *Draw* can export in this format.

SCODL (SCD) file format

SCODL (Scan Conversion Object Description Language) files are used by Matrix and other film recorders to print high-quality 35mm slides. *Draw* can export in this format.

Export

The Export command in the File menu lets you export any clip-art image from *Draw* to the ollowing formats: **EPS, CGM, TIF, SCD, WMF, WPG,** or **CSP.**

To export an image, choose the destination directory for the object(s) on the drawing area to be exported.

The Setup button lets you specify a resolution at which a file should be exported. For example, you can specify 150, 300, or a custom resolution. Note that the larger the value, the larger the file size of the image exported.

Choose a file format. Note that the file format extension appears by the filename box. Enter the filename and click on **OK**.

Supported export file formats and supported features:

File Type	Clippin g Mask	Gradie nt Fills	Wide/ Styled Lines	Bitmap Image Data
CGM	N	N	Υ	N
(Vector)				
CTM	N	N	Υ	N
WMF	N	N	Υ	N
(Vector)				
TIF	Υ	Υ	Υ	Υ
(Bitmap)				
EPS	Υ	Υ	Υ	Υ
(Vector)				
SCODL	Υ	Υ	Υ	Υ
WPG	N	N	Υ	N
CSP	Υ	Υ	Υ	Υ
PostScript	Υ	Υ	Υ	Υ
PIC	N	N	N	N

Topic deleted.

Work area

The work area is the blank area bounded by the Style bar at the top, the Toolbox at the left, and the Numeric bar at the bottom of the *Draw* window.

Exiting Draw (Alt+F4)

The Exit command in the File menu closes *Draw*.

When you choose the New command, you are prompted, "Save changes to (untitled)?" You can choose **Yes** to <u>save</u> the current drawing, **No** to leave *Draw* without saving the drawing, or **Cancel** to continue the current session.

Undelete/Undo (Ctrl+Z)

The Undelete/Undo command restores the last object deleted, and undoes move, size, rotate, and style change operations.

The command name changes to reflect the most recent operation that can be undone. For example, if you just deleted an object, the command reads Undelete. If you just moved an object, the command reads Undo Move/Size.

Block Select (Ctrl+B)

The Block Select command displays the Block Select cursor.

Use this cursor to **drag** a box around all objects you want to select. A single set of handles appears around the selected objects, and you can manipulate the objects as a temporary group.

During freeform editing, you can use Block Select to select multiple point handles.



Selecting objects one by one



Selecting all the objects in your document



Making a group of selected objects

Select All (Ctrl+A)

The Select All command in the Edit menu selects all objects in the drawing area.

A single set of handles appears around all of the objects, and you can manipulate the objects as a temporary group. (Press **Ctrl+G** to form a group that can be manipulated as a single object.)

Note that this command selects all of the objects in the drawing area, including any that may be outside of the current **viewing level**.

Multiple objects can also be selected using **Shift+click** or the **Block Select** tool





Block-selecting objects

Deselect All (Shift+A)

The Deselect All command in the Edit menu deselects all selected objects in a document. Clicking on an empty area of your screen also deselects all objects.

Cut (Ctrl+X)

The Cut command in the Edit menu removes all selected objects from the document and places them in the **Windows Clipboard**.

The objects can then be pasted from the Windows Clipboard into other currently-running applications such as spreadsheets, desk top publishing, or word processors. Press **Alt+TAB** to temporarily leave *Draw*, place the cursor where you want the illustration to go, then press **Ctrl+V** or **Shift+Insert** (depending on the application) to place the *Draw* illustration there.



Copying objects to the Clipboard



Pasting objects that have been cut

Copy (Ctrl+C)

The Copy command in the Edit menu places a copy of all selected objects into the **Windows Clipboard**.

The objects can then be pasted from the clipboard into another document or another Windows program.



Cutting objects to the Clipboard



Pasting objects that have been copied

Paste (Ctrl+V)

The Paste command in the Edit menu places a copy of the contents of the **Windows Clipboard** into the *Draw* document.

When you choose Paste, the Add Object cursor appears. Click the mouse to have the clipboard image appear at its default size, or **drag** the mouse to size a bounding box for the image.



Copying objects to the Clipboard



Cutting objects to the Clipboard

Paste in Front

The Paste in Front command in the Edit menu designates that the contents of the **Windows Clipboard** will be drawn in front of any currently-selected objects.

Select the desired objects that you want to paste in front of. Choose Paste in Front. The Add Object cursor appears. Click the mouse to have the clipboard image appear at its default size in front of those objects, or **drag** the mouse to size a bounding box for the image.



Pasting behind objects

Paste Behind

The Paste Behind command in the Edit menu designates that the contents of the **Windows clipboard** will be drawn in front of any currently-selected objects.

Select the desired objects that you want to paste in front of. Choose Paste Behind. The Add Object cursor appears. Click the mouse to have the clipboard image appear at its default size in front of those objects, or **drag** the mouse to size a bounding box for the image.



Pasting in front of selected objects

Cancel (Esc)

A command button found in most dialog boxes, used to cancel the operation you are performing. When you click on the Cancel button, the dialog box disappears and the screen remains unchanged. Pressing Esc also cancels many operations.

Clear/Delete (Del)

The Clear command deletes selected objects, points or segments.

During object editing, Clear deletes all selected objects from the document.

During freeform drawing, Clear deletes the last segment drawn.

During freeform editing, Clear deletes a selected segment, contiguous selected segments, or contiguous points. A dialog box allows you to specify Points deletion (the segments between the points are deleted and replaced by a single segment) or Sections deletion (the segments are deleted, leaving a gap in the object).

Symbol (Ctrl+S)

The Symbol command in the Draw menu displays the Symbol dialog box. Use this dialog box to choose from one of the 65 often-used symbols in the horizontally scrolling window.

If an object is selected before opening the Symbol dialog box, the symbol number which is internal to Arts & Letters is shown highlighted there.



Using symbols



The Clip-Art Manager



How to restore proportions



A reminder

Activity Manager

The Activity Manager in the Toolbox flyout

accesses the Activity Manager dialog box. Use Activity Manager to access lessons and activities which teach you how to use *Draw*.

See Using the Activity Manager

See specific activities

Topic deleted.

Topic deleted.

Line (draw) (F2)

You can <u>select</u> Line from the Draw menu or click on in the <u>Toolbox</u> to draw straight lines.

When the Line draw cursor appears, press down with the index finger mouse button and **drag** out a line. When you release the mouse, a handle appears at the stopping point. You

can continue by drawing another line, or you can continue with a curve by clicking on If you hold down the Shift key while drawing, a horizontal or vertical line is drawn. When finished drawing lines, click the **content menu button**. On the first click, the edit cursor appears and the lines can be edited. On the second click, **object handles** appear around the lines and the lines are drawn using the current **graphic attributes**.

Prowing cu

Drawing curves

Curve (draw) (F3)

The Curve command in the Draw menu displays the Curve cursor. If you want to draw a curve on the drawing area, you must select **Curve** from the Draw menu, press **F3**, or click

on the Curve tool in the <u>Toolbox</u>.

When the Curve draw cursor appears, press down with the primary mouse button and <u>drag</u> out a curve. When you release the mouse, a handle appears at the stopping point. You <u>can continue</u> by drawing another curve, or you can continue with a line by clicking on



At any time while drawing a curve, you can hold down the Control key and drag the cursor to pull out a "rubber band" straight line.

When finished drawing curves, click the **content menu button.** On the first click, the edit cursor appears and the lines can be edited. On the second click, **object handles** appear around the lines and the lines are drawn using the current **graphic attributes**.



Drawing lines

Edit Drawing (Ctrl+P)

The Edit Drawing command lets you change a selected **freeform** drawing.

Select a freeform drawing and choose Edit Drawing from the Draw menu, or click on the icon in the **Toolbox**. **Freeform point** handles appear on the object's lines. (If the handles don't appear, it's not a freeform object and so cannot be edited, although it can still be manipulated in other ways.) The triangular Edit cursor appears. Use it to select an editable point handle (a small open square on the line or curve, which becomes solid black when selected).

Multiple points can be selected using **Shift+click** or the **Block Select** tool . Once selected, all of the points can be moved together.

When a freeform curve handle is selected, a pair of small black boxes with dotted lines stemming from the handle appear. These are **control points**, which allow you to change the slope of the curve by **dragging** them.

When you have finished changing your drawing, click the <u>content menu button</u>. To edit the lines and curves, click this button again.



See a sample editing session

Add Handle (F5)

The Add Handle command in the Draw menu displays the Add Handle cursor.

During freeform editing, point the Add Handle cursor on a line or curve and click the mouse to add a point handle at that location.

Group (Ctrl+G)

The Group command in the Arrange menu groups all selected objects together into a single object.

One set of handles appears around the objects, and ${\it Draw}$ treats them as a single object until they are ungrouped.



UnGroup (Shift+G)

The UnGroup command in the Arrange menu breaks a selected group apart into its individual objects.



Align (Ctrl+N)

The Align command in the Arrange menu displays the Align dialog box.

Use this dialog box to align selected objects relative to each other (Objects reference) or to the page borders (Page reference). The objects can then be aligned vertically (top to bottom) or horizontally (left to right).

Clip-art symbols that have been broken apart and resized and otherwise modified can be restored using the **Assemble Logically** option to reassociate the parts of the group. For example, you can break apart a heron to recolor its legs and crest (symbol 6622) then **regroup** this part with the body (symbol 5960) after **selecting** both parts.

When aligning words, check the Use Words Baselines option to align using the baselines of the words. This option has no effect on other objects.

Bring to Front (Ctrl+F)

The Bring to Front command moves a selected object to the front of all other objects on the drawing area.

Using the Bring to Front and <u>Send to Back</u> commands, you can overlap objects to compose your picture the way you want.



See Paste to Front

Send to Back (Shift+F)

The Send to Back moves a selected object behind all other objects on the drawing area.

Using the <u>Bring to Front</u> and Send to Back commands, you can overlap objects to compose your picture the way you want.



Duplicate (Ctrl+D)

The Duplicate command in the Arrange menu (or the uplicate cursor.

 $\underline{\textbf{Move}}$ or $\underline{\textbf{size}}$ objects using the duplicate cursor to create duplicates at the new position or size.

Flip Horizontally

The Flip/Horizontally command in the Arrange menu flips a selected object horizontally (produces a mirror image).

Flip Vertically

The Flip/Vertically command in the Arrange menu flips a selected object vertically (turns it upside down).

Correct Shape

The Correct Shape command in the Arrange menu restores a clip-art symbol or text object to its standard proportions if the object has been sized non-proportionally.

Color

There are several convenient ways to apply color in *Draw* to a **selected** object.

An easy way is to click with the index finger mouse button on the Color style button A ready-made color palette drops down to allow you to color the object's **line** or interior **fill**. If you don't like the colors shown, you can click on **Define** to mix your own using the Hues mixing model.

Also, choosing **Color** in the **Define** menu will display the color palette and custom mixing button.

Editing shortcut: After selecting an object, hold down the **content menu button** anywhere on your work area and you will see a **content menu** similar to the following one.



Still pressing on the content menu button, scroll to the command

you want.

▼ —

Details of the Define Color dialog box



How to mix colors

Line styles (Ctrl+L)

The Line command in the Define menu displays the Define Line dialog box.

Use this dialog box to specify a line width, color, style, pattern, and arrowheads (if desired).

Click on **Apply** to apply the line styles to the lines of all **selected** objects.

Editing shortcut: After selecting an object, hold down the **content menu** anywhere on your work area and you will see a **content menu** similar to the following one. Still pressing

Symbol...
Color Palette...
Fills Palette...
Lines Palette...
Bundles Palette...
Help for Symbol

on the content menu button, scroll to the command you want.

-

Details of the Define Lines dialog box



A reminder

Type (styles) (Ctrl+Y)

The Type command in the Define menu displays the Define Type dialog box. Use this dialog box to specify a typeface, as well as its size, alignment, word and letter spacing, and style.

An option button under the typeface list lets you select **printer fonts** instead of Arts & Letters fonts, if desired. Click on the printer name and the supported fonts appear in the typeface list.

Scroll down in the list to find the typeface you want and highlight it. Type its size in the size box. Once in the **work area**, it can also be **sized** like any object.

Click on <u>Italics</u> to set the style of the words to normal or italic.

Click on **Spacing** to set the character spacing, word spacing, leading, kerning, and aspect (condense/extend) value.

Click on **Styles** to set the style of the text: normal, bold, underlined, italic, or strikeout.

Click on **Apply** to apply the type style to all selected text objects.

Editing shortcut: After selecting an object, hold down the **content menu** anywhere on your work area and you will see a **content menu** similar to the following one. Still pressing

on the content menu button, scroll to the command you want.



Details

Details of the Define Type dialog box



A reminder

Style bundles

Clicking on the icon on the style bar displays a ready-made list of bundled **graphic** attributes and text attributes. Any one of these can be applied to a selected object.

Editing shortcut: After selecting an object, hold down the **content menu button** anywhere on your work area and you will see a content menu similar to the following one.

Still pressing on the content menu button, scroll to the command you want.



Save and recall styles

For a current *Draw* session, the color, fill, line, and type styles of a selected object can be saved by pressing **Ctrl+R**. You can then apply these styles to another object by selecting it and pressing **Shift+R**. If you make a mistake, use Undo to restore the former styles.

Actual Size (Ctrl+1)

The Actual Size command in the View menu displays a portion of the <u>current page</u>. Objects are displayed at approximately the same size they will appear when printed.

After selecting Actual Size, you can press **Shift+O** [the letter] to return to the previous view.

Current Page (Ctrl+2)

When you choose Current Page in the View menu, *Draw* displays the last page on which you have added clip art, drawn a line or curve, or <u>selected</u> an object. Selecting an <u>object</u> on a page makes that page the current page a choice which also applies when printing the current page.

After selecting Current Page, you can press **Shift+O** [the letter] to return to the previous view.

All Pages (Ctrl+3)

The All Pages command displays all the pages of the current document. Objects appear small and may be difficult to manipulate at this viewing level.

After selecting All Pages, you can press Shift+O[the letter] to return to the previous view.

Zoom In (Ctrl+O [the letter])

The Zoom command in the View menu gives the Zoom In cursor, which is shown on the

Zoom In button . Use it to **drag** a box around the area of interest.

You can also quick click on a spot with the inside mouse button to enlarge that area as much as possible.



See the Zoom tool to find other ways of using this command

Previous (Shift+O [the letter])

The Previous command (under Save/Recall) in the View menu displays the previous view. You can use this command repeatedly to display up to the last four previous views.

Redisplay View (F12)

The Redisplay View command erases the screen and displays the view again.

Use Redisplay View to view the drawing order of objects, or to clear the screen of "artifacts" left from previous manipulations.

View Options

The Options command in the View menu lets you set the units of measure, create a reference grid, and show page borders.

The choice of units of measure is from inches, centimeters, or picas. You can also choose the grid spacing: grid dots can be placed from 1/10 unit apart to 6 units apart.

Back and Front buttons let you choose to draw the grid and/or page borders behind or on top of all objects in the drawing area. These grids and page borders do not print.



Display the View Options dialog box

Help for Items (F1)

The Help for Items command in the Help menu displays the Help cursor. Click on a command or tool and the Help window appears, displaying information about the selected command or tool.

Help Index

The Help Index command in the Help menu displays the Help index. Choose a topic in the index to see further information.

About

The About command in the Help menu displays a dialog box containing title, copyright, version, and serial number for *Draw*. Also displayed is the number of objects in the currently open document.

Toggle

A toggle is a switch or button that is either on or off. To toggle it is to turn it on or off, typically by removing or placing a check in the box placed beside the command.

The pushpin is a toggle that removes or keeps a box or option list on your screen.

Control points (Ctrl+4)

Control Points are the points at either end of a tangent at a selected **Freeform Point**.

The Control Points command **toggles** the display of curve control point handles on and off.

Note that an object must first be a freeform object (i.e., drawn with the line or curve tools) and that a freeform handle must be selected (the small open box becomes black). When this is done the control point handles are displayed. You can then **drag** the control point handles to adjust the slope of curve at that tangent.



See more about Freeform and Control points



A reminder

Freeform points (Ctrl+5)

Freeform Points are the points along the outline of a freeform shape.



See more about Freeform and Control Points

Freeform object

A freeform object is any combination of connected lines and curves that can be edited in *Draw.* Freeform objects are those created by using the **Line** and **Curve** tools.

Freeform points and Control points

Freeform points and control points are handles where an object can be edited. They appear only on freeform objects. To determine that an object is a freeform object, press

Ctrl+P, click on in the Toolbox or choose Edit Drawing from the Draw menu.

More freeform points can be added by pressing F5 (see Add Handle). The slope of the tangent at a freeform point can be modified after selecting it and manipulating one of the

∛ — |

See a sample editing session using control points



A reminder

two resulting control points.

DRW file format

DRW is the extension of a graphics file format.

CDR file format

CDR is the extension of a graphics file format.

PS file format

PS is the extension of the PostScript file format. *Draw* can import files created in this format. PostScript files often have other extensions, notably **AI** and **PRN**.

Basic drawing shapes

When you hold the mouse button down on the Shapes icon in the Toolbox, you see the Shapes flyout



Highlight the shape that you want and release the mouse button. The resulting cursor allows you to draw the shape any number of times until dismissed with a click of the **content menu mouse button**.

Pointer tool



The pointer is the default cursor. It is displayed when no other cursor is selected. Use the pointer to **select**, **move**, and **size** objects.

When another tool is selected, you can deselect it by clicking on the pointer tool.



Block Select tool



The Block Select tool displays the Block Select cursor.

Use this cursor to **drag** a box around all objects you want to select. A single set of handles appears around the selected objects, and you can manipulate the objects as a temporary group. You can also choose to **group** the objects.



Symbol tool

Holding the mouse button down on the Clip-Art Manager icon in the Toolbox the Objects/Libraries flyout

Hold the primary mouse button down and move it over the second ("4347") icon. Release the button and the Symbol dialog box appears. The Symbol dialog box allows you to select one of the 65 often-used objects displayed in the scrolling box there. When one is selected, the add object cursor appears. Click the mouse button to have the symbol appear at its default size, or drag the cursor to size a bounding box for the symbol.

The Clip-Art Manager

Return to Toolbox

Clip-Art Manager tool



This tool offers three **flyout** options: Releasing the mouse button on the first option displays the Clip-Art dialog box. Releasing on the second option displays the numbered Symbol dialog box; on the third, the Activity Manager.

The first option allows you to **open** one of *Draw*'s clip art **Collections**. A scrolling representation of clip art is displayed in thumbnail view at the bottom of this dialog box. Now you can use the "grasping hand" cursor to **drag** a clip art object into your drawing area. The second option allows you to select one of the 65 often-used objects displayed in the scrolling box.

The third option is the Activity Manager. Selecting it displays a dialog box for choosing among various *Draw* lessons, samples, templates, and test documents.



How to use the Clip Art Manager



How to use Symbols



How to use the Activity Manager



Text tool



The Text tool displays the Enter/Edit Text dialog box.

To enter new words, type up to 5,000 characters in the dialog box and click on Add. The Add Object cursor appears; place it where you want the upper left of the words to appear. Click the mouse to have the words appear at their default size, or **drag** the mouse to size a bounding box for the words.

To edit words, first select the words in the drawing area then hold down the **content menu button**. Drag the cursor through the resulting menu and release it on the item you want. You can replace or modify the selected words in the Enter/Edit Text dialog box. Click on Replace to replace the old words in the drawing area with the edited words from the dialog box.



Using Text



Duplicate tool



The Duplicate tool changes the cursor to the Duplicate cursor.

 $\underline{\textbf{Move}}$ or $\underline{\textbf{size}}$ objects using the duplicate cursor to create duplicates at the new position or size.



Rotate tool



The Rotate tool changes the cursor to the Rotate cursor for interactive object rotation, and displays the center point cursor.

Drag the **center point cursor** to set the pivot point around which rotation will take place.

Point on an object handle and drag it to rotate the object around the center point cursor.



Edit Drawing



The Edit Drawing tool lets you edit a selected freeform object.

<u>Select</u> a freeform drawing and choose Edit Drawing from the Draw menu, or click on the icon in the <u>Toolbox</u>. <u>Freeform point</u> handles appear on the object's lines. (If the handles don't appear, it's not a freeform object and so cannot be edited, although it can still be manipulated in other ways.) The triangular Edit cursor appears. Use it to select an editable point handle (a small open square on the line or curve, which becomes solid black when selected).

Multiple points can be selected using **Shift+click** or the **Block Select** tool



Once selected, all of the points can be moved together.

When a freeform curve handle is selected, a pair of small black boxes with dotted lines stemming from the handle appear. These are **control points**, which allow you to change the slope of the curve by **dragging** them.

When you have finished changing your drawing, click the <u>content menu button</u>. To edit the lines and curves, click this button again.



See a sample editing session



Zoom In tool (Ctrl+O [the letter])

The Zoom function in the **Toolbox** contains several tools:



gives a cursor. Use it to <u>drag</u> a box around the area of interest. It corresponds to the Zoom In command in the View menu and to the **Ctrl+O** [the letter] shortcut key.



zooms out to the previous view. It corresponds to the Previous command in the View menu and to the **Shift+O** [the letter] shortcut key.



zooms to actual view. It corresponds to the Actual command in the View menu and to the **Ctrl+1** shortcut key.



fills the screen with the current page. It corresponds to the Current Page command in the View menu and to the Ctrl+2 shortcut key.



fills the screen with all the pages available. It corresponds to the All Pages command in the View menu and to the **Ctrl+3** shortcut key.



pins and unpins the options to the screen, letting you have them always available.

Once you have the Zoom cursor, you can also quick click on a spot with the left button to enlarge that area as much as possible.



Color style button



The Color style button displays the color palette. Use it to select colors for the lines and the interior fill of objects.

First check the Line and/or Fill boxes to apply the color to an object's lines or interior.

Look over the choice of colors; scrolling may be necessary. If you don't like any of them, press **Define** to mix your own using the Hues mixing model.

Click on the color in the palette (or **Apply** the mixed custom color), and the color is applied to all selected objects.



Examine the Define Color dialog box

Fill style button



The Fill style button displays ready-made fill patterns.

To modify the fill pattern and/or color, press **Define.**

Click on a fill from those provided and it is applied to all selected objects.



Examine the Define Fill dialog box

Line style button



The Line Style button displays the Define Line dialog box. Use this dialog box to specify a line width and a <u>line pattern</u>.

A list box displays a list of named line styles. To select a named style, click on the name in the list.

Click on OK to apply the current styles to the lines of all selected objects.



Examine the Define Lines dialog box

Type style button



The Type style button displays the Define Type dialog box. Use this dialog box to specify a **type size**, **type attribute**, and **word alignment**.

Click on **Italics** to set the style of the words to normal or italic.

A list box displays a list of named type attributes. To select a named attribute, click on the name in the list.

Click on **OK** to apply the attribute to all selected words objects.



Examine the Define Type dialog box

Bitmap pictures

A bitmap picture is made of thousands of tiny dots, or pixels. Bitmap pictures are made by "paint" programs like Windows Paintbrush and by scanners.

Pictures in bitmap format can be placed in *Draw* through the Windows Clipboard. You can also use the **Import** command to import a bitmap picture in various formats.

GED file format

The GED (Graphic Environment Document) format is a proprietary, efficient file format used by *Draw* and other Arts & Letters programs to store **documents** on disk.

Wildcard characters

Wildcard characters are symbols that can be used to replace other characters. The wildcard ? can be used to represent any character, while the wildcard * can be used to represent any group of characters. For more information see your DOS User's Guide.

Document precision

The document precision value determines the "fineness" of the internal grid that *Express* uses to render images. The fact that the size of this grid is a fixed number entails a few important considerations.

First, there is a limit to the image size that can be created in *Draw*. The **Normal** document precision for *Draw* is 1440 units per inch. Dividing this number into the grid size gives a maximum image size of a little over 22 inches square. In order to render a larger image, the **Banner** feature in the Page Setup dialog box reduces the units per inch to 360 so that an image almost 89 inches square can be created.

Second, there is a tradeoff between largest image size drawing fineness. *Draw* always prints at the highest resolution of your output device. However, the practical effect of drawing using the lower units per inch of Banner page is to print curves that are not perfectly smooth because fewer coordinates are available to render curve segments.

Therefore, if you are not creating an image larger than 22 inches square, the best results will be achieved by using Normal document precision. To return to Normal, the default setting, after using Banner page, pull down the File menu and click on **Defaults...** then **Open...** then **draw30.def.**

Application

A program used for a particular task, such as presentation graphics, desktop publishing, or word processing.

Attributes

Characteristics of an object. The graphic attributes (which affect symbols, text, and freeform objects) are fill color, fill pattern, line color, and line type. The text attributes (which affect text only) are typeface, type size, leading, character spacing, condense/extend value, text alignment, and type style. All attributes have default settings which you can change.

Command

A command is an instruction given to a computer. A menu is a list of commands. The Toolbox places commands under icons.

DIF file format

Data Interchange Format, supported by many spreadsheet programs.

SYLK file format

SYmbolic LinK format, supported by Microsoft Excel and other programs.

Graphic attributes

Attributes are characteristics of an <u>object</u>. The graphic attributes are color, fill, line, and type. Text attributes are <u>typeface</u>, type size, type <u>style</u> (normal or italic), and <u>alignment</u>. All attributes have default (predetermined) settings that you can change.

Attributes of your own can be saved within a single *Draw* drawing session by selecting the model object and pressing **Ctrl+R**; they are then applied to other objects by selecting them and pressing **Shift+R**.

Words (Text) baseline

The baseline of a text object runs along the base of the letters, ignoring any decenders hanging below the baseline, like the bottom parts of the letters g and y. When aligning text objects, it is often appropriate to align along the baselines.

Hues color model

The Hues color model, the one used by *Draw*, creates colors by starting with a particular color and then adding different amounts of white and/or black. Some common colors and their Hues values (in the form hue/percent white/percent black) are:

Light Blue 195/20/0 Light Gray 172/90/8 Pink 340/40/0
Dark Blue 240/0/40 Dark Gray 0/100/55 Dark Red 0/0/20
Brown 0/50/60 Bright Green 138/0/0 Purple 272/59/2

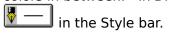
Orange 15/20/0 Pale Yellow 60/70/0

Color palettes

Color palettes are sets of named colors, usually related in some way and/or designed for a specific purpose.

Gradient fills

Gradient fills are composed of a starting color, an ending color, and a series of transitional colors in between. In *Draw*, you choose ready-made gradient fills from the Fill button





Raster image

A raster is an image defined as a collection of pixels (dots). The raster image of a line, for instance, is stored in a bitmap that contains information about the status of each pixel in the entire display, and which is then displayed in a series of horizontal raster lines made up of individual pixels. (The raster is the set of raster lines that make up the display.) Raster images cannot be manipulated as easily as vector or object-oriented images.

Draw offers a number of ready-made raster fills in the Define Fill dialog box (accessed by clicking on _____) and the Style Bundles palette (accessed by clicking on



Line width

Line with can be specified from 0.0 to 72.0 points (72 points = 1 inch). A 0.0 width line is also known as a "hairline;" it defines the thinnest possible line that an output device is capable of producing. (To eliminate a line, choose None as the line pattern.)

Line pattern (Ctrl+L)

Line pattern is a **style** found in the Define Line dialog box (quickly accessed by holding down the **content menu mouse button** when an object is selected or by pressing **Ctrl+L**).

Draw includes a solid line pattern, an assortment of dashed line patterns, and various line thicknesses. Select "None" to eliminate all lines from a selected object.



The Define Lines dialog box

Text alignment

Draw supports four word alignments through the Define Type dialog box, accessed by first clicking on the Type button in the Style bar, then clicking on **Define.**

Left aligns shorter lines of words in the text block with the left edge of the longest line. **Right** aligns shorter lines of words in the text block with the right edge of the longest line. **Centered** centers shorter lines in relation to the longest line in the text block. **Justified** inserts space between words in shorter lines until they equal the length of the longest line. *Draw* does not wrap text automatically.

To align the entire text block itself with some other object, select it and that other object, and press **Alt+N**.

The [

The Define Type dialog box

Aligning a text block with other objects

Printer fonts

Draw supports Windows-compatible hardware and software fonts. Fonts are typefaces of a particular style and size, and they are distributed by many vendors such as Adobe and Bitstream. Font files must be loaded in Windows before *Draw* can recognize them. And although *Draw* can create a **print file** without your owning the printer, final printing requires that the correct hardware fonts be loaded to it. See the Window user's guide or your type manager guide for further information.

Text attributes

Each word object in the *Draw* drawing area has "word attributes" which can be changed as desired. Among these attributes are **typeface**, type **size**, type **style** (normal or italic), **spacing**, and **alignment**. In addition, words are objects and so have all the attributes of **graphic objects**.



See how to use text

Type style

Draw supports five type styles for printer fonts:

Normal **Bold** Italic Strikeout <u>Underline</u>

Type (words or letters) can be slanted, colored, or outlined. The Define Type dialog box,

accessed by clicking on the drawing area. then on **Define**, allows you to specify how words appear on the drawing area.

When using Arts & Letters typefaces, only the normal and italic styles are available. To create the underlined and strikeout styles, draw a line under or through the text. To create a bold style for a typeface, increase the line weight or select a bolder version of the typeface.

The Define Type dialog box

Type spacing

Type spacing can be applied to Arts & Letters typefaces and to printer fonts. In some cases, printer fonts do not contain kerning information, and so cannot be kerned.

Spacing adjustments are applied by pressing the Spacing button in the Define Type dialog box. There you can adjust letter spacing (the space between all letters), word spacing (the space between words), leading (the space between lines), kerning (the space between special pairs of letters, such as "Te"), and the **aspect.**



Define Type dialog box

Unit of measure

Draw supports three units of measure: picas, centimeters, and inches. Six picas = 2. 54 centimeters = one inch.

A pica is made up of about 72 points. Points are the unit of measure for line thicknesses and type size (using the height of a typeface's capital "M").

Page orien	tation	
Portrait (Tall) here.	Landscape (Vide)	A page is in either one or the other of the orientations shown

Page size

Standard page sizes supported by *Draw* are:

<u>Name</u>	<u>Inches</u>	<u>Centimeter</u> <u>s</u>
Letter	8.50 x 11.00	21.59 x 27.94
Legal	8.50 x 14.00	21.59 x 35.56
Tabloid	11.00 x 17.00	27.94 x 43.18
А3	11.69 x 16.54	29.70 x 42.00
A4	8.27 x 11.69	21.00 x 29.70
A5	5.83 x 8.27	14.80 x 21.00
B5	7.17 x 10.12	18.20 x 25.70
35mm Slide	7.34 x 11.00	18.64 x 27.94
Graphics Screen	8.25 x 11.00	20.96 x 27.94

Custom sizes are also supported. In the Page Setup dialog box, enter the desired size.



Hairlines

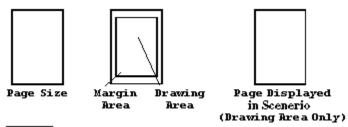
A hairline is the thinnest possible line that an output device is capable of producing. On high-resolution output devices, a hairline will be so thin as to be almost invisible; on lower-resolution devices, a hairline will be a solid, thin line.

To specify a hairline, enter a line width of **0.0** in the Define Line dialog box. (Choose None in the Pattern field to eliminate lines altogether.)



Margins

Margins are areas of empty space at the top, bottom, and left and right edges of a document. When you specify margins in *Draw*, the document work area displays only the "live" area of a page. Therefore, if you place an object at the edge of a page on the screen, it will not print at the edge of the page, but will be indented by the amount of the margin.





Complex curve

A curved shape made up of more than one Bezier segment. When you draw a curved shape with *Draw*, it is automatically converted into a simple (single Bezier segment) or complex (multiple Bezier segments) curve.



Drag

To drag a cursor, you press and hold the primary, or inside, mouse button, then move the mouse. When done, release the mouse button. From the keyboard this is done by holding down the Spacebar while pressing the arrow keys.

Bounding box

The bounding bo	ox is the smallest ('invisible) i	rectangle that com	pletely encl	oses an object.
The bounding be	on is the silianest	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	i cetarigie triat com	piccelly circl	oses an object.

Topic deleted [help_composite].

Topic deleted [help_accent].

Selecting objects using Shift+Click

To select objects using shift+click, point and click on the first object to be selected. Hold the Shift key and click on additional objects. Handles appear around each selected object. The selected objects can be grouped by pressing **Ctrl+G**.

During freeform editing, use shift+click in this way to select multiple point handles.



Object handles

When you **select** an object, eight small squares surround it. A ninth handle marks the center of the object.

Objects can be resized by **dragging** the object handles. Use the corner handles to size the object proportionally. The middle handles allow you to stretch or flatten the object. Resizing by dragging a handle takes the handle on the opposite side of the object as the fixed point from which resizing occurs. If you hold down the shift key while dragging a handle, the center point is the fixed point.



Clip-art collections

Clip-art collections allow you to access hundreds of precolored and preassembled clip-art images. These images are grouped in categories called collections, everything from aerospace to zoology. All clip-art collections have a default file extension of YAL.



Aspect (Condense/Extend value)

This value, set with the spacing command in the Define Type dialog box, represents the width-to-height ratio of text. A condense/extend value of 100% produces text with the standard width-to-height ratio. A value less than 100% produces condensed text, and a value greater than 100% produces extended text.



Control menu

In every window is a control menu, located in its the upper left-hand corner. It contains commands used to change a window's size and location and to close the window. To display the Control menu, hold down Alt while you press the Spacebar, or point to the bar in the upper left corner and click the mouse button.

Pointer

The Pointer is the cursor, or mouse-controlled icon, you use to select objects and commands and to drag handles. The Pointer cursor is the default cursor for *Draw*.

Proportional (sizing)

When an object is proportionally sized, it keeps its width-to-height proportions. To proportionally size an object, click on and **drag** one of its corner handles.

Press the Ctrl key while sizing proportionally in order to have the size altered on all four sides instead of two.

Clip-Art Manager (Ctrl+M)

The Clip-Art Manager, in the Draw menu and on the icon in the Toolbox, lets you select from thousands of pictures. Each picture is given a name and is filed by collections. For example, "Koala Bear" is filed under the collection of *Animals*.

See Using the Clip-Art Manager

The Hint Line

The Hint Line is the bar stretching across the very bottom of your *Draw* screen, displaying a brief description of the item currently under the cursor. It should be your first resource for on-line Help.

Service bureau

A service bureau is a business that specializes in outputting high-resolution graphic images in various formats. The telephone directory of every major city lists such businesses. If there is not one in your town, contact a color printer.



Negative image

Printing plates for a printer are typically made from negative film, or film with transparent images on a black background.

Multitasking

Multitasking is the ability of a computer to perform several tasks at once. While true multitasking is available in the Windows environment only under Windows NT, many *Draw* tasks can be performed simultaneously if you do not leave the program.

EPS file format

The Encapsulated PostScript format is a vector file format that allows graphic images to be transferred between computer programs. *Draw* can export files in the EPS format.



Click on

"Clicking on" is the selection of a function or an object with the mouse. Place the **cursor** on an item in the Menu Bar/Style Buttons Bar such as a dialog box button, or an object in the Drawing Area. Press and release the primary, or index finger, mouse button.

The item is selected when **object handles** surround the object and it is named in the status line.



Enter/Apply key

Pressing the Enter or the Apply key carries out an action. For example, in some **dialog boxes**, instead of clicking on Done with the mouse, you can press Enter on your keyboard. In the case of typing letters in the Enter/Edit Words dialog box, the Enter key starts a new line; the Add button actually places the text on the page.

Dialog box

A Dialog box appears when *Draw* needs more information before it can carry out a **command**. When you click on a command that is followed by three dots (...), a dialog box will appear, asking for responses such as Apply/Cancel, Yes/No, etc.

Files

You save the drawings you make with *Draw* in files. The files created by *Draw* are called documents. If you do not save your work in a document, it will be discarded when you exit *Draw* or start a new document.



Saving a document

Fill

Select Fill in the Define menu or click on the **Fill style button** below the Menu Bar in the Style Buttons Bar to add patterns to the interiors of objects.

See how to define a fill

Fixed disk

The fixed disk of your computer is where your programs and many other **files** are stored.

Flexible diskette (floppy disk)

You can store your $\underline{\text{files}}$ on 3-1/2 inch or 5-1/4 inch flexible diskettes. Flexible diskettes can be removed from your computer and stored elsewhere.

Cursor

A small graphic symbol you move around on the screen with the mouse or the keyboard arrow keys to choose commands and accomplish various tasks. Many tools have cursors relevant to the work that they do.

Italics

You can select this option in the **Define Type** dialog box (quickly accessed by holding down the **content menu mouse button** after selecting a text object) to make letters and numbers slant (either to the right or left). Italics add emphasis to words by slanting them.

This sentence is in italics.

If you select Italics from the **Define Type** dialog box, *Draw* shows you a default of 15 degrees, which you can change. Put a minus sign (-) in front of the numbers to slant the letters to the left.



The Define Type dialog box

Icon

An icon is a small picture that suggests what a tool or cursor does. For example, the Draw Line icon in the **Toolbox** shows a picture of a pencil drawing a line.

Justified

Justified text is an option in the **Define Type** dialog box. All lines in a justified paragraph are of equal length. This version of *Draw* does not wrap words, so you must supply the line breaks.



Mouse button

Typically a mouse has an inside, or index finger, and outside, or secondary, button. Use the inside mouse button to select objects, to click on dialog box buttons, and tools in the Toolbox.

In *Draw* the outside button is called a **content menu mouse button** because it displays and activates functions related to the **content menu**. Use it to complete editing of a **freeform** object and to edit other objects.



Using the content mouse button to make quick edits

Non-proportional (sizing)

When you **drag** one of the four middle **handles** of an object, you flatten or stretch the object, and it no longer has its original width-to-height proportions.



Clipboard formats

Draw allows you to cut and paste objects through the Windows clipboard in Arts & Letters, Windows Metafile, and Bitmap formats. A text paste format is also supported.



The Windows Clipboard

Windows Clipboard

Objects you **Cut** or **Copy** can be temporarily stored on the Clipboard. Objects in the Clipboard can be retrieved with the **Paste** command (or by pressing **Ctrl+V**) and added to a drawing. The objects in the Clipboard stay in the Clipboard until you cut or copy other objects to the Clipboard. You can add them again and again to the **drawing area**.

Object

An object is a single graphic, such as a symbol, text block, freeform object, or clip art. An object can be a group of many composite objects. For example, an airplane object can consist of wings, propellers, and canopy objects, each of which becomes an object when the group is ungrouped.



Scroll bar

The scroll bar is located on the right and bottom edges of the *Draw* window, and in some **dialog boxes** scroll bars have an arrow on each end and a scroll button. Click on the arrows to move the **drawing area** up or down and left or right in small amounts. **Drag** the scroll button and then release the mouse button to move quickly in the drawing area.

Content menu

A content menu is the list of command options displayed for a selected object when the **content menu mouse button** is held down.

Curve segment

A single Bezier curve. Curve segments are marked by a handle at each end.



Dither

A method of placing black or color pixels in an image to produce the effect of various shades of gray or color. *Draw* uses color dithering to simulate colors not available on the screen because of specific graphics card limitations.



Halftone

A method of using varying sizes of dots to produce the effect of various gradients and shades of gray.



Group

A group is two or more objects bound together using the Group command. You can manipulate a group object as if it were one individual object. The objects are grouped together until you ungroup them using the UnGroup command in the Arrange menu.



Imagesetter

A high-resolution printer, most commonly using the PostScript page description language, that creates camera-ready prints on resin-coated paper or on film.

Kerning

Moving text characters to optimize the spacing between them. Some letter combinations (such as A ν , T γ , etc.) appear to be spaced too far apart. Kerning tightens the letterspacing for these pairs to compensate for this effect.

Leading

The amount of vertical space, measured in points, between the base lines of two successive lines of text in a text object. Set the leading value using the Spacing command in the Define Type dialog box. Use a value greater than the type size value to separate lines of text, or use a lesser value to overlap text lines.



Define Type dialog box

PIC file format

A graphics format used by Lotus 1-2-3, Picture Perfect, and other software. *Draw* can import PIC files.



PostScript

A page description language, designed specifically to transfer information from a computer to a raster printer. The printer contains an interpreter that translates the PostScript commands into graphics objects on a page. *Draw* can print to PostScript printers and export documents as PostScript files.

Control menu

The Control menu allows you to resize the Arts & Letters *Draw* window.



For more information on the Control menu see Windows Help.

Minimize button

The Minimize button reduces the Arts & Letters window to the Arts & Letters ico

Maximize button

The Maximize button enlarges the Arts & Letters window to cover the area of your computer monitor.

Page border

The page border is the non-printing outline of the printable area of a page, as determined by the particular printer selected. You can draw up to and beyond a page border. The parts of any objects that cross a page border will appear on a different page when printed.

Current page

The current page is the page where the most recent action (adding, moving, or manipulating an object) was performed. Selecting an object on a page makes that page the current page.

Using Help

Remember that your first source of help should be the **Hint Line** at the bottom of your screen. It will give you information about the item currently under your cursor.

Another quick access to help for tools or commands on the drawing area is Help for Items.

To view help for a tool or command:

1. Choose **Help for Items** from the **Help** menu, or press the **F1** key.

The Help cursor appears.

2. Click on a tool or choose a command. A help window appears, displaying information about the chosen tool or command.

You can use the controls in the help window to see help on other topics. When done looking at the help information, pull down the File menu in the help window and choose Exit.

To view the help index:

1. Choose **Help Index** from the **Help** menu.

The help index appears.

2. Click on a topic to view further help.

For a detailed explanation on operating the Help system, choose Help for Help from the Help menu.



Rotating objects

When you rotate an object using the **Rotate tool** in the Toolbox, you can see the number of degrees the object rotates in the rotate button on the numeric bar at the bottom of your screen. The degrees change in one tenth degree increments as you move the mouse.

Rotating Two or More Objects on the Drawing Area

If you have rotated more than one object or picture on the Drawing Area, *Draw* remembers how far each was rotated. To see how many degrees you rotated the last object, simply click on that object (or any others you have rotated) and see the degrees on the rotate button.

Selecting more than one object displays 0.0 degrees. But *Draw* still remembers how much each object was rotated individually.

When you save the objects and exit or start a new drawing, *Draw* will remember how far you rotated those objects when you open the document later.

Rotating Grouped Objects

If you $\underline{\mathbf{group}}$ two or more objects, the \mathbf{r} button in the numeric bar shows 0.0. Rotating that group changes the numeric bar display. When you $\underline{\mathbf{ungroup}}$ that group, each object will show the new degrees of rotation in the numeric bar.

Direction of Rotation

Rotating clockwise (to the right) makes the number of degrees ascend or count from 0.0 to 360.0.

Rotating counterclockwise (to the left) makes the number of degrees descend or count from 360.0 to 0.0.



The numeric bar



Using the numeric bar

The numeric bar X: 1.09 Y: 2.06 in. r: at the bottom of your screen gives information about the position of the cursor and about the measurements of a selected object.

The ${\bf x}$ and ${\bf y}$ buttons always give the horizontal and vertical coordinates for the cursor. The ${\bf r}$ button indicates the degree of rotation for a selected object.

Selecting objects

To select a single **object**, point on it and click the index finger mouse button. Eight **object handles** appear around the object. A ninth, smaller handle marks the center point.

If several objects are stacked on top of one another, you may need to click more than once to select the desired object. The Style bar displays the name of the currently-selected object.

To select more than one object, use **Shift+Click**, **Block Select**, or **Select All**.

Objects selected using Shift+Click can be moved and sized individually, but their styles (color, fill, line, and type) can be changed simultaneously.

Objects selected using block select or select all can be moved and sized as a temporary group.

Moving objects

To move an object, **drag** it from one position to another. A rectangular bounding box moves with the cursor; when the bounding box is in the desired position, release the mouse button and the object is moved to the new position.

To cancel a move while the bounding box is displayed on the drawing area, press **Esc**.

If a selected object is very small, it may be difficult to move the object. Instead of dragging the object, *Draw* instead drags an object handle. (Press **Esc** if this happens.) To avoid this, hold both mouse buttons as you drag, or **zoom in**.



Sizing objects

To size an object, **select** it and **drag** an **object handle**. A rectangular bounding box moves with the cursor. When the bounding box is the size desired, release the mouse button and the object is redrawn at the new size.

To cancel a size operation while the bounding box is displayed on the drawing area, press **Esc.**

Dragging the top, bottom, left, or right handles sizes the object non-proportionally; dragging a corner handle sizes the object proportionally. Pressing **Shift** while dragging any object handle sizes the object away from its centerpoint rather than away from one side.

An object that has been resized non-proportionally can be restored to its **default** proportions using the **Make Proportional** command in the Arrange menu.

Using Activities

The Activity Manager gives you instant access to useful information.

Backgrounds -- Three collections provide backgrounds for presentations: Backgrounds (23), Backgrounds 35mm PostScript (17), and 35mm SCODL (18).

Compositions - Scenery -- Provides 11 scenes with which you can quickly make compositions by adding clip-art.

Forms -- Provides two lessons in using the grids supplied with *Draw* to create such forms as monthly planners and service interval charts. Examples are also provided.

Greeting Cards -- Contains 10 pre-made greeting cards that you can easily personalize and two templates for creating your own.

Illustrations -- Provides two collections, containing samples of artwork composed using *Draw*: B&W (11) and Color (8), Seeing how others have used *Draw* can give you ideas of your own.

Lessons -- Contains 79 mini-lessons divided into Beginner (10), Intermediate (28), and Advanced (41) collections. Viewing these lessons and performing the activities they suggest will help you on your way to mastering *Draw*.

Music -- Three collections contain the material necessary to create posters using musical notation: Notes/Time/Rests (56); Staff Paper/Other (4); and Staffs/Sigs/Clefs (44).

Special Effects - Color -- Contains gradient fills created to simulate such things as sunrises and metals. Using Save and Recall Styles you can quickly apply these gradients to objects you create.

Stationery & Bulletins -- Contains 10 designs for stationery and bulletins that you can personalize and print.

Test Documents -- Contains 11 ready-to-be-printed samples of color palettes, dither and raster patterns, halftones, and PostScript shading. These are provided so that you can see how the colors and patterns you select in *Draw* will actually print with your output device.

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Setting up Activities

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Setting up Activities

There are many different activities in *Draw*. Some of the activities should be put on tall (portrait) paper, and other activities should be put on wide (landscape) paper.

To change between tall and wide paper:

- 1. Choose **Current Page** from the **View** menu.
- 2. Choose **Print Setup** from the **File** menu. A dialog box appears.
- 3. Choose **Tall** (Portrait) or **Wide** (Landscape) Orientation. Click on **OK** in the upper right.

If you don't know which page orientation to choose, choose Tall (Portrait). There are a lot more tall activities than there are wide activities. (Some of the activities tell you if they are tall or wide.)

To select activities:

- 1. Pull down the **Draw** menu and click on **Activity Manager**.
- 2. When the Activity Manager dialog box appears, click on **Collections**, then **Open**. Browse the directories for files with the YAL extension. Highlight and select the YAL files that appear in the upper window. Press **Open** and their names will appear in the lower **Opened Collections** window. When you have finished selecting activities, click on **Done**.
- 3. The **Activity Manager** dialog box will reappear with the selected library activities in the left box. Choose the activity library you want, and its contents will be displayed in the right window under "Activity: Available."
- 4. Click on the activity you want, then **Add**. The pointer will change to the Add Object cursor and the dialog box will disappear. Place the Add Object cursor in the upper left hand corner of your screen and click. The activity will be displayed at Actual Size.

To print an activity:

- 1. Choose **Print** from the **File** menu. A dialog box appears.
- 2. Choose Current Page and click on the OK button.

Because the activities are pre-colored for you (except for the coloring pages), they will print out on your black and white printer with shades of gray for the colors. If you don't want the grays, you can turn off the color before printing, and then color the activity with crayons, markers, or colored pencils after printing.

To turn off the color in an activity:

- 1. **Select** all the objects by pressing **Ctrl+A**.
- 2. Click on the Fill button then on **Define.**
- 3. Under Named Fills, click on **None**.

Click on an activity name below to see more information about that activity.



Stationery and Bulletins

Greeting cards

The Greeting Cards activity library gives you a collection of cards for birthdays, holidays, and other special occasions.

You should center the card on the page before printing.

To center a card on the page:

- 1. **Select** the card.
- 2. Choose **Align** from the **Arrange** menu (or press **Ctrl+N**). A dialog box appears.
- 3. Choose Page reference and Center orientation and click on OK.

You can use the Break Apart command in the Arrange menu to ungroup the card, and then change the words and pictures to make a new card.



See Using Activities

Stationery and bulletins

The Stationery and Bulletins activity library gives you borders and pictures you can put on a page to create special stationery and bulletins.

You should center the activity on the page before printing.

To center an activity on the page:

- 1. **Select** the activity.
- 2. Choose **Align** from the **Arrange** menu (or press **Ctrl+N**). A dialog box appears.
- 3. Choose Page reference and Center orientation and click on OK.



See Using Activities

Drawing curves

Click on the Curve tool in the Toolbox. **Drag** the Curve cursor to draw curves. When you release the mouse button, your sketch is automatically translated into smooth Bezier curves.

Click and drag again from the end of the curve to create connected curve segments. Move the cursor away from the segment just drawn. Click and drag again to draw a new, unconnected curve.

When finished drawing curves, click the <u>content menu button</u> twice. On the first click, the Edit cursor appears and the curves can be changed. On the second click, <u>object handles</u> appear around the curve object. The curves appear on your drawing area using the current <u>graphic attributes</u>.

See the sample editing session in Modifying Objects

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Defining fill (Ctrl+I)

The Fill command in the Define menu displays the Define Fill dialog box. Clicking on then **Define** also displays this dialog box. Use it to make the interior of an object invisible, solid, filled with a raster pattern, or filled with a vector pattern. You can also change the object's color. (Click on the button shown here to see the options displayed when you hold down the content menu button.)

To select a <u>raster</u> or <u>vector</u> pattern, click on Raster or Vector. A number box appears; enter the number of the pattern desired or click on the scroll arrows to scroll through the pattern numbers. As you do, a preview box displays the current pattern. A list box displays a list of named fills. To select a named fill, click on the name in the list box.

Click on OK to apply the fill to all selected objects.

Editing shortcut: For quick access to Named Fills, select the object then hold down the **content menu button**. A **content menu** similar to the following appears

.



Details of the Define Fill dialog box



Importing files

The Import command in the File menu lets you import text files (**TXT** and **DOC** are the typical extensions) and clip-art images into *Draw* from any of the following formats: **TIF**, **WMF**, or **PIC**.

Click on the special file type to select it.

Go to the directory where the import file is located, click on a file name in the list, then click on OK. The Add Object cursor appears. Click the index finger mouse button to add the image into the *Draw* drawing area at its **default** size, or **drag** the mouse to size a **bounding box** for the image.

Note: Text must be in ANSI or ASCII format to be imported into *Draw*.

Setting up a printer

The Print Setup command in the File menu displays the Print Setup dialog box. Use this dialog box to choose a target printer.

Point on a printer in the list and click the index finger mouse button. The printer name becomes highlighted. Choose the **page orientation**, and paper size.

Clicking on **Options** takes you to the standard Windows Print dialog boxes. Provided the printer supports the options, *Draw* will use the Windows options that you choose.

Click on **OK** to select all of the options chosen here and in previous OKed Print boxes.



Print a document



Printing to a file

Printing to a file lets you print the picture you made in *Draw* on someone else's printer or imagesetter.

When you choose the Print command, you can click on the To File button to print to a file. You tell Draw the type of printer you plan to use to print the file, and you enter a file name up to eight letters long. The extension **.PRN** is the usual extension given to a print file. Printing first to your hard disk and then copying the resulting file to a floppy disk will considerably speed the process.

Once transferred to a floppy disk, this file can be taken to another computer that is connected to the printer you want to use. You can then follow the instructions below to print the file from a DOS prompt. (See a DOS User's Guide for information on using DOS.)

- 1. Put the disk in a flexible-disk drive.
- 2. Log onto that drive.
- 3. Type **COPY/B filename LPT1** and press **Enter**. (Instead of typing the word *filename*, type the name that you gave to the file.)

Note: If you are printing to a serial printer, do not use the /B switch after the COPY command. Also, printing the file from a hard disk will shorten print time.



Print files for service bureaus

Using symbols

The Symbols command in the Draw menu displays the Symbols dialog box. The second icon in this Toolbox flyout also accesses this command.

Use this dialog box to place one of the 65 scrolling symbols into the drawing area. More complex clip art is accessed through the <u>Clip-Art Manager</u>. Open a clip-art collection by pulling down the Collections menu. After selecting an image from the opened collection, click on Add. The Add Object cursor appears. Place the cursor where you want the upper left of the symbol to appear. Click the mouse to have the symbol appear at its default size, or <u>drag</u> the mouse to size a <u>bounding box</u> for the symbol.

When editing *Draw* clip art, look in the **object viewer** in the Style bar. If you see a number for the selected clip-art image, you may need to **break it apart** before continuing with certain operations. After ungrouping, the composite parts of these numbered symbols can be selected and **aligned logically** to recreate the original image, even though parts have been resized or otherwise modified.

If a symbol is currently selected in the document when you choose the Symbol command, you can enter a number and click on Replace to replace the selected symbol with the new symbol. The new symbol will draw at the size and proportions of the symbol it replaces.

You can also use the **Correct shape** command to redraw the new symbol at its proper proportions.



Using text (Ctrl+T)

The Text tool displays the Enter/Edit Text dialog box. Use this dialog box to enter new text and to replace existing text.

To enter new words, type up to 5,000 characters into the Words dialog box and click on Add. The Add Object cursor appears. Place it where you want the upper left of the words to appear. Click the mouse to have the words appear at their **default** size, or **drag** the mouse to size a bounding box for the words.

To edit words, first select the words in the drawing area and then click on the Text tool in the Toolbox. The selected words appear in the Enter/Edit Text dialog box. Click on Replace to replace the old words in the drawing area with the edited words from the dialog box. Choosing the All Upper option places the words into the drawing area in all Captials; choosing All Lower places the words in the drawing area in all small letters. The attributes of the text object can be modified by selecting the text object and holding down the **content menu button**.





Using the Clip-Art Manager (Ctrl+M)

Clicking on the clip-art icon displays the Clip-Art Manager dialog box, as does clicking on the Clip-Art Manager command in the Draw menu.

In the dialog box the upper list box lists the names of the currently-open *Draw* clip-art collections. Click on a collection name in the Collection list. Note that an (i) to the right of a collection name indicates a collection of symbols. The lower list (Image Name) displays the names of all of the clip art in the collection.

Click on a name in the lower list, then click on Add. The Add Object cursor appears. Place the cursor where you want the upper left of the clip-art picture to appear. Click the mouse to have the symbol appear at its **default** size, or **drag** the mouse to size a **bounding box** for the symbol.

The Clip-Art menus:

The **Collections** menu item displays options for opening and closing clip-art collections. Selecting **Open** displays the Open Collection dialog box, where you can choose from files with a YAL extension.

The **Images** menu item allows you to rename an image, give it a new keyword, or delete it.

The **Thumbnails** menu item allows you to hide (remove) the scrolling thumbnails at the bottom of the dialog box or to reduce the dialog box to the thumbnails alone. This abbreviated view will allow you to keep the Clip-Art dialog box open while still having work space. **Update** allows you to incorporate a thumbnail of a newly-added image in a current or in all collections; **Colors** by default displays the thumbnails in 16 colors. If you see muddy or inaccurate colors, try viewing at 256 colors. The results in any case will depend on your video card.

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Saving to Editor clip-art collections and creating thumbnails

Using the Activity Manager

The Activity Manager command and the Activity Manager tool In the Toolbox flyout

display the Activity Manager dialog box.

In this dialog box the upper list box lists the names of the *Draw* activity libraries. Click on a library name in the Selected Activity Libraries list. The lower list (Available Activities) displays the names of all of the activities in the library.

Click on a name in the lower list, then click on Add. The Add Object cursor appears. Place the cursor where you want the upper left of the activity to appear (usually at the upper left corner of the drawing area). Click the index finger mouse button, and the activity appears. Some of the activities should be ungrouped before doing the activity. Do this by selecting the group and pressing **Shift+G**. (You can tell if something is a group by **selecting** it. If it's a group, the object name in the Style bar will be "Group" or there will be a "G>" in front of the name.)

Note: Many of the activities are designed for the Current Page viewing level. Either before or after adding the activity to the drawing area, pull down the View menu and choose Current Page, or press **Ctrl+2**.



Define Color dialog box

Clicking on then **Define** accesses the Define Color dialog box.

Choose whether to apply your changes to the object's line or to its interior fill.

The Named Colors list displays the ready-mixed colors available in the palettes provided with *Draw.* Arrow down to see them.

You can mix any color you like using the **Hues** mixing model.

You can highlight the shown values and type in your own percentage.

Or, using the scroll bar, click on the arrows at each end of it to adjust the values one unit at a time. Click within the scroll bars (to the right or left of the white scroll box) to adjust the values ten units at a time. **Drag** the slider button inside the scroll bar. If you mix a color for a line, the line will be displayed on the screen as a solid color, but will print as a mixed color if the printer has the capability to do so.

When you are satisfied with the color, click on **Apply**.

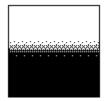


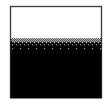
Detailed illustration



Gradient fills

Gradient fills are transitions from one color or grayshade to another.







Many ready-made gradient fills are displayed when you click on the Fill style button Clicking on a fill pattern from the displayed palette applies it to selected object(s).



Define Fill dialog box



A reminder

Modifying objects in *Draw*

Objects created in *Draw* can be modified to suit your needs.



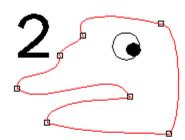
Click here to show a typical editing session corresponding to the numbered steps below.

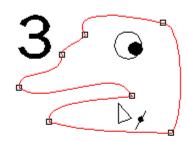
- 1. **Select** the object. Eight **object handles** surround it.
- 2. **Press Ctrl+P** to edit it. If it is a <u>freeform object</u>, editable <u>freeform points</u> appear, which can be manipulated.
- 3. Add a Handle by pressing **F5**.
- 4. Use the cursor to place the new handle anywhere on the drawing. Now you can **drag** the handle you added, and so bend the drawn line.
- 5. **Select** a curve freeform point to see its control handles (connected by a dotted line).
- 6. Grasp one of these handles to change the slope of the tangent at that point.
- 7. After modifying the drawing, click with the **content menu button** to show the final appearance of the object.

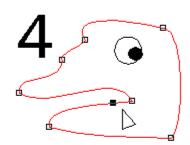


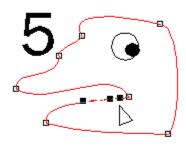
See the menu list













User's guide

An on-line user's guide is provided with *Draw*. It provides a detailed, step-by-step reference to *Draw* features, and the pages you need can be printed out.



Tutorials

Several easy lessons designed to familiarize you with Draw are provided on-line. One of the most important of these is the drawing tutorial.



See sample drawing session



See complete tutorial list

Selecting point handles

To select a point handle, point on it with the freeform edit cursor and click. The point becomes solid-filled.

To select multiple point handles, use **shift+click**, **block select**, or **select all**.

File menu

<u>F</u> ile		
<u>N</u> ew	,	
<u>О</u> ре	:n	
Sav	e <u>A</u> s	
<u>S</u> av	e	F9
Pag	e Setup	
P <u>r</u> in	t Setup	
<u>P</u> rin	t	
<u>I</u> mp	ort	
<u>E</u> ×p	ort	
E <u>x</u> it	:	

The File menu contains commands for opening, saving, and printing documents.

New - clears the current document from the screen.

Open - displays a dialog box for opening document and default files.

Save As - displays a dialog box for saving document and default files.

Save - saves the current document to the filename displayed in the title bar.

<u>Page Setup</u> - displays a dialog box for specifying page size, margins, and other page settings.

Print Setup - displays a dialog box for specifying a target printer and print options.

Print - displays a dialog box for specifying the number of copies to print and for sending the current document to the target printer.

Import - displays a dialog box for importing files into *Draw*.

Export - displays a dialog box for exporting the current page or selected objects to a file in a variety of formats.

Exit - exits Draw.

Edit menu

<u>E</u> dit	
<u>U</u> ndelete	Ctrl+Z
Block Select	Ctrl+B
Select <u>A</u> II	Ctrl+A
De <u>s</u> elect All	Shift+A
Cut	Ctrl+X
<u>С</u> ору	Ctrl+C
<u>P</u> aste	Ctrl+V
Paste in <u>F</u> ront	
Paste <u>B</u> ehind	
Cl <u>e</u> ar	Del

The Edit menu contains commands for selecting and deleting objects, for undoing and undeleting, and for transferring objects to and from the clipboard.

<u>Undelete/Undo</u> - undoes the most recent delete, move, size, rotate, or style change operation.

<u>Block Select</u> - displays the Block Select cursor for selecting multiple objects by dragging a bounding box around them.

Select All - selects all objects in the current document.

Deselect All - deselects all selected objects in the current document.

<u>Cut</u> - moves all selected objects to the clipboard and deletes them from the current document.

Copy - copies all selected objects into the clipboard.

<u>Paste</u> - displays the Add Object cursor for pasting the contents of the clipboard into the current document.

<u>Paste in Front</u> - displays the Add Object cursor for pasting the contents of the clipboard in front of all selected objects in the current document.

<u>Paste Behind</u> - displays the Add Object cursor for pasting the contents of the clipboard behind all selected objects in the current document.

<u>Clear</u> - deletes all selected objects from the current document.

Draw menu

<u>D</u> raw		
Clip-Art <u>M</u> anage	er Ctrl+M	
Symbol	Ctrl+S	
<u>W</u> ords	Ctrl+T	
Shapes	•	
Acti <u>v</u> ity Manager		
1		
<u>L</u> ine	F2	
<u>L</u> ine Cu <u>r</u> ve	F2 F3	
-	. –	
Curve	F3	

The Draw menu contains commands for placing artforms and text on the screen and for drawing lines.

<u>Clip-Art Manager</u> - displays a dialog box for selecting clip-art symbols to the current document.

<u>Symbol</u> - displays a dialog box for choosing a clip-art symbol to add to the current document.

Words - displays a dialog box for entering or editing text.

Shapes - displays the line cursor for drawing lines.

Activity Manager - displays a dialog box for selecting activities.

Line - displays the line cursor for drawing lines.

Curve - displays the curve cursor for drawing curves.

Edit Drawing - allows freeform editing of a selected freeform object.

Add Handle - adds a freeform handle to a selected freeform object.

Close Shape - attempts to create a closed shape from two selected open freeform objects.

Arrange menu

<u>A</u> rrange	
<u>G</u> roup	Ctrl+G
<u>U</u> nGroup	Shift+G
Bring to <u>F</u> ront	Ctrl+F
Send to <u>B</u> ack	Shift+F
<u>A</u> lign	Ctrl+N
<u>D</u> uplicate	Ctrl+D
Flip A V	
Flip <>	
Lub/	

The Arrange menu contains commands for precision drawing and editing.

<u>Group</u> - groups all selected objects together; the grouped objects can then be manipulated as a single object.

UnGroup - breaks apart grouped objects.

<u>Bring to Front</u> - places a selected object in front of other objects in the current document.

Send to Back - places a selected object behind other objects in the current document.

<u>Align</u> - displays a dialog box for aligning objects to each other and to the current page. <u>Duplicate</u> - displays the Duplicate cursor; point on an object and drag to duplicate it.

Flip/Vertically - flips a selected object vertically (turns it upside down).

Flip/Horizontally - flips a selected object horizontally (produces a mirror image).

<u>Correct Shape</u> - restores the default proportions of an object that has been stretched non-proportionally.

Define menu

Defi <u>n</u> e	
<u>C</u> olor	
<u>F</u> ill	Ctrl+l
<u>L</u> ine	Ctrl+L
<u>Т</u> уре	Ctrl+Y
<u>B</u> undles	
<u>S</u> ave	Ctrl+R
<u>R</u> ecall	Shift+R

The Define menu contains commands for changing the color, lines, fill, and typestyle of objects.

Color - displays a dialog box for changing the fill and/or line color of objects.

Fill - displays a dialog box for changing the interior fill of an object.

Line - displays a dialog box for changing the width and type of lines in an object.

Type - displays a dialog box for changing the typeface, size, and style of text.

<u>Bundles</u> - displays a dialog box for applying combinations of styles.

Save - saves the color, fill, line, and type styles of a selected object.

Recall - copies the current styles to a selected object.

View menu

<u>V</u> iew	
Actual Size	Ctrl+1
Current <u>P</u> age	Ctrl+2
All Pages	Ctrl+3
Zoom In	Ctrl+0
<u>P</u> revious	Shift+0
<u>R</u> edisplay View	F12
Options	

The View menu contains commands for changing the view of a document and for turning individual screen elements on and off.

<u>Actual Size</u> - displays objects at approximately the size they will appear when printed. <u>Current Page</u> - displays the entire current page. If additional screen space is available, other pages may be displayed as well.

<u>All Pages</u> - displays all the pages in the current document.

Zoom In - displays the Zoom cursor for zooming in to an area of the document.

Previous - redisplays the last view level.

Redisplay View - erases the screen then redisplays the current view.

Options - displays a dialog box for setting the unit of measure, grid, and border options.

Help menu

<u>H</u>elp

Contents...

Help for Items

F1

<u>Search for Help on...</u> <u>H</u>ow to Use Help...

Tutorials...

About A&L® Draw...

The Help menu contains commands for accessing the on-screen help system, and for displaying an information screen on *Draw*.

Contents - displays the starting screen for Help.

<u>Help for Items</u> - displays the Help cursor; selecting a command or tool displays help for that command or tool.

<u>Search for Help on</u> - displays the Help index, a starting point for locating help on different topics.

How to Use Help - displays instructions on using the on-screen Help system.

Tutorials - displays a choice of on-line tutorial sessions.

<u>About</u> - displays a dialog box containing version number, serial number, and other information about *Draw*.

View menu

<u>V</u> iew	
Actual Size	Ctrl+1
Current <u>P</u> age	Ctrl+2
A <u>l</u> l Pages	Ctrl+3
Zoom In	Ctrl+0
Previous	Shift+0
<u>R</u> edisplay View	F12
<u>O</u> ptions	

The View menu contains commands for changing the view of a document and for turning individual screen elements on and off.

<u>Actual Size</u> - displays objects at approximately the size they will appear when printed.



Details of complete View menu

Thumbnail images

A thumbnail is a small picture of the contents of a document not yet loaded into Draw.

When you are opening a document, importing a graphic, or using the Clip Art Manager, thumbnail images allow you to preview the document or image before it is placed on the screen.

In the Open document dialog box a thumbnail preview of each GED can be viewed without individually opening each document.

Thumbnail Images also allow you to view the different clip art images in the Clip Art Manager. Each thumbnail image is a small color or black and white representation of the clip-art image contained in collection files (identified by the *.YAL file extension).



Opening documents



Using the Clip-Art Manager

Freeform editing (Ctrl+P)

The Edit Freeform command in the Draw menu or in the Toolbox allows you to edit a selected freeform object.

When you **select** a freeform object and choose Edit Freeform, point handles appear on the object and the triangular freeform edit cursor appears. You can **drag** selected point handles to reshape the object. Click on a curve tangent point to view editable curve control point handles. The intersection point of straight lines will not show curve control handles.

Intuitive object selection

An object in *Draw* can now be selected by clicking on any of its visible parts. An object within a stack of other objects can be selected intuitively by clicking on the part of it that you can see.

To select a single object:

Point on a visible area of the object with the Pointer and click the index finger mouse button.

The selected object is surrounded by eight small squares, called object handles. These handles appear at each corner of an invisible rectangle that surrounds the object, and at the midpoint of each side. A ninth handle, in the shape of four arrows, appears at the center point of the object. Any previously selected objects are deselected. Whenever you add a new object to your Arts & Letters document, it is automatically selected.

An **open shape** or object with no **fill** must be selected by clicking on its outline.

Note: To select an object that is completely concealed by other objects, hold down on the Control key and point on the stack. Each time you click the mouse, a different object in the stack will be selected. Check the Style bar to see the name or the type of the currently-selected object.

Sizing from the center of an object

A new feature of *Draw* allows you to size an object away from its centerpoint, either proportionally from a corner handle, or nonproportionally from a side handle. You **select** an **object handle**, press the Shift key, and **drag** the handle.

Proportional sizing away from one corner handle (the default for proportional sizing) is done as above but without pressing any key.



Drag/Drop

Draw can paste certain files if they are dropped from the File Manager or similar application that supports Drag and Drop. Draw documents (GED) and Palette files (PAL) can be dropped on Draw. The file will replace the current Draw document or palette respectively, or will be appended if the Ctrl key is held down during the drop. Other files that are automatically appended to the current Draw document include TIF, the Arts&Letters PIC (Pictograph files), STY (Draw style files), DIA (Diagraph files), YAL (Draw clip-art collection files), and TXT (text files). DEF (default) files can also be dropped on Draw and will replace the current defaults file.



Content menu button in Draw

The content menu button is the outside, or secondary, button on your mouse (the right button for right-handed mice, the left button for left-handed ones). In *Draw,* holding down the content menu after selecting an object displays a content menu (similar to the one below) that allows you to modify that object.



Icon identifiers in Viewer

The Viewer in the Style bar has been supplied with icons to intuitively indicate the type of objects shown in its object list.

An explanation of the icons appears below.



Object Type:	Object Icon:	Named Object:
Symbol	()	S >
#XXXX	* **	object
<i>1170000</i>		name
Text	T	T >
ICAL	•	object
		name
Chart		C >
Charc		object
		name
Extrude	xx	E >
LAtitude	_	object
		name
Onan Shana	D <mark>∕</mark>	0 >
Open Shape	U	
		object
Clased Chana	-4	name C >
Closed Shape		
		object
Di atuura	Distress	name
Picture	Picture	P >
(.WMF)		object
D'I		name
Bitmap		B >
		object
		name
Image (. TIF)	Image	I > object
_		name
Group	300	G >
		object
		name
Blend	•	B >
		object
		name
Hole Group	\triangle	H >
		object
		name
Mask Group	<u> </u>	M >
		object
		name
Text on Shape	<u>⊳BC</u>	T >
•		object
		name
Warp Object	400	W >
. ,	-	object
		name

Block -Multiple -None -

Flyout toolbars and rollup menus

A flyout toolbar is an **icon** in the Toolbox that offers several tools when the mouse is held down on it. A rollup menu is one currently displaying only its title, **pushpin**, and enlarge/reduce button. All of the *Draw* dialog boxes that have pushpins can be arranged as rollup menus.

Pushpins

Now you can **toggle** pushpins to fix tools and dialog boxes on the screen for ready access. When used with the minimization feature, dialog boxes with pushpins allow you to customize your screen to include all of the necessary tools in the position you want.

Flyout toolbars and rollup menus

Accelerator keys

Many of *Draw* accelerator keys have the same assignments as Windows accelerator keys. They make it easy to choose the command from the keyboard instead of displaying a menu and highlighting the command with the mouse.

An accelerator key can be a single key (such as the **F4** function key or the **Del** key) or a two-key sequence using the Shift key (**Sh**), the Control key (^), or the Alternate (**Alt**), plus a second key, usually shown as KEY+KEY. The accelerator keys are listed in the <u>menus</u> after the commands to which they apply.

You can print the List of Accelerator Keys so they will be close at hand while you are learning *Draw.* To print the list of accelerator keys, click on the jump below then choose **Print Topic** from the Help Window File menu.



List of *Draw* accelerator keys

List of accelerator keys

 $\it Draw$ accelerator keys conform with Windows conventions $\,$ Note that the caret $\, \hat{} \,$ indicates pressing the $\it Ctrl$ key.

Action Desired	Draw_ Accelerator Key
Actual Size view	^1
Add (drawing) Handle	F5
Align objects	^N
All Pages view	^3
Block Select	^B
Break group apart	Shift+G
Bring to Front	^F
Clear (Delete)	Del
Clip Art Manager.	^M
Close/Exit	Alt+F4
Control Points	^4
Copy the object	^C
Current Page view	^2
Curve (add handle)	F5
Curve (control points)	^4
Curve (draw one)	F3
Curve (edit one)	^P
Curve (its lines)	^L
Cut	^X
Deselect All	Shift+A
Duplicate	^D
Edit Freeform (drawing)	^P
Erase	Del
Fill an object's interior	^
Group	^G
Help for Items	F1
Join Open Shapes	F7
Line (add handle)	F5

Line (draw one) F2
Line (edit one) ^P
Line (its styles) ^L
Paste ^V
Points (show) ^5

Previous view Shift+O [the

letter]

Recall styles Shift+R

Redisplay (redraw) F12 Save (the F9 document)

Save object's ^R

styles

Select All ^A

Send to Back Shift+F

Show Control ^4

Points

Switch To ^Esc

Symbols (65 basic

ones)

^S

Text (entering) ^T
Type (styles) ^Y
Undelete/Undo ^Z

UnGroup Shift+G

Zoom In ^O [the letter]

Object viewer

The object viewer, found at the top of the Drawing Area, displays the kind and the name of the object selected. A click of the index mouse button on the down arrow displays the list of objects in the document, with the selected object (if there is one) highlighted.



Explanation of the icons alongside object names

Vector drawing

A vector drawing is defined as a series of straight lines. A vector drawing of a circle, for instance, is a series of straight lines in the shape of a circle. The beginning and ending points of each vector are stored in the computer, and when you size the image, those points are adjusted, making the vectors shorter or longer as needed.

Draw offers a number of ready-made vector fills in the Custom Fill and the Custom Style Bundles dialog boxes.



WMF file format

A Windows Metafile is a file format that allows drawings to be moved from one computer program to another by **cutting** them to the **Clipboard** during a computer session or by saving them to disk. *Draw* imports and exports WMF files.



TIF file format

The Tagged Image File format is a bitmap file format that allows graphic images to be transferred between computer programs. Scanned pictures are often saved as TIF images. *Draw* imports and exports TIF files.



Fill styles

In the Define Fill <u>dialog box</u> is a list of predefined fill styles you can use to fill the interior of objects. Access it by clicking on the Fill style button , then on **Define.**

Define Fill dialog box

Bezier curves

A Bezier curve is a "cubic polynomial" representation of a curve that allows great flexibility and control in manipulating the curve. Any complex curve can be constructed from Bezier segments. The Bezier curve model is the one used by PostScript. When you export a file in .CGM, .WMF, or HPGL format, all Bezier curves are translated into straight line (vector) segments for compatibility with those formats.



See vector image

Custom styles

When you click on the Style button you see a list of names that indicate unique combinations of fill color, line color, back fill color, fills, lines, and type. Bundled styles are also accessible through the Bundles command in the Define menu.

Defaults

A default is a preset option or value that *Draw* uses until you specify otherwise.

Open shape/closed shape

An open shape is a **freeform object** consisting of one or more line or curve segments, and terminating with an end point at each end of the object.

A closed shape is a freeform object consisting of two or more line or curve segments, and forming a closed object without end points. Only closed shapes can have fill styles.

To join two freeform objects, <u>select</u> them and press **F7.** While this operation joins the shapes, it does not always create a closed shape. Close it by pressing **Ctrl+P** and drawing with the **Line** or **Curve** tool.

Rotate

To rotate an object means to turn it around some point. In *Draw* this is done interactively by clicking on the Rotate tool .

SDL file format

SCODL is a graphics format used by Matrix film recorders and other devices.

Style bundles



Saving to Editor clip art collections and creating thumbnails

The clip-art collections, or libraries, from other *Arts & Letters* drawing packages are accessible through *Draw*. However, you cannot add images to these collections nor see thumbnail images of them in the Clip-Art Manager until they are converted to *Draw*. The user must choose to convert them, since after the conversion only *Draw* can access them.

To convert other A&L clip-art collections to *Draw*:

- 1. Open your WIN.INI file, located in the Windows directory.
- 2. Find the [a&lbeta] section. If there isn't one, go to the [a&l] section.
- 3. Add the line **allowoldyalupdates=1** just below the section name.
- 4. Restart Windows.

Now when you open the Clip-Art Manager, the **Save To Collection** button is no longer grayed out (inaccessible). This means that you can now use it to add any image on your screen to an open collection.

To create a thumbnail, open the Clip-Art Manager and pull down the **Thumbnails** menu. Then choose **Update...** then **Options...** then either **B&W** or **16 colors**. If your monitor displays a muddy image after selecting 16 colors, change it to **256 colors**.

Problem report

Should you encounter problems during the use of the *Arts & Letters Draw*, certain information will be necessary before the technical support assistant can help you. This information may be more convenient for you to fax in order to avoid a telephone wait. The form is therefore in a ready-to-fax format. However if you do not have access to a fax machine, you will still want to print the form and fill it out before making your technical support call.

In the event of a system crash, the information contained in Dr. Watson may be useful. Included with Windows, Dr. Watson is a utility that monitors the applications you are running. To work, Dr. Watson must be run while Windows is active. (Many users place the Dr. Watson icon in their Startup group.) If an application terminates, Dr. Watson automatically records the code that was running when the application failed and prompts the user for an explanation of what happened. Dr. Watson then automaticlly generates a file called DRWATSON.LOG in your Windows directory, and it is this file that would be useful to us. You can copy DRWATSON.LOG and your GED to a diskette and mail it to us or upload it to our BBS at (214) 404-8652.

The technical support telephone number is (214) 661-8960; the fax number is (214) 661-5429.



Go to the technical support form and print it



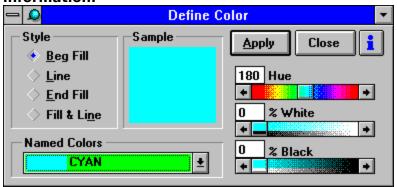
Go to the technical support form and grab the text for a word processor

*** URGENT TO TECHNICAL SUPPORT *** Problem report for Arts & Letters *Draw*

Page 1 of pages	Date
TO: Computer Support Corporati	on
15926 Midway Road, Dallas, TX 75	5244
FAX: (214) 661-5429 BBS: (2	214) 404-8652
FROM: Your name	
Address	
	Serial number
OS/Windows Version	
Current video driver and mode	
Target Printer in <i>Draw</i>	
Description of the problem	
The steps necessary to reproduce	the problem

If your application terminated, we would like to have copies of your Dr. Watson log file and the GED you were working on. You may also copy the text of the log file onto this fax.

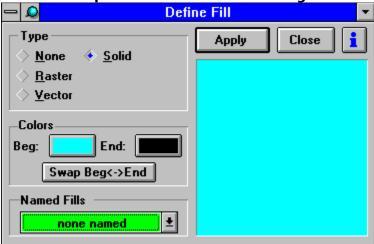
Click on the part of the Define Color dialog box where you want further information.



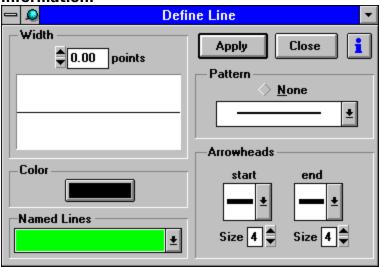
Click on the part of the Define Fill dialog box where you want further information.

Define Fill

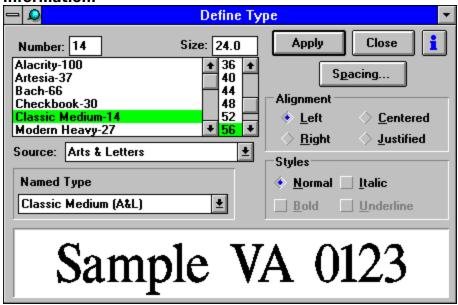
Define Fill



Click on the part of the Define Lines dialog box where you want further information.



Click on the part of the Define Type dialog box where you want further information.



Beginning Fill is the fill of the first color of a raster pattern, and is the only color for all other fill patterns. The color you choose from the Named Colors palette below, or which you mix at right, will be applied when this box is checked.

Lines can have a color different from the object's interior. The color you choose from the Named Colors palette below, or which you mix at right, will be applied to the line of your object when this box is checked.

End Fill specifies the second color of a raster or vector pattern. (It has no significance for other objects.) The color you choose from the Named Colors palette below, or which you mix at right, will become the second color of your raster or vector pattern when this box is checked.

Colors can be applied simultaneously to both the line and interior of the selected object. The color you choose from the Named Colors palette below, or which you mix at right, applies to line and fill when this box is checked.

The Sample patch shows your Named Colors choice or the result of your mixing colors.

An object is made transparent by giving it no color. Do this by checking the option box.

Solid is the default fill for <i>Draw</i> objects. interior.	The chosen color fills every part of the object's

A raster is an image defined as a collection of pixels (dots). *Draw* offers many ready-made raster patterns that can be used to give the interiors of objects different textures and effects. Scroll through the numbered list that appears when the raster option is chosen.

A vector drawing is defined as a series of straight lines. *Draw* offers many ready-made vector patterns that can be used to give the interiors of objects different textures and effects. Scroll through the numbered list that appears when the vector option is chosen.

Swap changes the places of the first and end color for a raster or vector fill.

This rectangle shows a sample of the fill and its colors be	fore application to the object.

Click on the down arrow to display a ready-made list of fills.

Clicking on the Color button displays a ready-made palette of colors to apply to the line and a Define button in case you want to mix your own.

Various end figures are provided for the start and finish of a line segment.

These figures can also be applied to closed freeform objects with results that vary greatly, depending on the line width, the size of the start/end figure, etc. The size of the end figures can be increased or decreased by the scroll arrows below.

Click on the down arrow to display a ready-made list of named lines.

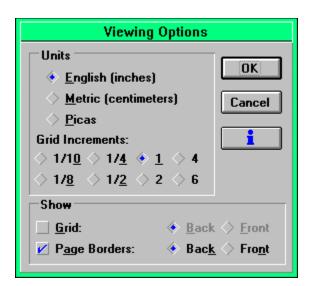
End Fill specifies the second color of a raster or vector pattern. other objects.)	(It has no significance for

Lines can receive a color different from the objects they define. see a ready-made palette.	Press the down button to

Scroll through the list of ready-made styles, click on the desired name, and apply it.

Clicking on the Help button brings you directly to a relevant topic.

Clicking here offers you options for specifying the $\underline{\text{file style}}$ or pattern, if any.



Grid increments are in fractions or multiples of the chosen unit.

When the grid is checked on, it can be made to show over all objects or behind them.

When page borders are checked on, the imaginary, non-printing lines dividing the separate pages of your document can be made to draw over all objects or behind them.

This window shows the list of fonts available for the Source below -- in this case Arts & Letters, which offers over 90 scalable typefaces in its complete collection.

The source for the fonts in the window above can be Arts & Letters (as in this example) or the printer fonts available to a printer installed under Windows.				

The name of a font can be give typeface and a point size.	en by its source, or giver	າ a special name that ide	ntifies the

