



Technology Training
January-February 2003



Web and Graphics Tools Freehand 10

Presented by Northwest ISD
In conjunction with ESC XI

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Technology Training January-February 2003



Schedule

- ❖ Pre-Workshop – Story Boards and Site Design
- ❖ January 14/15 – Overview and Adobe Photoshop
- ❖ January 28/29 – Macromedia Flash MX

❖ **February 11/12–Macromedia Freehand 10**

- ❖ February 25/26 – Macromedia Dreamweaver MX



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Information Design

- ❖ Message – What do you want to say
- ❖ Audience – Who are you trying to reach
- ❖ Purpose – What do you want them to do with it
- ❖ Background – Why you are here
- ❖ Structure – How it is organized

Information is defined as the stuff on a page. Usually there is an innate organization to this “stuff”.

Does the information to be contained on a site have a hierarchy, I.e. some concepts and ideas are more important or critical than others?

Can the information be organized into equal junks in importance?

Must the information be displayed in a “building block” fashion, I.e. concept #1 must be learned before concept #2 before concept #3?

How the information you intend to display can be organized determines what type of web page or site you will create.



Presentation Design

- ❖ Navigation – determined by information type
- ❖ Color Scheme – contrast and usage
- ❖ Font Selection – standard versus enhanced
- ❖ Graphics Selection – appropriate to subject
- ❖ Multimedia Effects – good and bad
- ❖ Layout – where is everything
 - ❖ English/International/Cultural

How you want your page to look is partially determined by the information that you are trying to display. However, there are as many ways to create a page as there are people creating pages!

Basic areas to include:

A top logo region

 Show the owner/creator and the basic intent of the site

A top or left navigation area

 Displays the available information on the site and allows the user a way to access it

A “body” area where most content and information is displayed

Optional parts:

A top navigation area that contains important, but not critical, links to other functions, such as contacts, help, etc.

A bottom bar that contains copyrights and direct contact information

Before you create.....you need

- ❖ A storyboard image or graphic
- ❖ Element list
 - ❖ Navigation
 - ❖ Pictures
 - ❖ Page List or overview
 - ❖ Content blocks
- ❖ An audience checklist
- ❖ Development and Maintenance Timeline

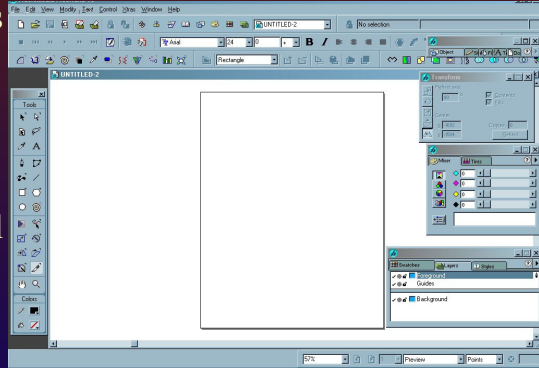
Inspiration 6.0 is one way to develop a visual representation of your page or site. Most people have an easier time working with a visual view of a page than a written narrative.

Pencil and paper still work, even in the 21st century! Create a drawing of your page and site structure. This will be the equivalent of the mental map that you are asking your viewers to build as they click through your site. If you don't understand the structure of your creation, don't expect your site visitors to understand it either

SIMPLIFY, SIMPLIFY, SIMPLIFY!

Macromedia Freehand 10

- ❖ Tool creating vector graphics for use in:
 - ❖ Desktop Publishing
 - ❖ Web Pages
 - ❖ Animations
- ❖ Completely vector based tool
- ❖ Internal tool for creating, not presenting, graphics and layouts



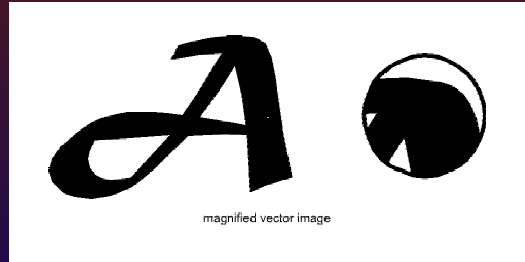
Freehand MX is a vector graphics development tool for the Macromedia suite of products. It is oriented towards creating professional, print-ready, and online graphics easily and quickly.

A vector graphics tool differs from a traditional graphics package in that the output is built using mathematical formulas to describe the lines, colors, and interactions of a pictures elements, rather than a set number of pixels/colors. Vector graphics can be scaled to any size and layered with vectored and non-vectored images – scalable and repeatable.

Non-vector graphics, such as GIF and JPG images, are designed to be small and efficient. Vector graphics are for scalability and development. Most of the fonts available on your machine are vector graphics which is how the font is displayed at different monitor and screen resolutions.

Vector Graphics

- ❖ Created by formulas
- ❖ Can be manipulated as lines or points within a line
 - ❖ ALL objects, whether originally bitmap or vector, can be converted to true vector graphics
 - ❖ Some loss of quality may occur
- ❖ NOT designed for web use
- ❖ Easy to create complex shapes and overlays

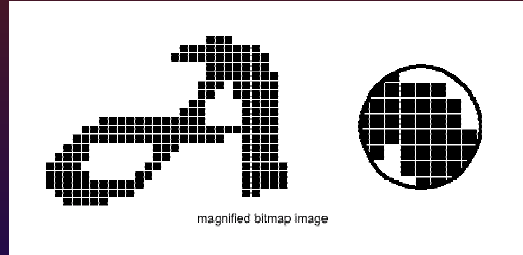


Examine some of the samples that are included in the Freehand MX/Samples directory. Zoom in as much as possible and examine the edges of the image. The detail remains the same.

Perform this same exercise on a JPG or GIF image and the pixels are readily evident.

Bitmap Graphics

- ❖ Created by individual cells (pixels)
- ❖ Cannot be manipulated as lines or points within a line
 - ❖ ALL objects, whether originally bitmap or vector, can be converted to true vector graphics
 - ❖ Some loss of quality may occur
- ❖ Designed for web use and display
- ❖ Difficult to scale and manipulate once resolution is set.



No vector image format is supported on the web site directly. Freehand is a starting point for creating layered images that can be saved into web-ready graphics.

When you find small images on the Internet that you want to use on your web page, they are generally not resizable. Why? Because they were saved in non-vectorized formats. Any resize action changes the quality of the image.

Vectorized images do not suffer from this problem.



Freehand Terms

- ❖ Document – the space that visible once a finished page is finished
- ❖ Objects – anything within the document
- ❖ Handles – dots on a line which can be manipulated
- ❖ Selection – element is highlighted with handles and lines
- ❖ Transparency = Photoshop Opacity
 - ❖ Only works on overlapping objects

Most vector tools on the market deal with “documents”, rather than images. A document can be any size; the default size is a standard 8 by 11 paper.

A document can cross pages, flow text from one page to another, and then be saved as a single “image” that can be manipulated by non-vectored programs.

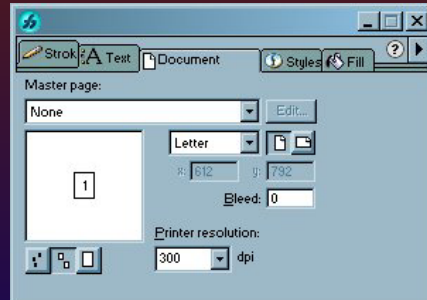
EVERYTHING is an object – text, lines, colors, shapes

Creating An New Document

File | New creates a new document.

Window | Inspector | Document opens the Document Inspector to control properties

- ❖ Paper Size
- ❖ Landscape/Portrait
- ❖ Document View
 - ❖ Useful when you create a large number of pages
- ❖ Bleed –used to describe the amount of ink that print over a margin to ensure color coverage when a page is cut (print term)
- ❖ Printer Resolution
 - ❖ 300-600 is good printer quality
 - ❖ 72 is standard, internet resolution



To create a new document, do one of the following:

Choose File > New.

Click the New button in the Main toolbar.

To open an existing document:

Choose File > Open or click the Open button in the Main toolbar.

Locate the file to open, and click Open.

To switch between open documents:

Choose Window and the name of the document to display.

Note: On the Macintosh, you can also click the FreeHand icon in the title bar to select the document name.

To close a file and quit FreeHand:

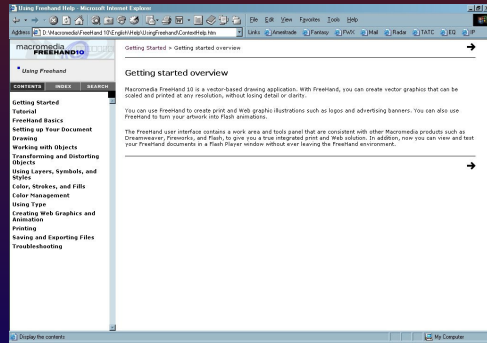
Choose File > Exit (Windows) or File > Quit (Macintosh).

If you have not yet saved or named the file, an alert dialog box appears. To save the file, click Review, and then click Yes (Windows) or Save (Macintosh).

Enter a name in the Name text box (if needed), and click Save.

HELP!!!

F1

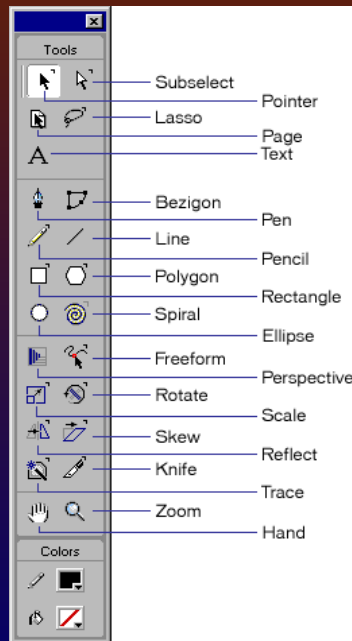


To access HELP using the menus:
Click on Help | Using Freehand.

Toolbar Overview

❖ Common Tools

- ❖ Selection Tools
- ❖ Text and Color
- ❖ Point Creation and Shapes
 - ❖ Ribbons and Lines
 - ❖ Rectangle/Multi-sided/Circles
 - ❖ Spirals
- ❖ Freehand-Specific Tools
 - ❖ Perspective
 - ❖ Point Manipulation
 - ❖ Transforms
- ❖ Line and Fill Colors (ACTIVE)
- ❖ Double-click on any tool with a top right corner for options



To add a tool to the Tools panel:

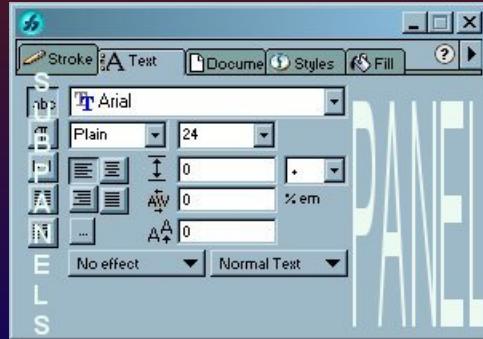
1. Choose Window > Toolbars > Customize.
2. Select the desired command from the Command list.
3. Drag the button onto the Tools panel.

To remove a tool from the Tools panel:

1. Choose Window > Toolbars > Customize to display the Customize Toolbars dialog box.
2. Drag the desired button from the Tools panel.
3. Once you remove a tool from the Tools panel, you cannot move the tool back onto the panel.

Panels and SubPanels

- ❖ Panels are:
 - ❖ Moveable
 - ❖ Complete
 - ❖ Always accessible through the Window menu command
 - ❖ NOT dockable
- ❖ Subpanels are small, square icons on each panel (where available) that provide more options for specific tool



To switch between open panels (Windows):

Press Control+Tab.

To show or hide all open panels:

Choose View > Panels.

To group panels:

Drag a panel by its tab to another panel or panel group.

To remove a panel from a group:

Drag the panel by its tab from the panel group.

To return panels to their default positions:

1. Exit FreeHand.
2. Locate the English folder within the FreeHand 10 application folder and delete the Fhprefs.txt (Windows) or Preferences (Macintosh) file.

To store panels in a zipped or unzipped position:

1. Choose Edit > Preferences. Click Panels.
2. Select Remember Location of Zipped Panels.
3. When this option is selected, a zipped panel can be stored in one location and return to its original location when unzipped.

Available Panels

- ❖ Layers – displays and controls all layers
- ❖ Styles – Preset styles (advanced)
- ❖ Swatches – color panels that can be used in any color mode
- ❖ Navigation –actions attached to Freehand objects (advanced)
- ❖ Color Mixer – Main mixing panel for colors
- ❖ Tints – subset of selected color in premixed quantities
- ❖ Halftones – used for color separation in CMYK printing
- ❖ Align – aligns grouped and ungrouped objects
- ❖ Transform – panel and subpanel with objects for standard transforms, such as rotate, skew, scale, move, and reflect

The easiest way to learn any of the tools is to use the tool.

Click on each of the tools and attempt to draw or modify a simple rectangle. The more you do this, the better understanding you will have of each of the tools. There is no substitute for practice.

Layers Panel

- ❖ You always have
 - ❖ Background
 - ❖ Foreground
 - ❖ Guides
- ❖ Layers are NOT automatically added
- ❖ Check mark = visible
- ❖ Lock = locked/unlocked status
- ❖ Grey circle: show fills: on/off



Layers separate objects in an illustration to make them easier to work with. Layers divide an illustration into discrete planes; this is similar to drawing an illustration's components on separate tracing paper overlays. By default, a new document contains three layers: Foreground, Guides, and Background. Importing and drawing occur on the current drawing layer, which is initially the Foreground layer. When a new layer is added, it initially becomes the default drawing layer; any content you create or import appears on that layer until you move the content.

The Layers panel is divided by a horizontal bar called the separator bar. Layers above the separator bar—generically called foreground layers—are printable. Those below the separator bar—background layers—do not print.

The Guides layer contains guide lines dragged from the ruler or entered manually, as well as paths that have been converted to guides. Objects on the Background layer are dimmed, and the layer appears by default below the separator bar, so it does not print. If you move the Background layer above the separator bar, objects on it do print.

Every object in an illustration resides on a layer; each layer can have multiple objects. You can edit only those objects on visible, unlocked layers.

By moving objects from one layer to another or rearranging layers, you can change how the objects overlay one another. Each layer maintains its own stacking order of objects. You can set preferences to control how objects can be moved between layers.

Adding Layers

- ❖ Click on the black triangle for a list of options
 - ❖ Select New to create a new layer
- ❖ To add an element to a layer
 - ❖ Select the object with the select tool (black arrow)
 - ❖ Left-click on the layer you want to add the object to in the layers panel
 - ❖ Right-click on the layer and select Move Selection to this layer.
 - ❖ Use the check/uncheck to ensure that the object was moved.



To create new layers, you use the Layers panel. You can create all layers before creating your artwork or add individual layers as you need them. You can add new layers or duplicate existing ones.

To add a new layer:

1. Choose Window > Panels > Layers to display the Layers panel.
2. Click the triangle in the upper right corner of the Layers panel to display the Options pop-up menu, and choose New.

To duplicate a layer and all objects on it:

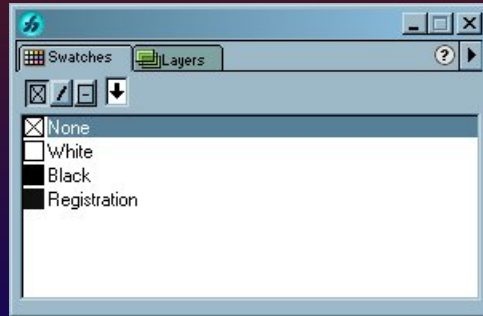
1. In the Layers panel, click a layer name to select it.
2. Click the triangle in the upper right corner of the Layers panel to display the Options pop-up menu, and choose Duplicate.

To rename a layer:

1. Double-click the layer name in the Layers panel.
2. Type a new name, and press Enter (Windows) or Return (Macintosh).

Swatches Panel

- ❖ Default colors available @ startup
- ❖ New colors can be added by:
 - ❖ Open the color mixer
 - ❖ Create the color of your dreams using the slider bars
 - ❖ Right click on the color window in the bottom of the Mixer Panel
 - ❖ Select Move to Swatches
 - ❖ Check the Swatches window to rename or use



The Swatches panel lets you store colors, edit and rename them, convert process colors to spot colors and vice versa, change the color mode (RGB and CMYK), and import and export custom color libraries.

The Swatches panel displays the color list for the active document. It also has three selectors: the Fill (left), Stroke (center), and Both for the combined Fill and Stroke (right). The active selector is pressed. The selectors show the colors for a selected object. The colors also appear in the color boxes in the Tools panel. The default colors in a new document are None, White, Black, and Registration. These colors cannot be deleted or renamed.

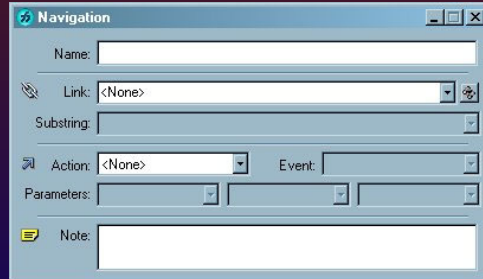
The Swatches panel displays process color names in italics, spot color names in plain type, with a triple-dot icon next to RGB colors, no symbol for CMYK colors, and a black hexagon for Hexachrome colors.

To show or hide the Swatches panel, do one of the following:

1. Click the Swatches button in the Main toolbar.
2. Choose Window > Panels > Swatches.

Navigation Window

- ❖ Not what it seems
- ❖ Select an object, then:
 - ❖ Maintain notes (max: 255 characters) about objects
 - ❖ Attach ActionScript to the object
 - ❖ Add a link internally or to a web page
 - ❖ Add a name for the object
- ❖ To test navigation, choose Control | Test Movie from the menu and click on the object



The Navigation panel lets you assign URLs to objects, inspect objects to see what URLs are assigned to them, update a URL for all objects linked to it, and search for objects linked to a specified URL. The Substring field displays words or phrases within an active text block that are linked to the URL displayed in the Link text box.

To assign a URL to an object:

1. In the FreeHand Document window, select the object, text block, or text string to which you want to assign a URL.
2. Choose Window > Panels > Navigation.
3. In the Link text box, enter the URL for the object, or select a URL from the pop-up menu.

If you selected a text string in step 1, the string appears in the Substring field.

To search for objects linked to a URL:

1. In the Navigation panel, enter a URL in the Link text box or select URL from the Link pop-up menu.
2. Click the Find button to the right of the Link text box.

Objects in the current document linked to the URL are selected in the Document window.

To update a URL for all the objects linked to it:

1. Deselect all objects in the current document.
2. In the Navigation panel, select the URL from the Link pop-up menu.
3. Click the Find button to the right of the Link text box.
4. Modify the URL in the Link text box as needed.

The URL is updated for all objects linked to it in the current document.

Color Mixer

- ❖ Displays slider bars or swatches for each color model
 - ❖ CMYK (default) – printing
 - ❖ RGB – Computer Colors
 - ❖ Color wheel
 - ❖ Vertical slider – hue
 - ❖ White dot – color selection
 - ❖ Windows “safe” color swatches
- ❖ Colors are dragged onto an object to apply them, either lines or fills
- ❖ Button w/plus sign adds current color to swatches



Drop carefully!

Use the Color Mixer panel to define colors, adjust hue, lightness, and saturation, and to choose colors from the System Color dialog box. Controls in the Color Mixer panel let you choose from four color modes and add colors to the color list in the Swatches panel.

Both the Color Mixer and the Tints panel use the same color box to display a color as you edit it. The color box displays the original color on the left and the new color on the right. You can change this display to a single color box using Preferences.

To show or hide the Color Mixer panel, do one of the following:

Click the Color Mixer button in the Main toolbar or choose Window > Panels > Color Mixer.

To change the color box display for the Color Mixer and Tints panels:

1. Choose Edit > Preferences. Click Colors.
2. Do one of the following:
 - Deselect Color Mixer/Tints Panel Uses Split Color Well to display single color box.
 - Select Color Mixer/Tints Panel Uses Split Color Well to display split color box.
3. Click OK.

To display a color's components, do one of the following:

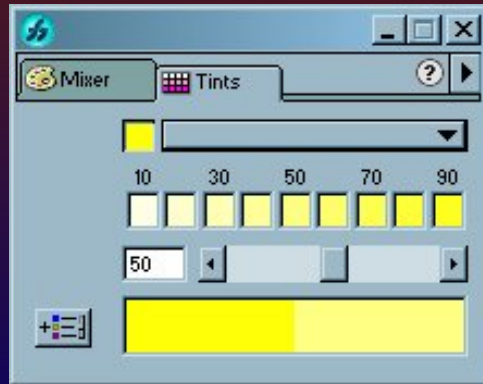
Use Eyedropper to drag a color swatch from any object or color box to the color box at the bottom of the Color Mixer panel OR Hold down Control (Windows) or Option (Macintosh) and click a color swatch in the Swatches panel.

The Color Mixer panel displays the color's CMYK or RGB values as appropriate.

To change a color mode: Click a color mode button in the Color Mixer panel.

Tint Panel

- ❖ Provides a pre-selected range of colors, using the active color to white
- ❖ Excellent tool for dragging shades of a color for highlighting, shadows, borders, etc.



Tints are lighter versions of a color, created by specifying a percentage of the original color. To apply, create, and edit tints, you use the Tints panel. If you add a tint to the Swatches panel, its base color is also added. If you remove the base color from the Swatches panel, all tints based on that color are removed as well.

To show or hide the Tints panel: Choose Window > Panels > Tints.

To apply a tint or create a tint:

1. In the Tints panel, select the base color of the tint by doing one of the following:
 - Drag a color swatch from the Swatches panel to the color box in the Tints panel.
 - Choose a base color from the Tints pop-up menu in the Tints panel.
2. Select the tint by clicking a preset tint in the color bar, dragging the slider, or by entering a percentage from 1 to 100.
3. To apply the color, do one of the following:
 - Drag a swatch from the Tints panel color box to a document object.
 - Drag a swatch to the stroke or fill color box on the Tools panel
4. To add the new tint to the Swatches panel, do one of the following:
 - Click the Add to Swatches button.
 - Drag a color swatch from the color box to the arrow button in the Swatches panel

The tint's name is preceded by its percentage of the original color.

Halftones Panel

- ❖ Rarely used for electronic publication
- ❖ Determines the angle of rasterization and color application during the printing process.
- ❖ Critical for printing; Affects electronic publications only during color mixing and transformation
- ❖ Good to know (advanced)



Halftones are primarily used for PostScript printing operations. Most halftones will be converted to “solid” colors when converting to a non-vectorized format.

If you've included screened objects in your artwork, you can select halftone settings for selected objects, to print those objects at halftone settings that differ from those applied to the document as a whole.

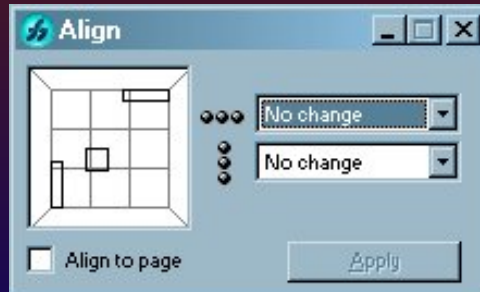
You can override object-level halftone settings when choosing Separations options in the Print Setup dialog box.

To apply halftone settings to selected objects:

1. Select an object or objects in the document.
2. Choose Window > Panels > Halftones.
3. For Screen, choose a halftone dot shape. Choose Default to use the shape specified in the Separations panel in the Printer Setup dialog box.
4. Enter a screen angle in degrees or drag the dial to specify the Angle.
5. Enter a screen frequency or drag the slider to specify Frequency.

Align Panel

- ❖ Used to align selected objects with each other and the page
- ❖ To use:
 - ❖ Select objects to be aligned
 - ❖ Display the Align Panel using Window | Panels | Align
 - ❖ Select the desired option
- ❖ Align to Page can be deselected to only use selected objects as a reference, rather than page edges



You can align or distribute objects or points relative to other objects, other points, or the current page. Aligning moves objects so that they lie on a straight line along one edge or their centers. Distributing spaces objects evenly by one edge or their centers, or by evenly spacing the distance between them. Points are aligned or distributed by their position, since they don't have an edge.

You can lock an object so that it does not move during alignment. Other objects will align relative to the locked one.

You can also use blends or power duplicating to evenly space identical objects across a page.

To align or distribute selected objects or points:

1. Choose Window > Panels > Align to display the Align panel.
The three rectangles in the preview illustrate the current alignment settings; when you select a distribute option, a fourth rectangle appears.
2. Do one of the following:
 - In the preview window, click to set alignment options. For example, click the left edge to align objects by their left edges.
 - Choose alignment or distribution options using the pop-up menus.
 - Select Align to Page to align or distribute objects relative to the current page dimensions.
3. Click Align.

Transform Panel: Center/Rotate

- ❖ Contains all of the standard transform actions
 - ❖ Move
 - ❖ Rotate
 - ❖ Scale
 - ❖ Skew
 - ❖ Reflect (Flip)
- ❖ All actions can be performed using text boxes or mouse



You can use the Transform panel to apply precise transformations and to display information on transformed objects. When moving, rotating, or scaling an object, the Transform panel displays the move distance, rotation angle, or scale percentage, respectively.

To set an object's center point manually:

1. Click the Pointer tool in the Tools panel.
2. Double-click the object. This displays its transformation handles and center point.
3. Drag the center point to the new location.
4. To reset a center point, deselect/reselect the object, or hold Shift- click the center point.

To rotate a selected object:

1. Do one of the following:
 - Double-click the Rotate tool in the Tools panel.
 - Choose Modify > Transform > Rotate.
 - Choose Window > Panels > Transform and click Rotate in the Transform panel.
2. Choose one or more of the following options:
 - Select Contents to rotate the contents of a clipping path with the rest of the path.
 - Select Fills to rotate a Tiled fill with the rest of the object.
3. In the Rotation Angle text box, enter a + value to rotate the selection counterclockwise around its center. Enter a - value to rotate the selection clockwise around its center.
4. Enter a value in the Copies text box. A value of 0 rotates only the selected object. Higher values create the specified number of copies, each of which is progressively rotated.
5. Set the object's center manually or by entering values in the X and Y text boxes in the Transform panel.
6. Click the Rotate button.

Transform Panel: Scale

- ❖ Contains all of the standard transform actions
 - ❖ Move
 - ❖ Rotate
 - ❖ Scale
 - ❖ Skew
 - ❖ Reflect (Flip)
- ❖ All actions can be performed using text boxes or mouse



To scale a selected object:

1. Do one of the following:
 - Double-click the Scale tool in the Tools panel.
 - Choose Modify > Transform > Scale.
 - Choose Window > Panels > Transform and click the Scale button in the Transform panel.
2. Choose one or more of the following options:
 - Select Contents to scale contents of clipping path with rest of path.
 - Select Fills to scale a Tiled fill with the rest of the object.
 - Select Strokes to scale the object's stroke with the rest of the object.
3. For horizontal scaling, enter a + value in the X text box to enlarge the selection and a - value to reduce it. To adjust horizontal and vertical scaling separately, deselect Uniform.
4. For vertical scaling, enter a + value in the Y text box to enlarge the selection and a - value to reduce it.
5. Enter value in Copies text box. Value of 0 scales only selected object. Higher values create specified # of copies, each progressively scaled.
6. Set the object's center manually or by entering values in the X and Y text boxes in the Transform panel.
7. Click the Scale button.

Transform Panel: Skew

- ❖ Contains all of the standard transform actions
 - ❖ Move
 - ❖ Rotate
 - ❖ Scale
 - ❖ Skew
 - ❖ Reflect (Flip)
- ❖ All actions can be performed using text boxes or mouse



To skew a selected object:

1. Do one of the following:
 - Double-click the Skew tool in the Tools panel.
 - Choose Modify > Transform > Skew.
 - Choose Window > Panels > Transform and click the Skew button in the Transform panel.
2. Choose one or more of the following options:
 - Select Contents to skew the contents of a clipping path with the rest of the path.
 - Select Fills to skew a Tiled fill with the rest of the object.
3. Enter a positive value in the Y text box to skew the selection to the right, and a negative value to skew it to the left.
4. Enter a positive value in the V text box to skew the selection up, and a negative value to skew it down.
5. Enter a value in the Copies text box. A value of 0 skews only the selected object. Higher values create the specified number of copies, each of which is progressively skewed.
6. Set the object's center manually or by entering values in the X and Y text boxes in the Transform panel.
7. Click the Skew button.

Transform Panel: Reflect

- ❖ Contains all of the standard transform actions
 - ❖ Move
 - ❖ Rotate
 - ❖ Scale
 - ❖ Skew
 - ❖ Reflect (Flip)
- ❖ All actions can be performed using text boxes or mouse

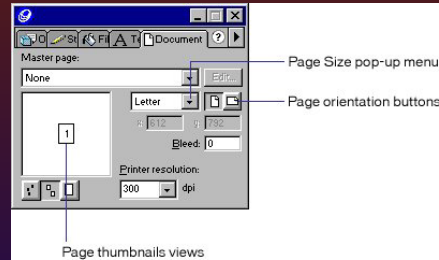


To reflect a selected object:

1. Do one of the following:
 - Double-click the Reflect tool in the Tools panel.
 - Choose Modify > Transform > Reflect.
 - Choose Window > Panels > Transform and click the Reflect button in the Transform panel.
2. Choose one or more of the following options:
 - Select Contents to reflect the contents of a clipping path with the rest of the path.
 - Select Fills to reflect a Tiled fill with the rest of the object.
3. Enter a value of 0 to 90° in the Reflect Axis text box to flip the selection horizontally. Enter a value of 90° to 180° in the Reflect Axis text box to flip the selection vertically.
4. Enter 0 or 1 in the Copies text box. Entering a higher number will cause multiple copies of the object to be stacked on top of each other.
5. Set the object's center manually or by entering values in the X and Y text boxes in the Transform panel.
6. Click the Reflect button.

Inspectors

- ❖ Inspectors are similar to Panels
- ❖ Accessible from Windows | Inspectors
- ❖ Extended options for tools
 - ❖ Object – basic information about document and its content
 - ❖ Stroke – controls lines (brushes, spacing, breaks, etc.)
 - ❖ Fill – controls content and structure of filled objects
 - ❖ Text – controls the main text functions (font, paragraph, alignment, kerning, etc.)
 - ❖ Document – all aspects of the entire document, including orientation, size, resolution



An inspector is a panel that allows you to display and alter the attributes of objects and pages. At least one inspector is used in almost all drawing tasks. FreeHand comes with the following inspectors:

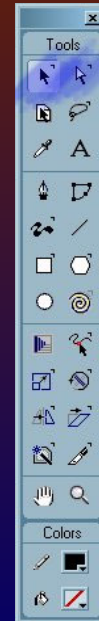
- The Object inspector displays the position and dimensions of a selected object or objects. You can edit values in the Object inspector and apply them to a selection.
- The Stroke inspector displays the stroke attributes of a selected path, including the types of strokes (None, Basic, Brushes, Custom, Pattern, and PostScript), and the stroke width, cap, join, miter limit, dash setting, and arrowheads.
- The Fill inspector displays the fill attributes of a selected path. Fills include None, Basic, Custom, Gradient, Lens, Pattern, PostScript, Textured, and Tiled.
- The Text inspector displays the formatting of selected text. The inspector contains five subpanels: Character, Paragraph, Spacing, Columns and Rows, and Adjust Columns.
- The Document inspector displays thumbnail icons for each page in your document. You can move the thumbnails in the inspector with the Pointer tool to move the corresponding pages on the pasteboard. You can choose from three magnified views. The Document inspector also has options for adding, duplicating, and removing pages, plus options to set page size, orientation, bleed, and printer resolution.

Pointers

Common Function: Both can be used as a marquee selector

Different functions:

- ❖ Black (select)
 - ❖ Selects and drags objects
- ❖ White (subselect)
 - ❖ Selects a path for modification
 - ❖ White triangle: point area to select
 - ❖ Traditional "Mouse": select a line and modify from selected point
 - ❖ Changes to black arrow during click-drag motion
 - ❖ Can select either visible points on a line or vector handles
 - ❖ Left-click and drag to position either one



Specify how closely you click to object to select it:

1. Choose Edit > Preferences. Click General.
2. Enter a value from 1 to 5 pixels in the Pick Distance text box and click OK.

Select object using Pointer tool, do one of the following:

- Using the Pointer tool, click the object. If the object has no fill, click its stroke to select it.
- If you are using a tool other than the Pointer tool, hold down Control (Windows) or Command (Macintosh) to temporarily use the Pointer, and then click the object.

Select object or point using Subselect tool, do one of the following:

- Using the Subselect tool, click the object, path, or point. This selects only the part you click, even if it is contained in a grouped object.
- If you are using the Pointer tool, hold down Alt (Windows) or Option (Macintosh) to temporarily use the Subselect tool, and then click the object, path, or point.
- If you are using a tool other than the Pointer tool, hold down Control+Alt (Windows) or Command+Option (Macintosh) to temporarily use the Subselect tool, and then click the object, path, or point.

Lasso Tool

- ❖ Rough selector tool
- ❖ Performs two functions:
 - ❖ Selects filled objects if any portion of the object falls within the lasso selection
 - ❖ Selects portions of lines that fall within the lasso selection
- ❖ Hold down shift when moving the lasso to add to a selection

Be careful: the marquee and pointer selection tools provide more accuracy for selection



To select an object using the Lasso tool:

Drag the Lasso tool to define a selection marquee around the object or points you want to select.

To add an object to a selection:

Hold down Shift as you select an object or point.

To select all objects on the active page, do one of the following:

- Choose Edit > Select > All.
- Press Control+A (Windows) or Command+A (Macintosh).

To select all objects in a document, do one of the following:

- Choose Edit > Select > All in Document.
- Press Control+Shift+A (Windows) or Command+Shift+A (Macintosh).

To deselect all objects in a document:

Choose Edit > Select > None or press Tab.

To select all objects except the current selection:

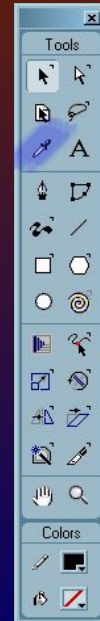
Choose Edit > Select > Invert Selection.

To delete a selection without storing it on the Clipboard:

Choose Edit > Clear or press Delete.

Eyedropper Tool

- ❖ Extracts a color sample from any object and makes it the active color
- ❖ Can be used on vector or raster images.



To apply color using the Eyedropper tool:

1. Select the Eyedropper from the Tools panel.
2. Position the pointer over the color that you want to apply.
3. Drag the color to the object to which you'll apply the color.

Text Tool

- ❖ Inspector Panel contains initial settings; highlighted text can be modified after insertion
 - ❖ Font, family, size, color, fill, alignment, paragraph or letter spacing, orientation
- ❖ Can be attached to a path (common usage)
- ❖ Text Tool can be used to create layout for flowing text.

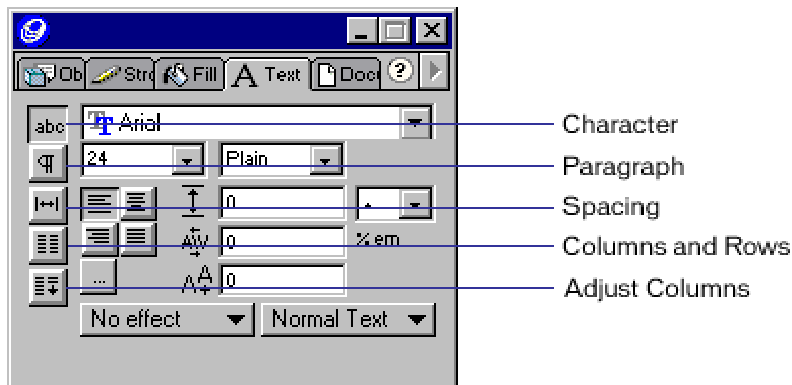


Three ways to work with text:

- The text Toolbar:



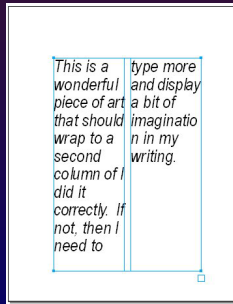
- The Text Menu list
- The Text Inspector



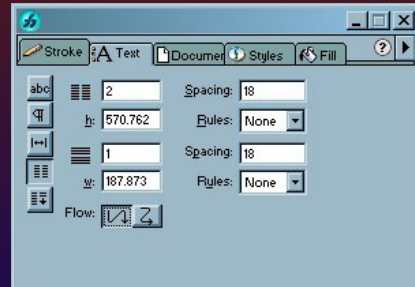
Text Exercise #1

Create a 2 column layout within a text box.

Type gibberish to ensure that the text wraps appropriately. (Use a large text size)

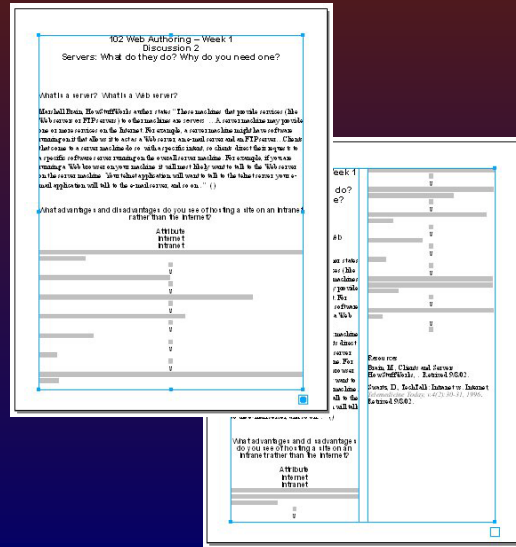


Options



Text Import

- ❖ Use the File | Import command to import full text documents.
- ❖ Select a text/RTF document from the file selection box.
- ❖ A “corner” cursor will appear.
- ❖ Drag a text box to contain the text document.
- ❖ Modify text options as needed to change the layout of the imported document



In FreeHand, you can import RTF (Rich Text Format) text files with text formatting intact, and unformatted ASCII text files (plain text). If you import text containing fonts and text styles not installed on your system, the Missing Fonts dialog box prompts you to select replacement fonts and text styles.

Note: Importing RTF text with custom tab leaders, custom strikethrough, or custom underline effects changes the effects. Outline, subscript, and superscript effects can be imported but not exported.

You can also drag text or copy and paste it to import it from another application. Once you import text, you can edit it as you would any text in FreeHand.

FreeHand English does not support double-byte vertical text used in some Asian languages. When importing double-byte vertical text, FreeHand English rotates the text block to simulate vertical alignment, but the character orientation defaults to horizontal.

To import a text file:

1. Choose File > Import to display the Import Document dialog box.
2. Select a text file to import and click Open.
3. Place the imported text:
4. Click to place the text file at its original size.
5. Drag to set the position and the size of the text block.

Paths

- ❖ Any line can become a “path” within Freehand.
- ❖ To attach text to a path:
 - ❖ Create a text object
 - ❖ Create a line object, shaped using the subselect tool
 - ❖ Select the text object
 - ❖ Hold down shift key and select the object
 - ❖ Click on Text | Attach to Path
 - ❖ The objects are now linked.
 - ❖ The line can be modified directly and the text will stay attached to it until you select Text | Detach from Path

The Object inspector can be used to modify a path. The Object inspector displays the attributes of a selected object.

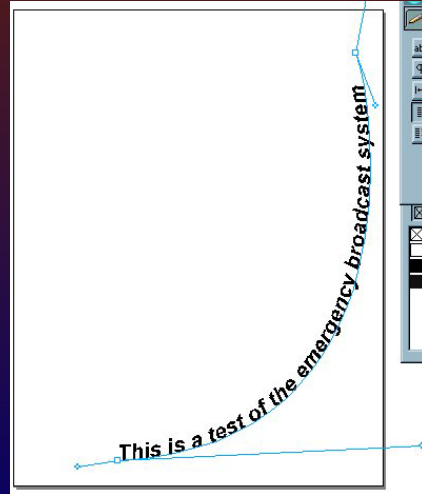
1. In the Tools panel, click the Pointer tool. Left-click on a path in your document to select it. Click on an endpoint to select it, or click on a line segment to create a new, selected point.
2. Choose Window > Inspectors > Object.
3. In the Object inspector, select the Corner Point button to modify the corner angle.
Moving a curve point handle can affect adjacent path segments. Corner point handles move independently of each other, which lets you adjust adjacent path segments one at a time.
4. Drag the handle for the selected point until the line segment is displayed where you would like.

Text Exercise #2

Attach simple text to a path

Modify the path in multiple ways to test the affect on the text.

Select the vector handles using the subselect tool (white pointer) and modify the angle, drift, and curve of the attached line.



Pen Tool

Two functions:

- ❖ Create shapes using single clicks of the mouse; each click creates a mutable point
- ❖ Add points to existing shapes (most common usage)

Fill and Brush styles are controlled through panels

Another way to increase the number of points on a line: Select Xtras | Distort | Add points



To draw with the Pen tool:

1. Click the Pen tool.
2. Do any of the following:
 - Click to place a corner point.
 - Drag to place a curve point and extend its handles. Press Control (Windows) or Command (Macintosh) as you drag to move the curve point to a new location.
 - Hold down Alt and right-click (Windows) or Control-click (Macintosh) to place a connector point.

Dragging as you place a connector point extends the point's handle. This handle affects the curve of the next path segment.

3. To finish the path, do one of the following:
 - Double-click the last point or press Tab to create an open path.
 - Click the first point to create a closed path.

Bezigon Tool

Sets point locations.

- ❖ Click to place a point, then continue dragging to move that point.
- ❖ Use the Bezigon tool to create a path with straight segments.

Works best if used in conjunction with the Point Tool.

Can drastically alter the paths of existing text and fills if used improperly.



To draw with the Bezigon tool:

1. Click the Bezigon tool.
2. Choose an option:
 - Click to place a corner point.
 - To place a curve point, hold down Alt (Windows) or Option (Macintosh) as you click.
 - To reposition a point and the point handles simultaneously, hold down Control (Windows) or Command (Macintosh) and drag the point to its new location.
 - To place a connector point that connects a straight segment to a curved path: In Windows, hold down Alt and right-drag the mouse button. On the Macintosh, Control-drag to place a connector point.
3. To finish the path, do one of the following:
4. Double-click the last point or press Tab to create an open path.
5. Click the first point to create a closed path.

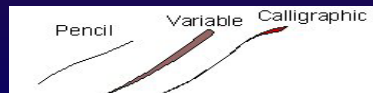
Pencil/Pen Tool

Creates freehand lines in pencil mode.

- ❖ Fills and Brush colors/styles apply.

Variable stroke adds thickness and density to the curves and line ends.

Calligraphic pen creates a ribbon-like structure that maintains ribbon characteristics, even when modified drastically.



To constrain path segments: Hold down Shift as you place a point.

To continue a selected path:

1. Click the Pen or Bezigon tool. You can continue a Pen path with the Bezigon tool and vice versa.
2. Click or drag to draw additional segments.
3. To place a path segment at sharp angle to preceding curve, click curve point to retract its handle. Drag or click to set the next point as desired.
4. Double-click the last point or press Tab to finish the path.

To close a selected open path, do one of the following:

- Use Pointer or Subselect to drag one end point over other end point.
- Choose Window > Inspectors > Object. In the Object inspector, select Closed to automatically connect end points of path with new path segment.
- In Windows only, right-click the path and choose Path > Closed from the pop-up menu.

To open a selected closed path, do one of the following:

- Choose Window > Inspectors > Object. In the Object inspector, deselect Closed to remove the last path segment from the path.
- In Windows only, right-click the path and choose Path > Open from the pop-up menu.

Line/Shape Tools

- ❖ Lines and Shapes work exactly like with Flash
- ❖ EXCEPT THAT LINES AND FILLS ARE ATTACHED!
- ❖ Rectangle Tool Options: corner radius
- ❖ Polygon Tool Options:
 - ❖ # of sides
 - ❖ Polygon or Star (# of points)
- ❖ Spiral Options:
 - ❖ Draw from center/edge/end
 - ❖ Expand by rotations or increments



Rectangles and ellipses are drawn as grouped objects. If you ungroup a rectangle or ellipse, FreeHand converts it to a path, and you can no longer edit it as a rectangle or ellipse.

To draw a rectangle, ellipse, or line:

1. Click the Rectangle, Ellipse, or Line tool in the Tools panel.
2. Hold down the mouse button to start a path, drag to draw, and then release the mouse button to end the path.

To draw a rectangle, ellipse, or line from its center:

Hold down Alt (Windows) or Option (Macintosh) and drag the respective tool.

To draw rectangles with curved corners:

1. Double-click the Rectangle tool.
2. In the Rectangle Tool dialog box, enter a value or use the slider to adjust the corner radius, from 0 for a standard 90° corner to 100 for extremely curved corners.
3. Click OK.
4. Draw the rectangle.

To adjust the corners of a selected rectangle:

1. Choose Window > Inspectors > Object to display the Object inspector.
2. Enter a value in the Corner Radius text box. Press Enter or Return.



Technology Training
January-February 2003



Deconstructing Exercise

Basics Exercise available at Macromedia's site.
<http://www.macromedia.com/support/freehand/>

Provides an overview of shapes, fills, selection, and integration.
We will learn new techniques as we go along.

Step #1: Download the following two files to your Desktop
http://www.smileydays.com/tester/deconstruct_1.fh10
http://www.smileydays.com/tester/deconstruct_2.fh10

Vector Art Exercise

Draw one of the shapes and match as closely as possible using shape and point tools.

30 minutes.

GRAPHIC COMMUNICATIONS I
MRS. LICATA

VECTOR ART RECREATION

Using Macromedia freehand, try to recreate the illustrations below to the best of your ability. Print out one copy and hand it in with this sheet when finished.



Publishing

Three ways of saving/exporting/changing:

- ❖ File | Save As: Saves Freehand formatted file.
ALWAYS Save before exporting
- ❖ Export: Saves to over 20 formats, each with their own options and requirements
 - ❖ Remember the Import command in Flash?
Freehand can save directly to layers or keyframes, depending on options.
- ❖ Publish as HTML
 - ❖ Creates a browser, version-specific web page as close to the displayed image as possible
 - ❖ Limitations of HTML prevent 100% display

New	Ctrl+N
Open...	Ctrl+O
Close	Ctrl+W
Save	Ctrl+S
Save As...	Ctrl+Shift+S
Revert	
Import...	Ctrl+R
Export...	Ctrl+Shift+R
Export Again	
Send	
Report...	
Collect For Output...	
Printer Setup...	
Print Area	
Print...	Ctrl+P
Publish as HTML...	
Output Options...	
deconstruct_1.fh10	
PerspectiveGridPoster.fh10	
alignedtext.FH10	
Exit	Ctrl+Q

To publish a FreeHand document as HTML:

1. With the document displayed in the Document window, choose File > Publish as HTML.
2. In the HTML Output dialog box, do one of the following to choose HTML settings:
 - Choose a setting from the HTML Setting pop-up menu. (If you have not previously created any HTML settings, only the built-in Default setting is available.)
 - Click Setup to view the HTML Setup dialog box and choose HTML settings. For information on choosing HTML settings, see the procedure that follows. When you have finished selecting settings, click OK.
 - Click Wizard (Windows) or Assistant (Macintosh) and follow the onscreen instructions to select HTML settings. When you have finished selecting settings, click Finish.
3. Specify which pages to publish, all or a range.
4. Select Show Output Warnings to display the HTML Output Warnings dialog box when you convert the document.
5. Select View in Browser or HTML Editor to preview the converted HTML document on your system.
6. Choose a browser or editor from the pop-up menu to view the document, or click Browse and locate an HTML viewing application on your system.
7. Click Save as HTML.
8. If you selected View in Browser or HTML Editor in step 6, the specified HTML application launches and displays the converted document.
9. If you selected Show Output Warnings in step 4, the HTML Output Warnings dialog box appears, indicating any HTML errors in your document.

Sample Flash File

- ❖ Open Macromedia/Freehand
10/Samples/Capitol_Of_Texas.fh10
- ❖ Select View | Flash Anti-alias to View the text
- ❖ Zoom into the directions box to find save settings
- ❖ Use File | Export Settings
to set options
- ❖ Use Control | Play Movie
to view



Toys and Fun #1

- ❖ Arc Tool – Open Arcs, Flipped Arc, Concave Arc
- ❖ Fish Eye Lens – Warps object views
- ❖ 3D Rotations/Skew – Rotates objects in 3 dimensions on variable center points
- ❖ Spiral Tool – just like tool box spiral
- ❖ Perspective Slider – Creates a stack of objects by dragging a single object
- ❖ Eyedropper – select color from anything
- ❖ Shadow – Creates tinted copies of selected objects
- ❖ ZigZag – Warps lines in angular directions, depending on mouse movement
- ❖ Copy Flip – Creates a flipped copy of a selected object
- ❖ Cake Writer – drops preset shapes along the selected path
- ❖ Chart – Quickie chart tool
- ❖ Flex – Warps lines of a shape, depending on line movement





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Questions

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