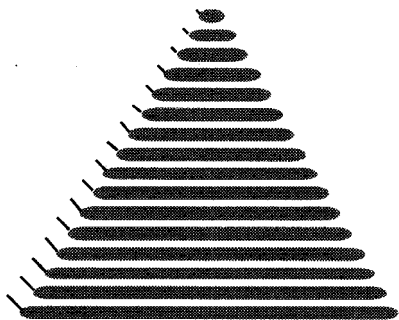# FILEVISION® IV

## User Guide

Original Filevision® concept by
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Filevision® IV design by
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Filevision® IV program additions by
W. Faulkner White


User Guide by Dennis H. Tugwell

## Customer Satisfaction

If you discover physical defects in the disks or in the manual, Marvelin Corporation will replace the disks or manual at no charge to you during the 90 day period after you have purchased Filevision IV. Return any item to be replaced with proof of purchase to the place of purchase or to Marvelin Corporation

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# Preface

Filevision IV has a long Macintosh history and is the latest and probably the most dramatically changed version of the original Filevision program written in 1984. In fact, Filevision was actually programmed on Apple's Lisa computer prior to the release of the first Macintosh.

The Filevision program has undergone two major metamorphoses to reach the current Filevision IV stage and has experienced an impressive following through these changes. Included are many of the Fortune 1000, colleges and universities, and numerous government agencies. Professionals in most of the major disciplines have also found unique solutions for their professions using Filevision and its offspring.

The original Filevision was considered a masterpiece of Macintosh programming by many reviewers. When the first version of Business Filevision was released, it received the award for Best Software of the Year by the American Federation of Information Processing Services (AFIPS) who mainly consist of managers of information services (the M.I.S.s) throughout business and industry.

Filevision was designed as a totally unique object oriented database that packed a considerable amount of power considering the limitations of the earlier Macintoshes. The program included a fully functioning drawing page with every object linked to an attached database record. While the drawing page was limited to a small 4 x 6 size, and the database was somewhat restricted, the unique concept of hypergraphics and integrated imaging was born.

From its earlier origins, a major upgrade was released in the early part of 1986 which bore the unimaginative name of Business Filevision. While the name may have been unimaginative, the inner workings of the new Filevision were far from mundane.

The drawing page was increased in size and many new methods for creating, identifying, manipulating and presenting the graphic objects were provided. Several additional database functions were added to allow for sorting, searching and better highlighting, increased reporting flexibility, larger records, fields and files, print preview, LaserWriter compatibility, the ability to paste graphics from the Clipboard, storage of graphics in record fields, annotation fields, mail merge form letters and much much more.

Since 1984, the Macintosh continued to grow in power and capacity and the possibilities for bigger and better versions of Filevision became both obvious and realizable. Avid Filevisionaries began submitting

their "wish lists" and in 1987 the development of Filevision IV began. Over forty of those requests have been implemented in Filevision IV.

All files created using either Filevision or Business Filevision are convertable to Filevision IV.

# So what's new?

Filevision IV has been enhanced far beyond the initial versions of Filevision and Business Filevision. Some of these enhancements are:

- An increased drawing page size which is incrementally selectable up to a full 30 inches tall by 32 inches wide. The Info page is still 30" x 30".

- The entire drawing and Info pages can now be selectively output to a printer via the Print Page function.

- A relocatable windowed drawing and Info page with standard scroll bars, zoom, close and resize boxes.

- The ability to import various graphic formats directly from their files. This includes MacPaint, discrete object PICTs, and EPSF (Encapsulated PostScript Format) graphic types.

- The ability to export to a separate PICT file any single object on the drawing or Info page, group of discrete objects or the entire drawing page.

- The ability to import EPSF graphics, store and catalog them, output them to a printer or export them back to an EPSF graphic file.

- Version 1 color development in both the drawing and Info pages with combinations of foreground and background colors for graphic objects, shades, symbols, text and record fields.

- The ability to display the full 256 color palette of imported version 2 color or photographic gray scale images.

- Four drawing page zoom views from 33% to 200% with drawing, mini page and text entry features fully supported in all views.

- A floating and disposable tool box with pop-up line width and line color menus, current shade preview box and added drawing tool functions.

- Larger symbol and shade palettes with 40 units per palette.

- The added ability to copy any number of customized shade palettes to the Scrapbook.

- Added rotate, slide and invert functions in the Shades Editor.

- File protection with semi-automatic and/or manual file Save.

- On-line context sensitive help (fully illustrated).

- Maximum monitor utilization on both monochrome and color monitors with up to 35 inch screens.

- Overlapping or side by side drawing and Info page windows.

- Extended MultiFinder compatibility.

- Windowed form and print layouts.

- A scrollable -View Print- preview window.

- An increase in drawing page layers and database Types to a maximum of 32.

- Increased drawing page object size and the number of an object's anchor points allowed.

- Increased drawing page text entry to 4,000 characters per block

- An increased file size to a maximum of 16 megabytes.

- An increased record size to a maximum of 16 kilobytes.

- An increased field size to a maximum of 8,000 characters.

- The maximum number of fields has been increased to 255.

- The Import/Export Utility, previously packaged separately, has been integrated as a directly invokable Filevision IV function.

- Increased number of characters in formula fields (up to 300).

- Pop-up field menu in the field set-up dialog for auto placement of bracketed field names in formula fields.

- The ability to hide field names in the Info page (for creating spreadsheet look-a-likes or adding spreadsheets to the Info page).

- The added ability to group multiple fields in the Info page layout and Print Format windows for concurrent relocation.

- Modifiable drawing page rulers with selectable points of origin, scaling, adjustable zeroing, adjustable initial starting values and a selection of several standard linear measures.

- Horizontal and vertical cursor tracking screen coordinates.

- Print optional drawing page grid and guide lines.

- Optional display/print front/back grid and guidelines.

- Increased number of fonts available from the hierarchical Text menu (up to 256).

- New Options menu for several drawing page options.

- Increased number of text sizes and styles.

- Increased number of line widths.

- Rounded rectangle edit dialog with variable corner contouring.

- Optional text masking.

- Auto scrolling.

- A field "Close Lines" function has been added to fill in the empty lines and spaces when printing labels or form letters.

- Automatically copy the attributes (color, shade, font, font size, style, symbol, line width & color, etc.) of any object for use in creating a new object.

## What's next?

We apologize for those requests that were not included; however, to accomplish them all would have required another year or two of programming time. They are all on the list for consideration in the next version of Filevision IV.

Every effort has been made to insure the trouble free use of Filevision IV. If you run into a problem that you feel should not have occurred, we would very much like to hear from you.

Regards,

Marvelin Corporation

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Phone: (213) 450-6813

# Table of Contents

# Section Two

# The Tour

## Starting the tour

## A first look at Filevision IV

## The Info page

## Highlighting

## The Drawing page

# Section Three

# Using Filevision IV

## 1. Parts of a Filevision IV file

## 2. Context Sensitive Help

## 3. The Drawing Page

**4. Graphics and Drawing** ...................................................................................................**108**

## 11. Linking Filevision IV Files

## 12. Sort and Find

## 13. Highlighting

## 18. Editing Tools and Other Features

# Section Four

# Reference

## Appendix A:

### Filevision IV specifications

**Appendix G:**

# Glossary

# Index

## List of Tables and Charts

## Example file illustrations

# *Introduction*

X

A C

ZIP

STREETS

GRAPHICS  CITIES  DATABASE

GRAPHICS  FREEWAYS  DATABASE

GRAPHICS   WATERWAYS   DATABASE

GRAPHICS    FARM ROADS    DATABASE

GRAPHICS    STATE ROADS    DATABASE

GRAPHICS   INTERSTATE ROADS   DATABASE

GRAPHICS    STATE PARKS    DATABASE

GRAPHICS    NATIONAL PARKS    DATABASE

GRAPHICS    COUNTIES

GRAPHICS    STATES

GRAPHICS    AIRLINE   ROUTES

GRAPHICS    U.  S.   MAP

# FILEVISION® IV

## AN OBJECT ORIENTED - INTEGRATED IMAGING

## MULTILAYER DRAWING AND DATABASE PROGRAM

### for the Macintosh®

# Introduction

## What is Filevision IV?

Filevision is a combination drawing program and multilayer database with each of 32 possible drawing layers attached to their own unique database. The drawing layers can be displayed in several combinations with all layers showing, selected layers showing, selected objects in each layer showing or in any combination. Each object (shape, symbol, line or text) is attached to its own record within that drawing layer's database Type.

If desired, up to 32 databases can be established within one file without the requirement to attach drawing page objects. Each database can be unique with its own record set-up and reports.
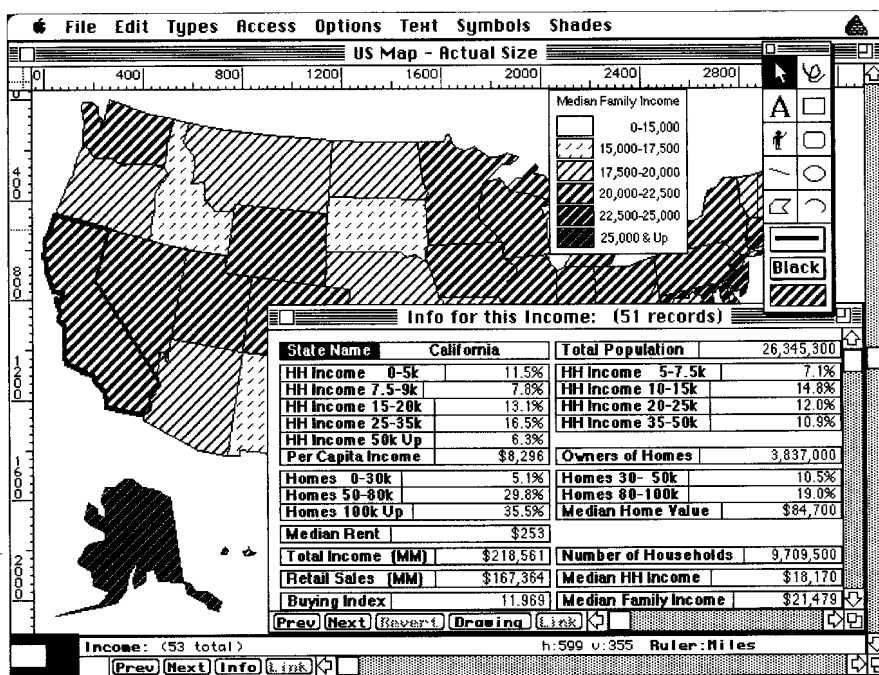
Filevision is easy to set up and use and provides all of the standard database features with one of the most flexible and understandable methods provided on any computer. Features such as Highlighting both records and drawing page objects, many ways to format and display fields, unrestricted field contents and the ability to change any of these features at any time.

The Highlighting feature not only allows you to find all records meeting your specified search criteria but it also highlights all drawing page objects that are attached to those records.

The 32 x 30 inch drawing page supports a full set of drawing tools, a modifiable shades palette, multiple line widths, text and a modifiable symbol palette for entering special symbols. All of the objects entered on the drawing page can be displayed with different foreground and background colors.

You can also import and export, store, retrieve, print and display Paint, discrete object PICT and Encapsulated PostScript (EPS) graphics. PICT's can be imported and exported as both discrete objects or single image pictures. All can be attached to or stored in their own Info field.

The drawing page can be set to a drawing mode or to various display modes such as blinking, black or nothing when an object is selected. All objects entered on the drawing page can be identified and named in the information area title bar.

Besides the various ways to display each layer or object, pop-ups can be created to display detailed information about the object selected or to create legends or other general information. Double clicking an object can link you directly to that object's database record or to another file which can provide even more detailed information concerning the object. All of this is supported in either black and white or color.

Picture an information management package that integrates a full function filing system and complete drawing system with a versatile report generator. A system complete with computed fields, three-level sorting, and statistics.

Filevision represents information in pictures, as well as numbers and words. It sorts and analyzes the extensive data behind these "smart drawings". And Filevision prints out a limitless variety of business reports.

# The anatomy of Filevision

Filevision is unique amongst the computer programs offered for personal computers. It doesn't fit any of the many standard classifications used to categorize these programs.

Filevision is a database but goes far beyond the concept of standard databases. Filevision is a drawing program but goes far beyond the concept of standard drawing programs. Filevision is a desktop publishing tool, a desktop presentation tool, a desktop mapping tool, a mini word processor/mail merge program and it now even emulates a mini spreadsheet program.

These are all functions that Filevision provides to allow the development of powerful solutions as an object oriented integrated imaging database. The idea underlying Filevision is to demystify the accumulation of data and to allow a connection between the data being accumulated and the real visual world.

For instance, if you are working with a map of the United States and would like to determine who all of the personnel are in your Chicago office, double-click the Chicago branch symbol on the map and bring up the database record to provide that information.

Creating a master file to represent this task would appear something like the following illustration:

## MASTER FILEVISION IV FILE

**Drawing page**

| ⌘  File  Edit  Types  Access  Options  Text  Symbols  Shades | 🔺 |

Master File - Actual Size

**Info page**

Info for this Branch Office:  (7 records)

| Office |
| --- |
| Chicago |

| Address |
| --- |
| 3482 Main Street |
| Chicago, IL 60111 |

| Job Description | Personnel |
| --- | --- |
| Sales Manager | Jack Cohen |
| Cust Relations | Julia Anderson |
| Order Desk | Jill Barton |
| Factory Mngr | Bill Baxter |
| Shipping Dept | Bob Delgado |
| A/R | Kay Mason |
| A/P | Sally Newman |
| Credit Mngr | Dennis Kelly |
| Bookkeeper | Faye Alberts |
| Receptionist | Jane Kelly |

| Phone | (602) 444-5555 |
| --- | --- |
| FAX | (602) 444-1111 |

| Branch Manager | James Karns |
| --- | --- |
| Office Manager | Louise Smith |

| Sales MTD | $1,485,322 |
| --- | --- |
| Sales YTD | $4,444,250 |

| Link | |

Branch Office: Chicago

[Prev] [Next] [Info] [

[Prev] [Next] [Revert] [Drawing] [Link]

Using this scenario, your master file could be represented graphically something like this:

**Drawing page**                    **Info page**

Layer (type) #1 - Branch Office          Record for the Chicago
Branch Offices                                 branch office.

Layer (type) #2 - U.S. Map
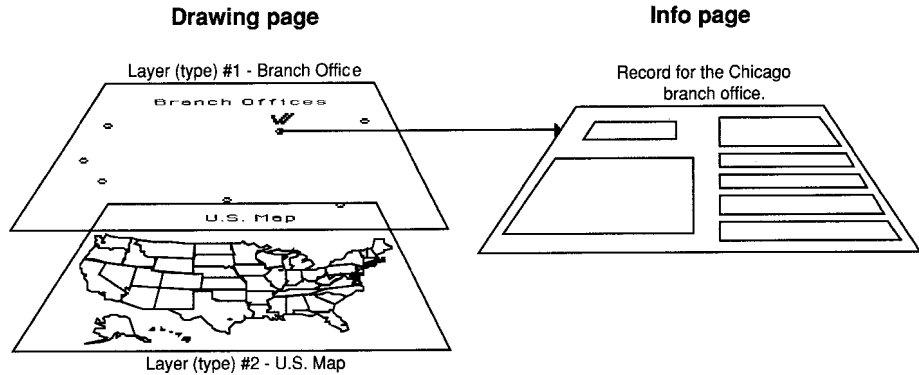
The fact that there is one drawing page object per office does not limit the number of records that could be created for each office. As long as the key sort field is entered with sequential keying information, a separate record could be created for every employee at that office.

The drawing page layers provide links to their own unique database type with each object linking to its own database record. The records for each of the other branch offices are represented below:

**Drawing page**                    **Info page**

Layer (type) #1 - Branch Office          Record for the Chicago
Branch Offices                                 branch office.

U.S Map

Layer (type) #2 - U.S. Map

Chicago
New York
Miami
Houston
Los Angeles
Seattle
San Francisco
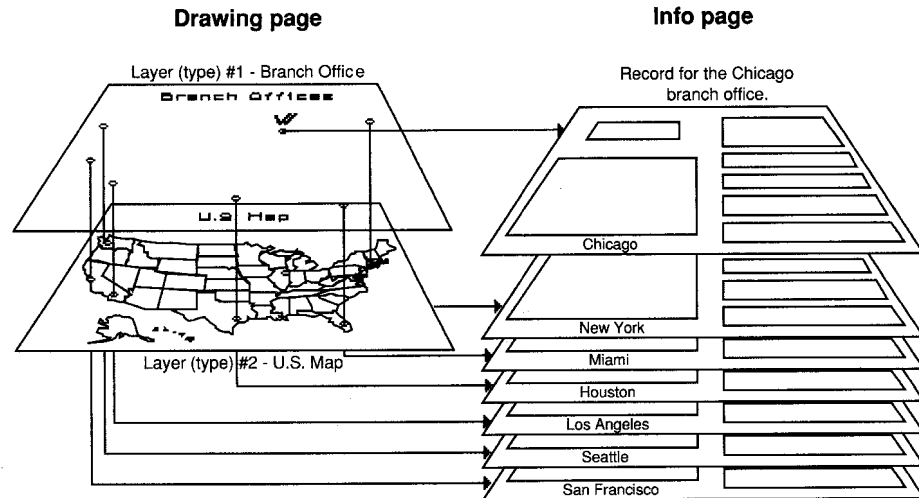
So far only records from the Branch Office type have been shown. The U. S. Map may contain additional information relating to the 50 states, such as demographics:

**Drawing page**                                    **Info page**

Layer (type) #1 - Branch Office

Branch Offices

Record for Florida
demographics

U.S. Map

Layer (type) #2 - U.S. Map
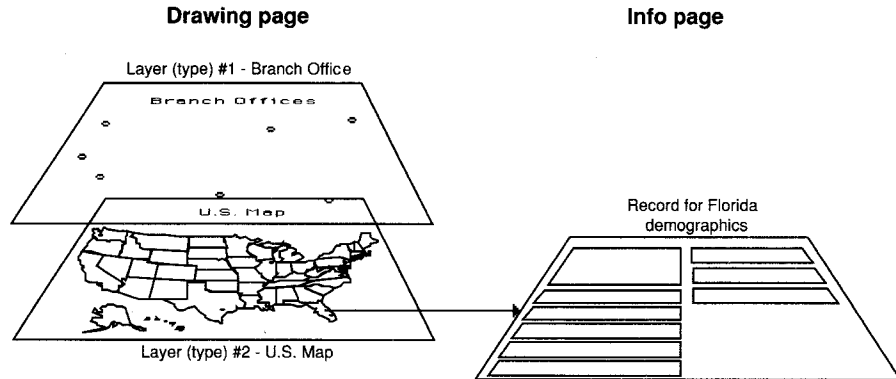
In this case, there could be 50 separate records, one for demographic information on each state.

But the file is lacking some important information. What about customers. A new type can be added any time for additional data on various areas of interest and can be easily placed at any level of the drawing page. Even if the new layer were placed at the bottom, a direct double-click on one of the customer symbols would bring up their record:

**Drawing page**                                    **Info page**

Layer (type) #3 - Customers

Customers

Record for XYZ Corp
in Orlando, Florida

Branch Offices

Layer (type) #1 - Branch Office

U.S. Map

Layer (type) #2 - U.S. Map
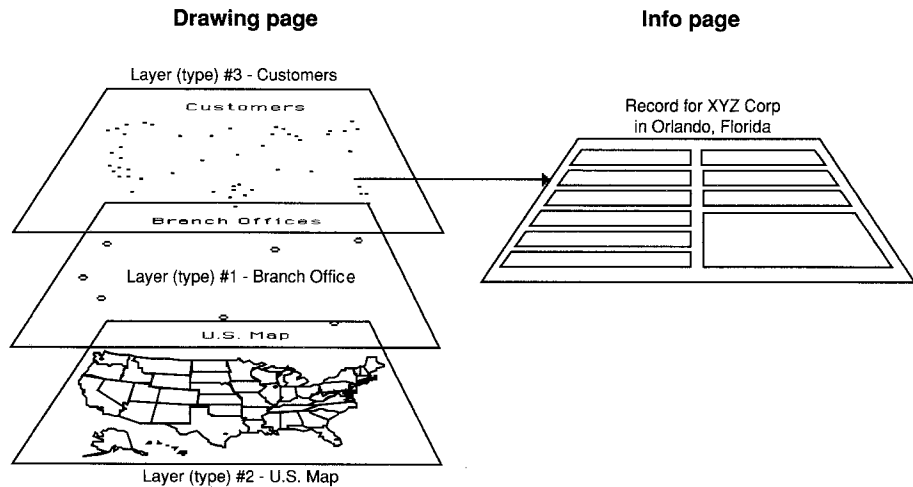
And if there were several areas of interest that were all related, either visually (as with the examples so far) or that require data only, up to 32 database types could be established within a single file. While the addition of new types will create additional drawing page layers, it is not necessary to enter objects on the drawing page for the Info page to supply the necessary data:

## MASTER FILEVISION FILE

| Drawing page | Info page |
|---|---|

Records without attached
drawing page objects

Type layers without objects

Customers

Branch Offices

U.S. Map
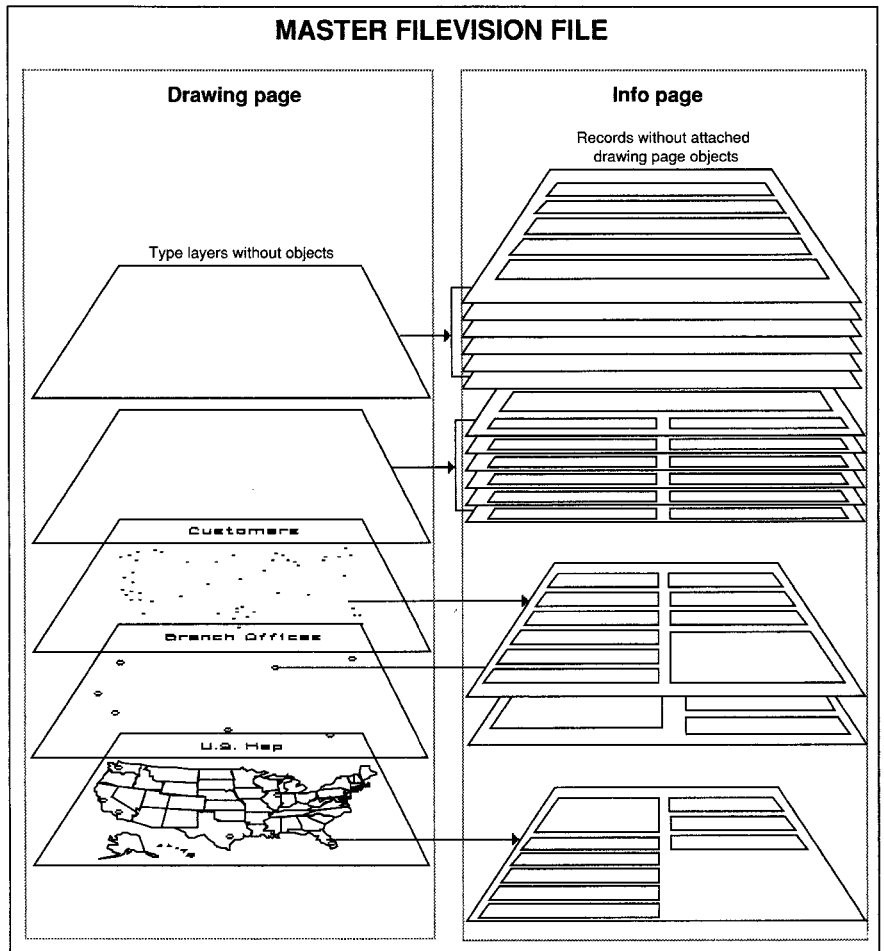
It might appear that most any complex problem could be handled with the power and flexibility shown in these examples. However, in case the problem requires even more definition, Filevision provides additional capability in rapid file linking.

Filevision automatically provides a Link field in every record of every type which allows you to link directly to other Filevision files. For instance, if you wanted to view a detailed floor plan of your Chicago office, all that is required is to click the Link button with the Chicago record selected. The floor plan file launches automatically, replacing the current Master File.

If the name of the Chicago office floor plan file is entered in the Link field as "Chicago", whenever the Chicago branch office record is selected, clicking the Link button (from either the drawing or Info page) will automatically launch that file. The option to double-click the Chicago icon from the drawing page's map to launch the Chicago file is also available if desired. The Chicago record would now appear as:



Linking to any file hierarchy in any direction is possible without limitation to the number of files except as restricted by available disk space. All folders will be searched for the targeted link file.

The new Chicago file also has all of the capabilities of the master Filevision file and any to the records in Chicago file can be set to link to even more files or back to the master file.
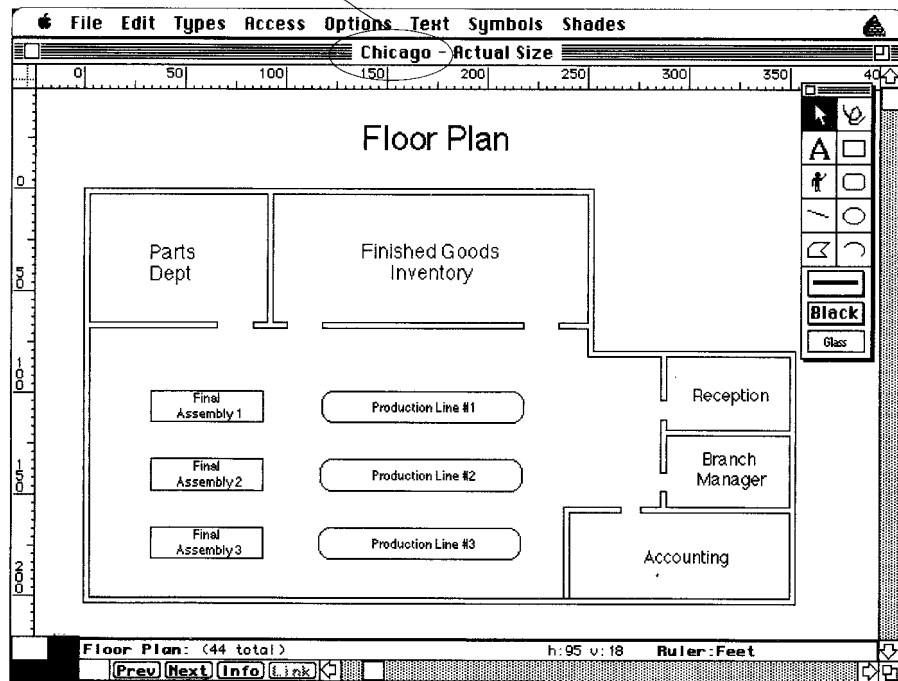


In linking files, up to five levels of nesting is provided that allows you to return to each of the previous files in the order that they were first called. This is easily accomplished from the File menu's Return To... function or by issuing a Command-; (semicolon).

Filevision information is organized in a simple hierarchy: files, types, objects and records, and fields. An office filing cabinet offers a good analogy to that hierarchy. Suppose you have a filing cabinet with four types of information stored: employees, customers, inventory and production. (Floor Plan would be a fifth type with no records.)
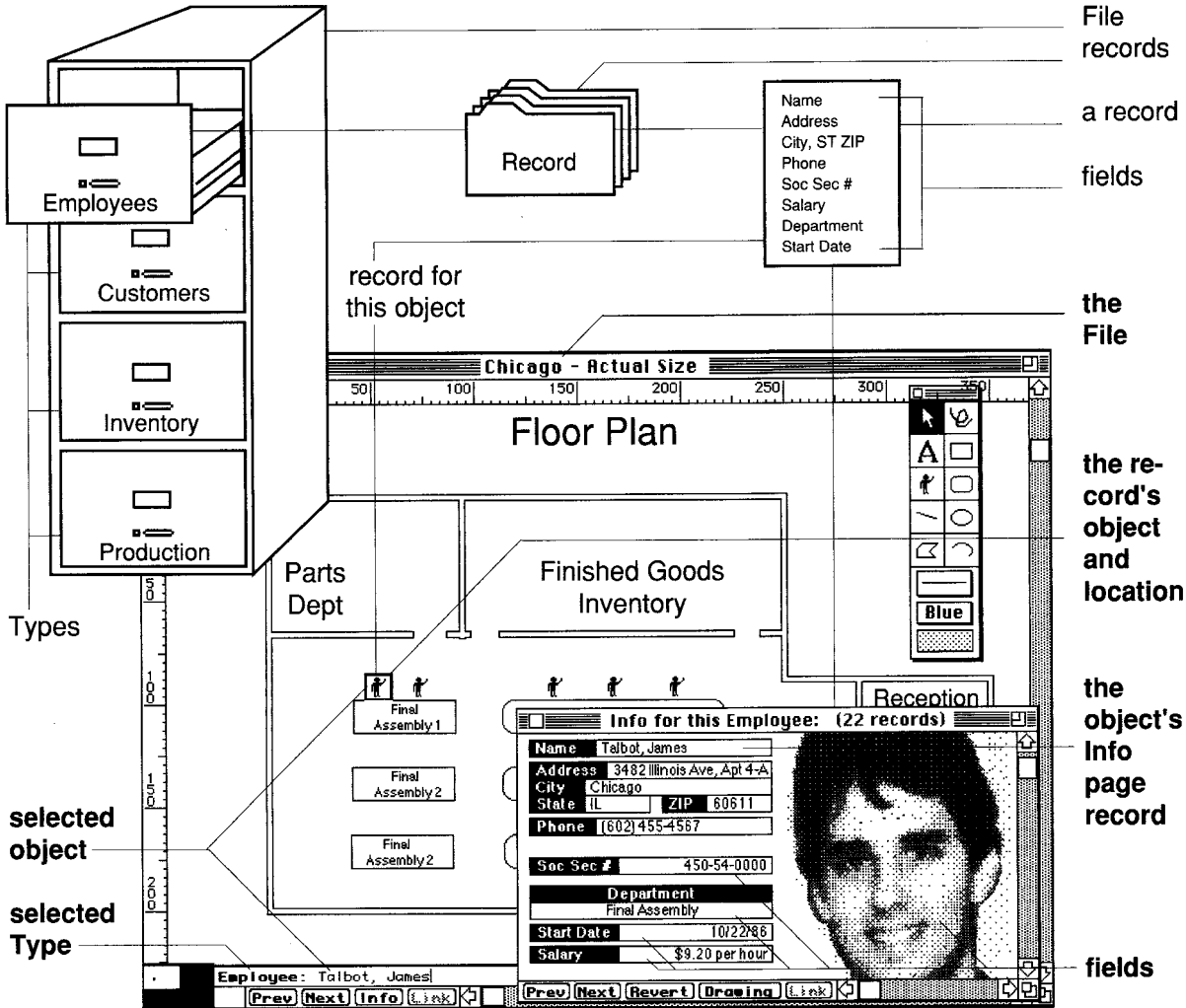
You could then say that a

| | |
|---|---|
| File | refers to the file cabinet. |
| Type | refers to either "Employees" , "Customers", "Inventory" or "Production". |
| Object | refers to an individual employee, customer, part/assembly or production station or cost center. |
| Record | refers to the file folder of information you keep about each employee, customer, part/assembly or production station or cost center. |
| Field | refers to the placeholder for each specific piece of information in the record, like Name, Birth date, or Street Address. |

However, this analogy tells only a small portion of the Filevision story. The simple file handling described above can be achieved by most any ordinary file manager or database.

The main difference with Filevision is that you can set up several different integrated imaging database Types in one file AND you can illustrate the locations of every object contained in that file, visually showing the relationships. Even if they are objects from different database Types.

**using the file**

Now that the files are set up, there are a number of ways to display, enhance, report and generally manipulate the information (both data and graphics) to an extraordinary analytical advantage. A few are shown below:

- You can print the current page, either drawing or Info.

- You can print reports, forms, labels or mail merge form letters.

- You can sort, find or highlight and analyze various information.

- You can create pop-ups for "tuck-a-way" legends or greater details on any drawing page object.

- You can create shaded map thematics for analyzing potential new markets.

**printing a page**

In printing the current page, Filevision allows you to print all of the page or selected sections. Issuing a Print Page instruction from the File menu, either of the following dialogs (depending on which page you are currently working in) will allow you to select which section (page) or sections to print:



| Select drawing pages to be printed: |
| ☐ Print guides |
| ☐ Print grid |
| (Cancel) (Done) |

| Select info pages to be printed: |
| (Cancel) (Done) |
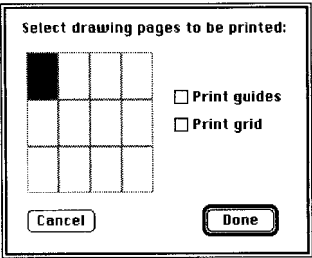
Drawing page Print dialog          Info page Print dialog
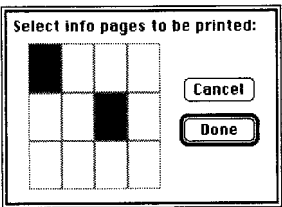
**setting up and printing reports**

In printing out reports, forms, labels and mail merge form letters, a Print Library is supplied to allow you to keep an archive of all of the various reports for easy selection and printing. If you select Print Records from the File menu, you will be presented with the following dialog:



**Print Library**

| Print format | Type | Style |
|---|---|---|
| Pop & Area | States | Report |
| Demographics | States | Form |
| Sales | Branch Office | Report |
| Customers | Customers | Label |
| Form Letter | Customers | Form |

(Delete) (Edit) (New)

Records to print:
○ All
◉ Highlighted
○ Selected

Print to:
○ Printer
◉ Screen
○ File

(Quit) (Page setup) (Print)

From the Print Library dialog, you will have the option to print all of the records, highlighted records or selected records. You will be able to direct the output to a printer, to the screen for a preview and final adjustments or to a text file for use with a word processor or other programs.

If you send the print request to the screen, another window titled View Print will be displayed to show how the output will appear on your printer. This will allow you to make final adjustments to eliminate a few wasted pages or sheets of labels.

**View Print**

States with over
5,000,000 population

| State Name | Population | % U.S. Pop. | Sq Miles | % U.S. Area |
|---|---|---|---|---|
| California | 26,345,300 | 10.967 | 158,762 | 4.319 |
| New York | 17,966,200 | 7.479 | 49,656 | 1.351 |
| Texas | 16,408,700 | 6.831 | 267,346 | 7.272 |
| Pennsylvania | 12,012,000 | 5.001 | 46,068 | 1.253 |
| Illinois | 11,640,400 | 4.846 | 56,400 | 1.534 |
| Florida | 11,435,200 | 4.760 | 60,295 | 1.640 |
| Ohio | 10,836,000 | 4.511 | 41,222 | 1.121 |
| Michigan | 9,211,900 | 3.835 | 96,791 | 2.633 |
| New Jersey | 7,618,900 | 3.172 | 8,220 | 0.224 |
| North Carolina | 6,304,900 | 2.625 | 52,586 | 1.430 |
| Georgia | 5,990,500 | 2.494 | 58,924 | 1.603 |
| Massachusetts | 5,847,400 | 2.434 | 9,216 | 0.251 |
| Virginia | 5,785,000 | 2.408 | 42,326 | 1.151 |
| Indiana | 5,585,800 | 2.325 | 36,519 | 0.993 |
| Missouri | 5,093,800 | 2.121 | 69,674 | 1.895 |
| Overall Count: | 15 | | 15 | |
| Overall Total: | 158,082,000 | 65.809 | 1,054,005 | 28.670 |
| Overall Average: | 10,538,800 | | 70,267 | |
| Overall Standard Deviation: | 5,924,710 | | 65,170 | |

(Cancel) (Done)

## sort and statistics

If you need to do a specific sort or create statistical information for your report, Filevision offers easy to understand and fast methods to set up these functions with the following dialogs:

**Sort printing as follows:**

Primary sort field:

| State Name | [ A-Z ] |

Start a new page for each: ☐

☒ Secondary sort field:

| % U.S. Area | [ A-Z ] |

☐

| % U.S. Area | ield: |
| % U.S. Pop | |
| Link | |
| Population | uplicate sort fields |
| Square Miles | |
| State Name | [ A-Z ] |  ☐ |
| Total US Pop | |

**Statistics for:** Square Miles

| | Count | Total | Average | Standard deviation |
|---|---|---|---|---|
| Overall statistics . . . . | ☒ | ☒ | ☒ | ☒ |
| By State Name . . . . . | ☐ | ☐ | ☐ | ☐ |
| By % U.S. Area . . . . . . | ☐ | ☐ | ☐ | ☐ |
| By % U.S. Pop . . . . . . | ☐ | ☐ | ☐ | ☐ |

**Use "Sort" to select different detail statistic fields.**
Select "Numeric" from the Format menu to enable all statistics.

[ Cancel ]   [ Preu Field ]   [ Next Field ]   [ Done ]

## highlighting

One of the most powerful and unique features of Filevision is the ability to select specific records based on an extremely versatile Highlighting search criteria and then to isolate these records from all others. Not only are the highlighted records isolated in the database but all of the drawing page objects that are attached to the highlighted records are themselves highlighted. The search criteria dialog for achieving a Highlight condition is easy to use:

**Highlight "Customers"s meeting these conditions:**

| Receivables |

| is | is not |

| = | ≥ | ≤ | -- |

| Credit Limit |
| Name |
| Receivables |
─○ Value
─○ Rank (0 to 0)
└◉ Field

[ Clear ]

☐ Credit Limit is greater than or equal to $10,000
———◉ AND —○ OR———

■ Receivables is greater than or equal to Credit Limit
———◉ AND ■○ OR■———

☐

———◉ AND —○ OR———

☐

[ Cancel ]                                    [ Done ]

The criteria in this example would find all customers that were at or over their credit limit, but only those with credit limits greater than or equal to $10,000. With Highlight, you can search on one or more values, on the ranking, i.e. the fifth highest buyer or all of the top ten buyers, or on a comparison of one or more fields as in the this example. You can AND or OR the search criteria up to four times per page and you can AND, OR or Replace several pages of Highlighting criteria each session. You can "swap" all Highlighted records for all Not Highlighted records by toggling them with a Command-W command key chord. The possibilities are limitless.

And if that isn't impressive enough, Highlight not only finds all of the records that meet your search criteria, it also Highlights all of the objects on the drawing page that are attached to those records. Once highlighted, you can easily locate and analyze or perform other drawing page functions such as changing their shade patterns (or colors).

**map thematics**

Besides the numerous obvious advantages that Highlight provides, it also adds a quick and simple method to generate thematics. The following example shows the easy process to create mapping thematics.

Using the U.S. Map type from the Master File (containing income demographic information), Highlight all states with median family incomes of between $20,000 and $22,500. The highlighted drawing page would appear as:
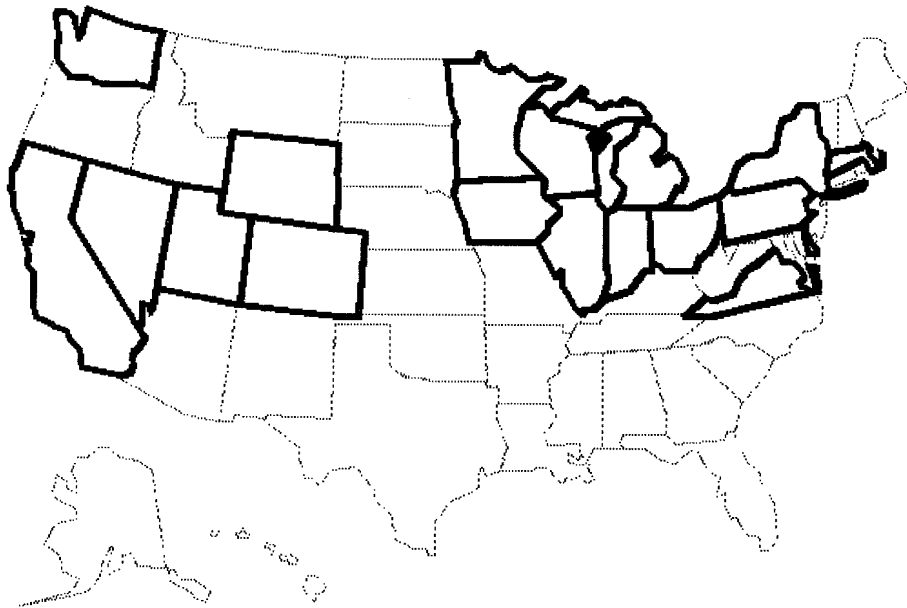
Access the Shades palette and assign the highlighted states a shade pattern (or colors).  By repeating this process for each range of incomes, you would end up with a full thematic representation of all state's median family income levels.

If you then copied all of the thematically shaded states into a new type, you would have a permanent record for this thematic.  Add a legend and your thematic map is complete.
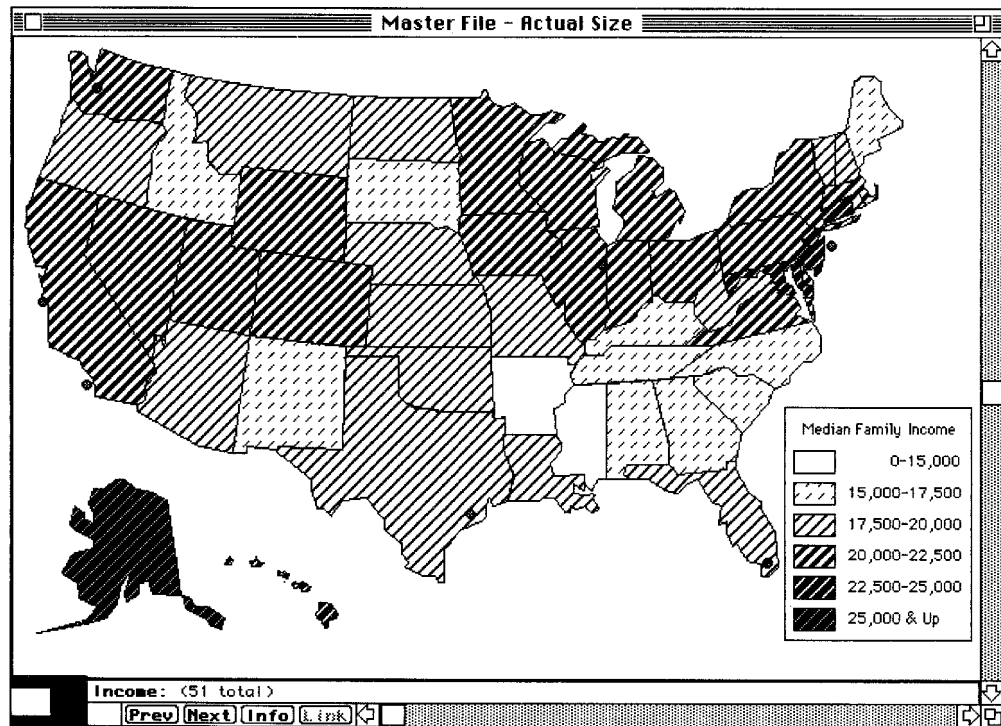


After finishing your new Income Type map, select Hide All from the Access menu and the map is hidden from view until needed.  You are then free to create additional thematic types and hide them for later access and analysis.

**pop-ups**

If a little more detail is required to provide additional information on an object, Filevision allows you to create pop-ups.  The process for creating a pop-up is simple and pop-ups can be added at any time you feel that further  explanation or information is required but not enough to keep it visible at all times.  The pop-up can be of any size, up to the full drawing page.  Information such as topographical features, the migration of the Monarch butterfly or the firing of a neural synapse could be displayed at the click of a button.

As an example, let's assume that your branch manager in Chicago was planning a visit to the Los Angeles office but was unfamiliar with the Southern California freeway system and wanted to see the best route to the office from LAX. Just click on the FWY button:
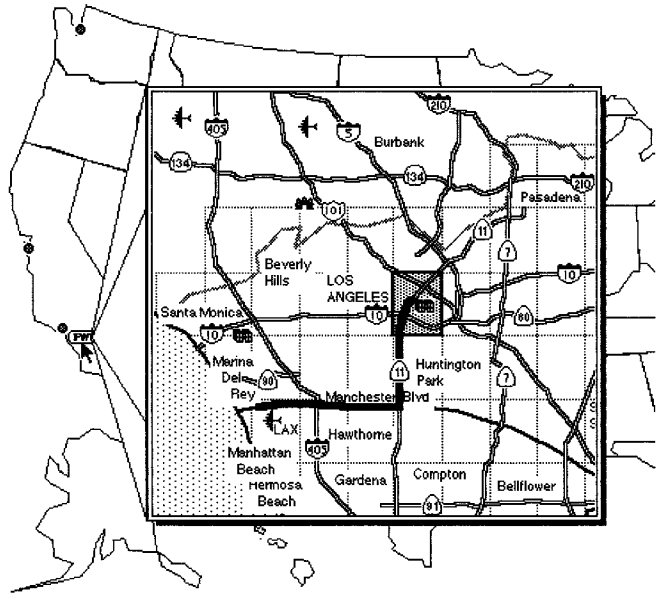


**what you can do**    You can put Filevision to work helping to solve your personal and business problems. Or training. Or research. Or whatever your interests may be. With a little creativity and a few clicks of the mouse you can:

- Point at any part on a technical drawing and retrieve printed specs and detailed exploded views.

- Map an urban community and provide detailed information on every element within the community.

- Create a complete estimating, job scheduling, invoicing, daily reporting, backlog reporting and scheduling board for the operations of your business.

- Utilize demographic information to create map thematics for determining new markets.

- Store your library of Paint, PICT and PostScript type graphics for later retrieval.

- Develop a security system with a database of your employees including their personal information and identification photographs.

- Identify, catalog and illustrate your prized butterfly, stamp or coin collection.

- Manage an archaeological dig with map locations and detailed information on all finds.

- Click on a stock shelf and retrieve the cost of goods. Then print out a report that calculates gross margins.

- Identify the location of dated perishables in your inventory.

- Click on a symbol and "pop up" a detailed drawing. Or hide details that clutter your view.

- Highlight your best markets on the screen. Or print out last month's worst performers.

- File customers using an on-screen sales map. Then print a customer list, sorted by anything from flavor preference to shoe size. In the click of a mouse.

## what Filevision can do

- record, edit and interrogate visual, numeric and written information

- import and display gray scale photographic quality scanned images.

- sort, merge, select, compute, initialize and copy information

- draw, stretch, shrink, reshape, shade, cut, paste, move and copy graphics

- import and export PICTs, Paint and EPSF (Encapsulated PostScript) graphics

- overlap, hide and highlight visual information

- change and create shades and icon-like "symbols"

- import and export text files from any Macintosh or other system program

- exchange text and graphic information via the Macintosh Clipboard with other Macintosh programs

- copy complete database types with their objects and records to the Clipboard and then to a new file

- print lists, reports, form letters, labels and pictures

- create a file without graphics—and add graphics later, or never at all

- print counts, totals, averages and standard deviations for the whole report or part of the report

- set up a mini spreadsheet with up to 256 cells or combine your standard record fields with a mini spreadsheet

- link to related and nested files

- calculate the contents of a field automatically, using the information in other fields

- create files of up to 32,000 records and 16 megabytes in size

- do it all in color (if equipped)

Because it combines a filing system with a drawing system, Filevision IV creates a new kind of business and personal software. It will revolutionize your ability to analyze information.

Just picture the potential.

**what you need**  To use Filevision IV you need this minimum equipment:

- a Macintosh Plus, SE or II with 1 megabyte of memory

- an external or hard disk drive

- the original Filevision IV Program Disks

It's best to have a Macintosh-compatible printer for printing out reports and graphics.

Also, a Macintosh-compatible gray scale scanner with a Mac II would be required to realize the full integrated imaging potential of Filevision IV.

# How to use this manual

The first thing to do is to make sure you read  Section One "Before you start...".
It contains important material  that may save you problems.  This "Introduction"
can also give you a quick overview of Filevision.

Section Two, "The Tour", furnishes you with a sample file in order to teach you
the fundamentals of Filevision.  You won't be just an onlooker—you'll add
information to the file, identify  patterns, and print reports on that information.

Section Three, "Using Filevision", rounds out your knowledge of Filevision.  It
tells you how to use every one of  Filevision's functions, step by step.  You
should browse  through it once just to get a feeling for the scope of Filevision's
capabilities, then refer to it when you need  directions for a specific operation.

Section Four, "Reference", contains several appendices which include:

- Filevision IV specifications

- Filevision IV menus and dialogs

- lists of double-click shortcuts and special key combinations

- a list of Filevision and system error messages and possible remedies

- Importing and Exporting text examples

- an ASCII character chart for entering special characters in Filevision

- a Glossary of terms used in Filevision IV

# Phoenix Arizona
## MA G Freeway System
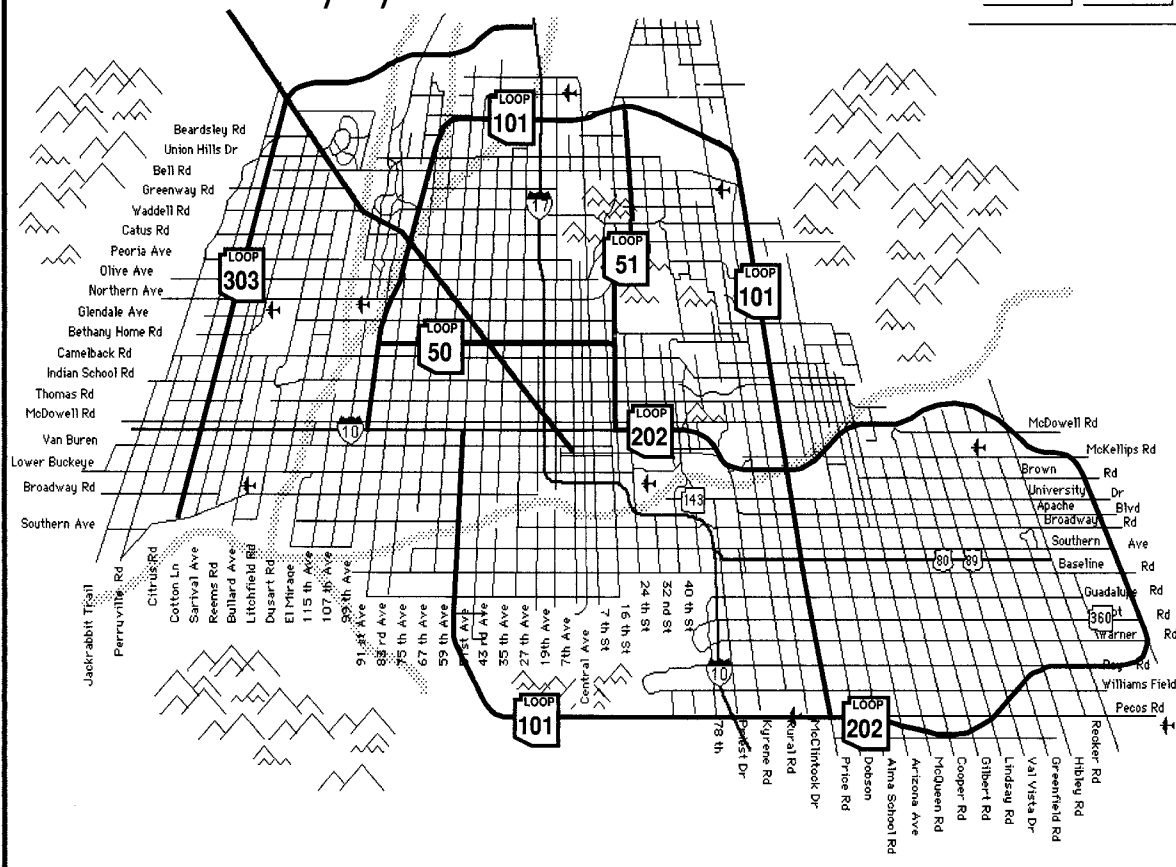
**Info for this Help: (1 records)**

PHOENIX MAP HELP

This map provides access to information relating to specific roadway projects in the Phoenix area. At present, the only roadways selectable are the highways being built under the financing of Proposition 300. These are called Freeways under the types menu. DOUBLE CLICKING on a colored roadway shown on the map will transfer you to a - project specific - table of contents file containing links to additional - more specific - graphics and data base information.

SELECTABLE OBJECTS
Roadways: Transfers you to related roadway file.

DATA BASE FILES
No attached data bases.

Click on the DRAWING button to return to the drawing.

[Prev] [Next] [Revert] [Drawing] [Link]

Phoenix Arizona
Freeway System Construction Project
Courtesy DeLeuw & Cather

# *Before you start...*

Before you start...
Copying Disks and Files

OL Structures - Actual Size

# Structures

| 5b | 5c | 6b | 7a | 7b | 8 |

5e

9a

23rd Ave.
19th Ave.
83rd Ave.
75th Ave.
67th Ave.
59th Ave.
51st Ave.
Rose Garden Ln.
Deer Valley Rd.
Cave Creek Rd.
32nd St.
40th St.
Tatum Blvd.
Future 56th St.
Future 64th St.
Scottsdale Rd.
Hauden Rd.
Pima Rd.

Union Hills Dr.

Utopia

9b

Bell Rd.

Future Bell Rd.

4b

43rd Ave.
35th Ave.
31st Ave.
27th Ave.
25th Ave.
7th St.
12th St.
16th St.
20th St.
7th Ave.

Raintree Rd.

Thunderbird Rd.

Greenway Rd.

Thunderbird Rd.

9c

Grand Ave.

R/R

6a

Cactus Rd.

Peoria Ave.

Black Canyon Fwy.

Future Squaw Peak Pkwy.

Shea Blvd.

4a

A.T. & S.F. R.R.

Mountain View Rd.

Via Linda

10a

96th St.

Olive Ave.

Via De Ventura

Northern Ave.

Glendale Ave.

Arizona Canal

Indian Bend Rd.

3b

Grand Canal

Cc

Mcdonald Rd.

10b

Camelback Rd.

Bethany Home Rd.

Chaparral Rd.

**Future Paradise Parkway**

Indian School Rd.

3a

Indian School Rd.
Roosevelt Canal
Thomas Rd.

99th Ave.
91st Ave.
83rd Ave.

VBASE  INDEX  HELP ?  PHOENIX  LOOP 101

Hauden Dr.
Dobson Rd.

Thomas Rd.

10c

2

Mcdowell Rd.

107th Ave.

I-10

Mcdowell Rd.

[Prev] [Next] [Info] [Link]

## LEGEND

| | | | |
|---|---|---|---|
| ⍦ | Major Interchange | (No.) | Section Number |
| ⍦ | Highway Structure | ■ | Highway Under |
| ⍦ | River Crossing | ■ | Highway Over |
| ⍦ | Canal Crossing | | |
| R/R | Railroad Crossing | | |

CHAR

Phoenix Freeway Construction

- Structures -
Design
Cost
&
Schedule

Courtesy Deleuw & Cather

### Info for this Structures:  (121 records)

| STRUCTURE NO | 23 | STRUCTURE | 75th Ave. |

| TRAFFIC OPERATION | CONST SECTION |
|---|---|
| Full Diamond Interchange | 5a |

| TYPE | | Underpass |
|---|---|---|
| PROFILE | OL | -1 |
| | X - RD | 0 |

| DESIGNER | | Benson & Gerdin |
|---|---|---|
| | Design Start | 86/8/26 |
| | Design Finish | 88/7/1 |

| CONTRACTOR | | |
|---|---|---|
| | Const. Start | 89/10/1 |
| | Const. Finish | 91/4/1 |

| CONSTRUCTION ESTIMATE $ | 1,101,360 |
|---|---|
| REMARKS | |

**RUSTICATION PERSPECTIVE**

### STRUCTURE DESCRIPTION

| TYPE GIRDER |
|---|
| Post-tensioned Concrete Box |

| | |
|---|---|
| GIRDER SIZE | 5.502 |
| LENGTH C/L TO C/L | 250.020 |
| TOTAL LENGTH | 253.00 |
| WIDTH | 108.83 |
| AREA ( SQ. FT. ) | 27,210 |
| NO. OF SPANS | 2 |
| COST PER SQ. FT. | 40.00 |

### TRAFFIC DATA

| | |
|---|---|
| ADOT REQ THRU LANES | 2\2 |
| ADOT REQ LF TURN LANES | 1NB/2SB |
| PROP CONST THRU LANES | 2\2 |
| PROP CONST LF TURN LANES | 1NB/2SB |
| STATUS F=FINAL  NF=NON. FINAL | F |

#### FINAL BSR

| | |
|---|---|
| BSR Pkg. | 86/7/20 |
| F BSR to S.C. | 86/7/21 |
| F BSR to ADOT | 86/7/23 |

[Prev] [Next] [Revert] [Drawing] [Link]

# Before you start...

Before you start using Filevision IV, please read this section. It will save you time and trouble, whether or not you're an experienced Macintosh user.

**what you should know**

You should know these fundamentals of the Macintosh, all of which are covered in Macintosh, the owner's guide:

- **how to turn on the Macintosh**
- **how to insert a disk**
- **how to initialize a disk**
- **how to use the mouse**
- **how to select one or several documents on the Desktop**
- **what a menu is and how to choose menu items**
- **how to use the keyboard and the Edit menu**

**make a working copy of each Filevision IV disk**

This section also shows you how to copy disks and files. Be sure to copy your original Filevision IV disks before you begin the Tour, examples or Tutorials, and to use those working copies.

The very first thing to do with your Filevision IV disks is to copy them. Use the copies in place of the originals.

If you don't know how to copy a disk, see "Copying Disks and Files" at the end of this section.

**converting Filevision and Business Filevision files to Filevision IV (see Appendix B)**

Business Filevision users who are converting their files to Filevision IV need only to open the file from Filevision IV. Filevision IV will offer the option to make a back-up copy in the original Business Filevision format before proceeding with the conversion. After the conversion is finished, nothing else is required to put the file to immediate use.

Those who wish to convert the older Filevision files to Filevision IV will first have to convert to Business Filevision. Use the Filevision Convert Utility located on your Start-up disk. From the converted Business Filevision file, use the same procedure as above (see Appendix B for detailed instructions).

## copy important files before using them

A file is the portion of the disk where Filevision keeps the information you work with. When you use a file, Filevision automatically updates that information. So it's a good idea to make a backup copy of an important file before using it.

If you don't know how to copy a file, see the next section "Copying Disks and Files".

## please send in your registration card!

The enclosed registration card serves a variety of purposes. When you send it in you'll be enrolled in Marvelin Corporation's Customer Service Program. Your membership entitles you to:

- **special promotional offers**

- **notification of upgrades when available**

- **free tips and hints**

- **free technical assistance**

You must send in your registration card to receive these services.

# Copying Disks and Files

**Copying Filevision IV files onto a hard disk**

This section tells you how to copy disks and files. If you're an experienced Macintosh user, there's nothing new here. But experienced or not, copy your Filevision IV disks immediately!

**copying to your hard disk**

- Start by first creating a new folder called Filevision IV on your hard disk desktop (the root directory).
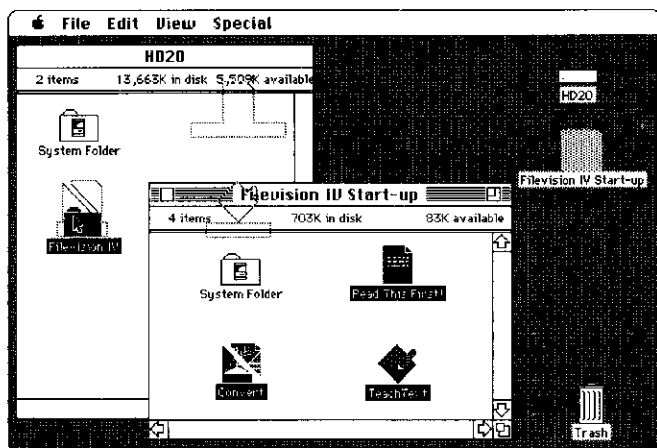


- Insert each of the Filevision IV diskettes into the floppy drive. As soon as the floppy icon is showing, double-click it with your mouse pointer to open the floppy.

- Select all* of the files on the floppy by marquee-dragging, shift-clicking, command-A or by chosing **Select All** from the **Edit** menu. All of the file icons will turn black when they are selected.

- With the mouse button depressed and the pointer on one of the selected files, drag all of the files to the Filevision IV folder on your hard disk. Your Filevision IV folder will turn black as soon as you have positioned the mouse pointer over it.

*CAUTION: If your hard disk already has a System Folder, do not copy the System Folder that is included on your Filevision IV Start-up disk. Having more than one system file on your hard disk can cause unexpected problems.

If you want to replace your hard disk System files with the Filevision IV system, boot your Macintosh using the Filevision IV Start-up disk and then remove the System Folder on the hard disk. You can then copy the new System Folder safely.

The Macintosh will show you a dialog informing you of the copying actions and when it is finished.

**copying Filevision disks**

- Insert the disk to be copied into the internal drive.

- Insert a new disk or a disk you don't need in the external drive.

This is called the destination disk.
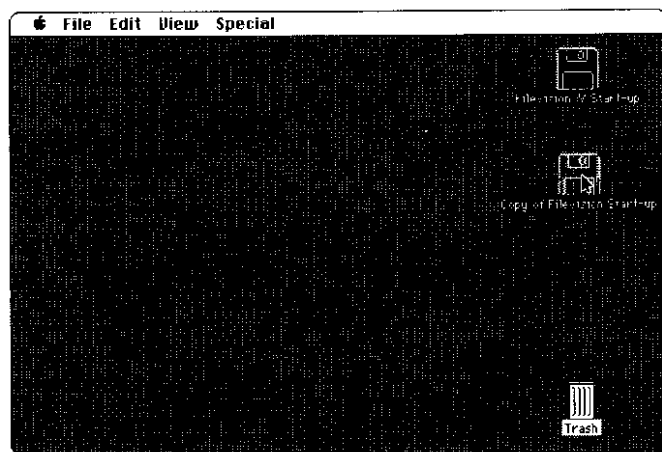


- If the destination disk is new, a dialog box will ask if you want the disk to be initialized. Click the Initialize button, then type in a name when it's requested—for example, Copy of Start-Up Disk— and click OK.

- Close all the windows on both disks by clicking the square closeboxes at the upper-left corner of each window.

- Move the pointer on top of the icon of the disk you want to copy. Press and hold down the mouse button.

The icon turns black.

- Still holding down the mouse button, drag the icon of the disk you want to copy over the icon of the destination disk. The icon of the destination disk will turn black when the pointer is positioned properly:

- Release the mouse button.

You'll be asked to confirm this action, which will erase all the files on the destination disk.

- Click **OK**.

In a few moments the disk will be copied. If you are using an older version of the system, it will automatically eject the disk in the internal drive and ask you to reinsert the system disk.

• If asked, insert the system disk when the copy is complete.

**copying a file or folder onto the same disk**

In this example you'll make a copy of the Tour folder, which contains two files.

• Locate the **Tour Folder** on you hard disk (there isn't enough free space to copy the Tour Folder on the same floppy disk).

• Click the icon of the **Tour Folder**.

The folder icon turns black.

• Choose **Duplicate** from the **File** menu.
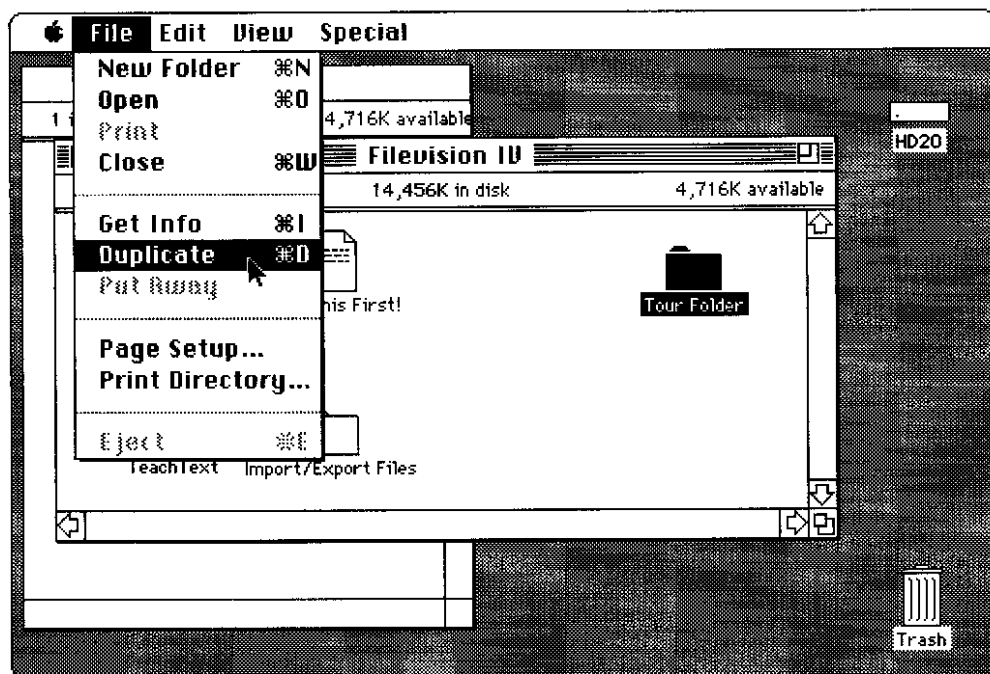


After a moment you'll see the new folder appear, bearing the name of the old one but preceded by the words Copy of. Both of the new Tour files inside the folder copy will retain their original names.

Hazardous Materials and Spill Control solution
for the Mobil Bay Alabama waterway system.

Courtesy of the U.S. Coast Guard

**LEGEND**

⑧  PETROLEUM FACILITY

⑨  CHEMICAL FACILITY

**LEGEND**

HESS

DOUGLAS

LL&E
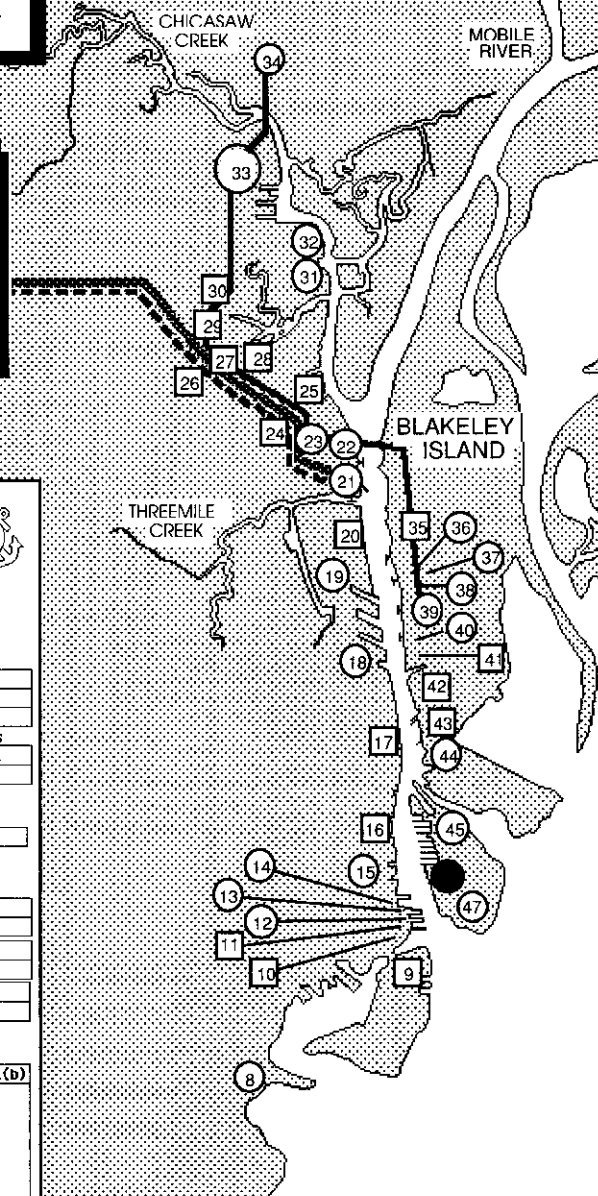
**U.S. COAST GUARD**

MSO Mobile
150 N. Royal Street
P.O. Box 2924
Mobile, Al. 36652-2924
(205) 690-2201

**Facility Information Form**

| Facility Name: | Alabama Dry Dock and Shipbuilding Corporation (ADDSCO) | |
|---|---|---|
| Address | | Facility Type: |
| | | SEE BELOW FOR FACILITY TYPES |
| | | Dunn & Bradstreet No. |
| Telephone: | | |

Please check the
appropriate box or boxes :   **Transport Mode Available**

| Ship: | | Rail: | 1 | Truck: | 50 | Pipe: | 1 |

**Emergency Information**

| 24 Hour Telephone No's.: | |
|---|---|
| 24 Hour Contact Persons: | |
| Security Guard Tel. No's.: | |
| Guard Dog (Y/N) | Tel. No's.: |
| Local Fire Dept. Tel. No's.: | |
| Local Police Dept. Tel. No's.: | |

**Product Information**

| Product(a) | Max.Cap.(a) | Product(b) | Max.Cap.(b) |
|---|---|---|---|
| | | | |

FACILITY TYPES : NEC, OILP, BULK, HAZP, POTW, CHEMICAL

# *The Tour*

Periodic Table of the Elements

| H | IA | | | | | | | | | | | | | | | | | O | He |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ◇ | IIA | | | | | | | | | | | | | | IIIA | IVA | VA | VIA | VIIA | ◇ |
| Li | Be | M ◇ | | | | | | △ | ⊗ | | | | B | C | N | O | F | Ne |
| Na | Mg | IIIB | IVB | VB | VIB | VIIB | | VIII | | | IB | IIB | Al | Si | P | S | Cl | Ar |
| K | Ca | Sc | Ti | V | Cr | Mn | Fe | Co | Ni | Cu | Zn | Ga | Ge | As | Se | Br | Kr |
| Rb | Sr | Y | Zr | Nb | Mo | Tc | Ru | Rh | Pd | Ag | Cd | In | Sn | Sb | Te | I | Xe |
| Cs | Ba | La | Hf | Ta | W | Re | Os | Ir | Pt | Au | Hg | Tl | Pb | Bi | Po | At | Rn |
| Fr | Ra | Ac | Rf | Ha | | | | | | | | | | | | | |

| Ce | Pr | Nd | Pm | Sm | Eu | Gd | Tb | Dy | Ho | Er | Tm | Yb | Lu | LANTHANIDES |
| Th | Pa | U | Np | Pu | Am | Cm | Bk | Cf | Es | Fm | Md | No | Lr | ACTINIDES |

Legend:

- M  Mössbauer Data
- ◇  Hexagonal
- Body Centered Cubic
- Cubic
- ⊕  Rhombohedral
- Orthorhombic
- △  Diamond
- ⊗  Monoclinic
- Tetragonal
- Face Centered Cubic
- ◌  Triclinic

Bruce Parkinson

**Info for this Elements: (107 records)**

Name Aluminum   Atomic # 13
Atomic Wt. 26.9815   Density g/cc 2.70
Ionic Rad Å 0.50   Ox #1 3   Ox #2   Ox #3
Atomic Rad Å 1.43   Covalent Rad Å 1.18
Melting Pt °C 660   Boiling Pt °C 2450
ΔH Fusion 2.55   Spec Heat 0.215   ΔH Vapor 67.9
Elec Cond 0.382   ThermCond 0.50
1st Ion 138   Work Func. eV 4.28   Electron
Discoverer Wöhler   Discovered
[Prev] [Next] [Revert] [Drawing] [Link]

**Info for this Isotopes: (107 records)**

Element Aluminum   At # 13
Isotpe1 27   Isotpe2 26   Isotpe3 29   Isotpe4 26
%1 100.   %2   %3   %4
Spin 1 2.5   Spin 2   Spin 3   Spin 4
Radio 1 n   Radio 2 β+   Radio 3 β-   Radio 4 β-
Half 1   Half 2 13.4   Half 3 2.60   Half 4 2.14
[Prev] [Next] [Revert] [Drawing] [Link]

Periodic Table

Courtesy Bruce Parkinson

# The Tour

This is where you learn the basics of Filevision. You'll use Filevision to manage a real estate townhouse development situated next to a golf course.

**before
you start...**

If you haven't read the preceding sections, please do. They'll help you get the most out of Filevision and start you off with good working habits.

A word of caution: Never turn off the Macintosh without first choosing Quit from the File menu and returning to the desktop. Your file could be damaged and you would definitely loose most of your work on the file after your last Saved version.
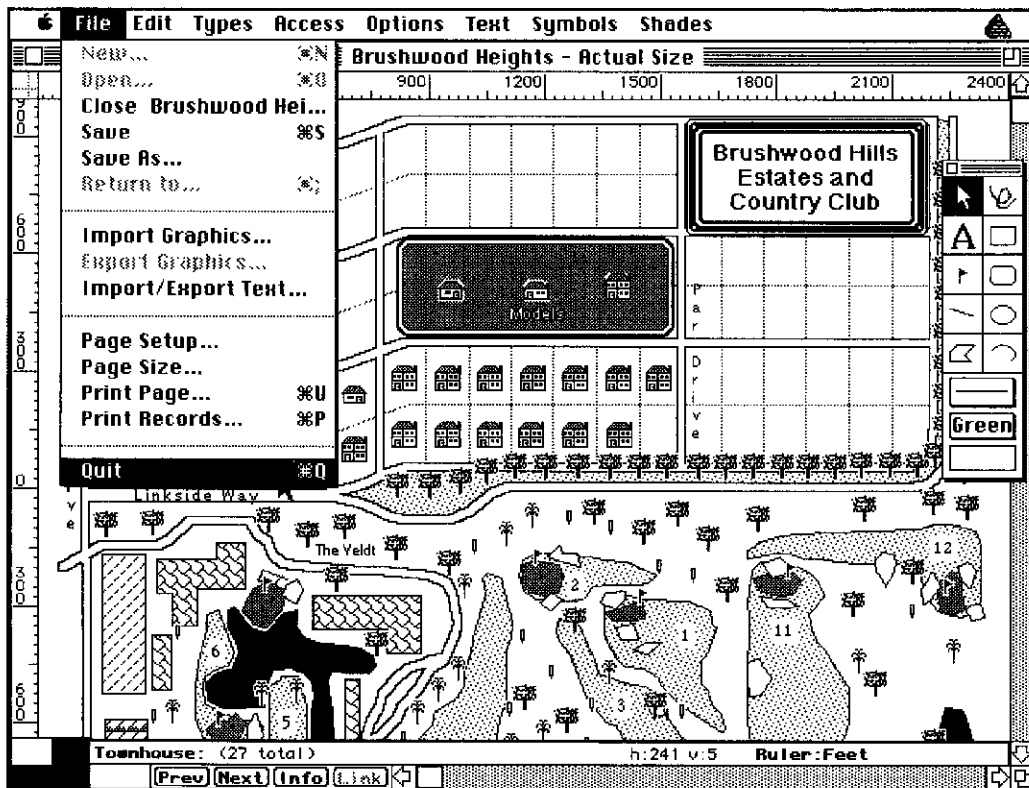
# Starting
# the tour

Now that you have read the preceding sections, you're ready to embark on your tour. You should use a working copy of the Filevision Start-Up Disk in your Macintosh internal disk drive and a working copy of the Program Disk in the external drive. If you are working with a hard disk, ignore the drive instructions.

You will be exploring and adding to a file that a manager of a townhouse development or a home owner's association might use.

## starting...

- Turn on your Macintosh.

- Insert your working copy of the disk labeled **Copy of Filevision IV Tour** in the internal drive. Hard disk users open the folder that contains your Tour Folder.

The desktop and file icons appear.



| ≡☐≡≡≡≡ **Filevision Tour** ≡≡≡≡☐≡ |
| --- |
| 4 items    72,300K in disk   4,644K available |

Tour Folder    Print Estimator

Import/Export Files    US Map (Color)
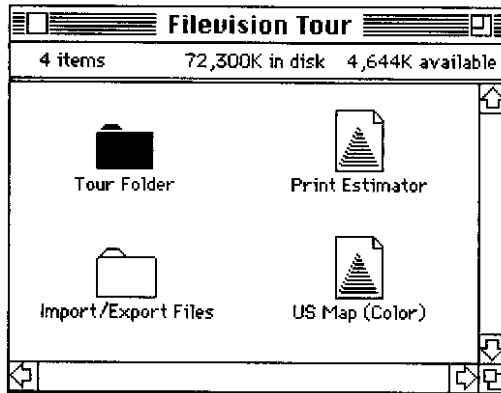
### copying the Tour files

You'll alter the Tour file, so the first thing to do is to copy the Tour Folder. That way, someone else can take the tour later.

- Click the **Tour Folder** icon to select it.

- Choose **Duplicate** from the **File** menu. (Floppy drive users will have to copy the Tour files to another diskette as there isn't enough room for both the original file and copy.)

A new, "Copy of Tour Folder" icon appears.

## opening the
## Tour file

- Click the **Copy of Tour Folder** icon to select it.

- Choose **Open** from the **File** menu.

You'll see two files, Brushwood Heights and Optima.

- Click the **Brushwood Heights** icon to select it.

- Choose **Open** from the **File** menu.

# A first look at Filevision IV

In a few moments you'll see the display shown below. The most frequently referred to parts of Filevision are labeled in the illustration. Don't click anything yet; this is a good time to become familiar with the Filevision Drawing display. Its parts are either labeled in the picture or discussed separately below.



window close box — file title and window viewing size — menu bar — MultiFinder icon — window zoom box — drawing window title bar — custom rulers — tool box (see below) — vertical scroll bar — thumb slide — drawing window — ruler measure — window resize box — mouse pointer position — horizontal scroll bar — selection info area

link file button
info (record) page button
next object or record button
previous object or record button
record icon box
mini page
mini page scroller

| | |
|---|---|
| pointer | freehand |
| text | rectangle (sq) |
| symbol | rounded rect |
| line | oval (circle) |
| polygon | arc (pie slice) |
| | line width |
| | line color |
| | current shade |

NOTE: The screen display shown above was created using a 13" monitor. Your screen display may only show a portion of this illustration.

If what you see doesn't look anything like this and a button reads Drawing at the bottom of the display window the file has been used before and you're looking at the Info display window. Click the Drawing button or window close box to return to the Drawing display window.

## selecting objects

A "file" is where you keep the information you work with. The individual items in a Filevision file are called "objects" when referring to the Drawing page and "records" when referring to the Info page. Each object can have its own record and records may have, but don't require their own objects.

- There are two rows of townhouses in the middle of the work area. Click the one on the right in the bottom row.
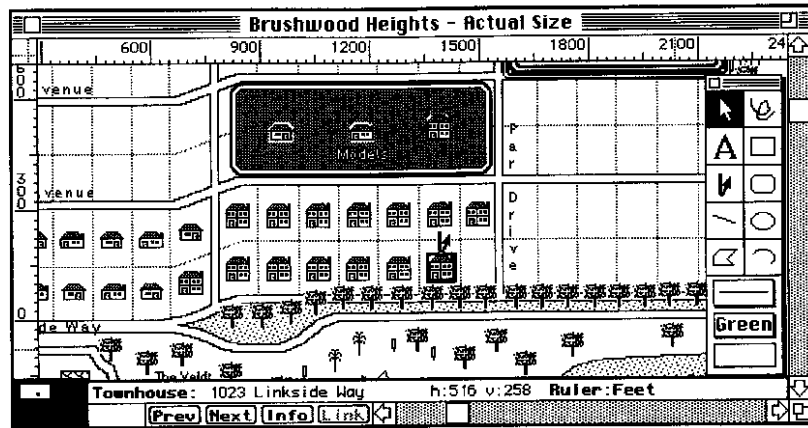


When you click the townhouse, a box surrounds it, indicating that the object has been "selected".
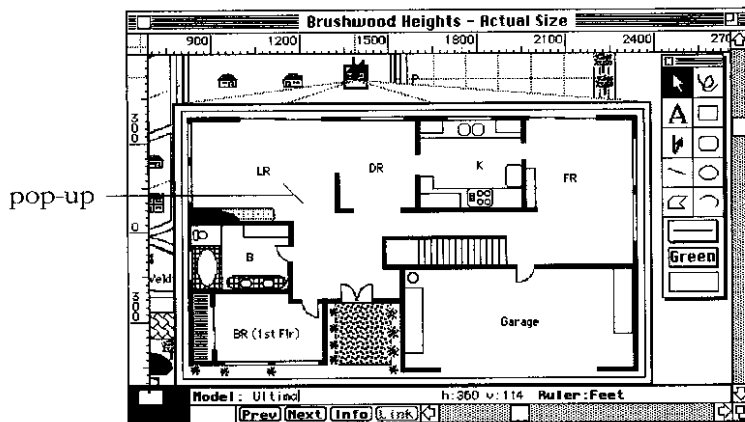


- Click one of the houses in the framed box over the word **Models** at the middle of the display.

A floor plan appears. You've just clicked a special kind of graphic called a "pop-up". It's also an object; in fact, all Filevision graphics are objects.

## deselecting objects

- Click the **pointer tool** (the arrow) in the **toolbox** or any other non-graphic area of the drawing.

The floor plan of the pop-up and the box surrounding it disappear, indicating that the pop-up has been "deselected".

## viewing an object's record

You probably noticed that when you selected the Townhouse the information Townhouse: 1023 Linkside Way appeared in the selection information area. There's a great deal more information that an object can contain.

- Click the townhouse next to the one you clicked before.
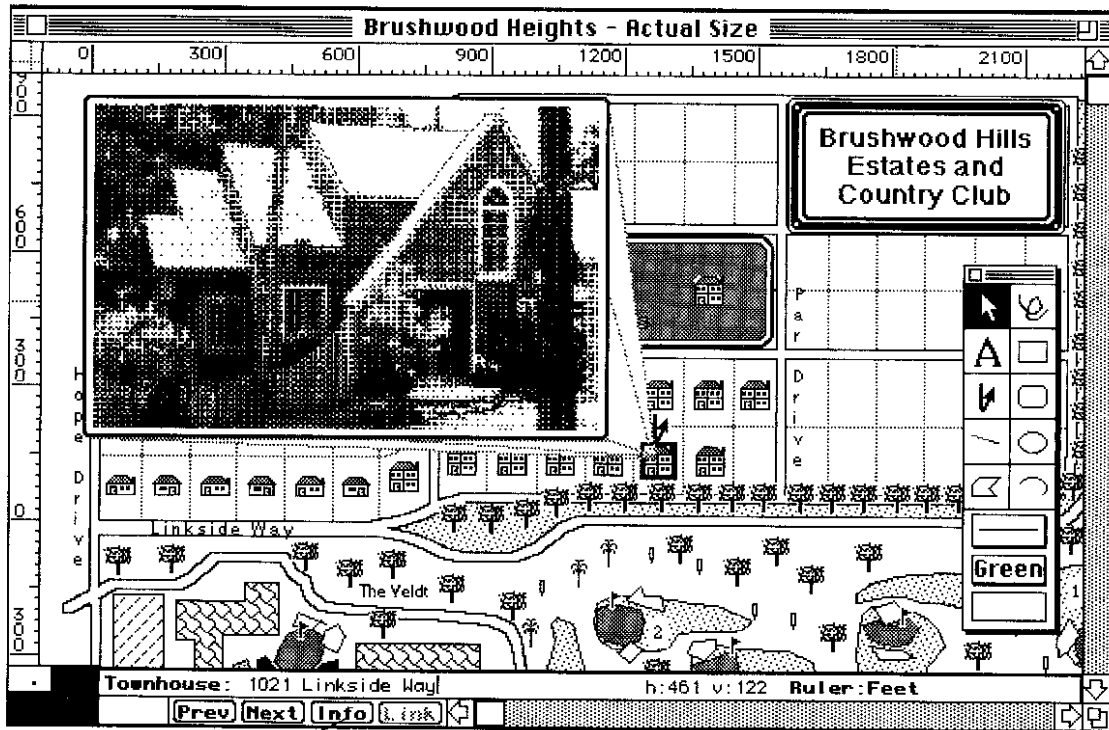


The info button for display of the object's record page.

This one has another pop-up that was created from a scanned photograph. A box appears around it once more and the address of that townhouse, 1021 Linkside Way, appears in the **selection information** area at the bottom of the screen.

# The Info page

a record
is
made up
of fields

This is the record for the house.

There's a box near the top of the display labeled Address, with the address of the house you clicked filled in.

The rest of the boxes contain information you'd expect to see in a record of information about a townhouse.

You can also click on the zoom box to increase the size of the Info page window to fill your monitor screen.

Those boxes, called fields, are placeholders for information. You'll soon learn how to type in ("enter") information into fields, and to change the sizes, names, and placement of the fields.

## returning from the Info display

• To get back to the picture of the townhouse development, click the **Drawing** button.

This view of the file is called the "**Drawing**" page.

## using the Prev and Next buttons to select objects

At this point, you should be looking at the Drawing display and 1021 Linkside Way should be selected. If you don't see 1021 Linkside Way in the selection information area at the bottom of the display, choose Townhouse from the Types menu, then click the Next button in the lower left of the display until the address 1021 Linkside Way appears in the selection information area.

- Click the **Prev** button in the left end of the window horizontal scroll bar.

The selection information area now reads 1020 Lake Avenue. That townhouse is shown selected (there's a box around it).

- Click the **Prev** button again.

The selection information area reads 1019 Linkside Way and the next townhouse down has a box around it.

## using a double-click as a shortcut

- Double-click the graphic of 1019 Linkside Way.

The record for 1019 Linkside Way appears.



Double-clicking an object is a shortcut you can use in place of clicking the Info button.

- Click the **Next** button.

The record for 1020 Lake Avenue appears.

As you can see, **Next** and **Prev** work equally well on both the Info page and the Drawing page.

- Click **Drawing** to return to the **Drawing** page.

# adding an object

Adding an object is simple. Let's add a townhouse.

- Click the **pointer tool** at the top of the **toolbox**.

- Choose **Townhouse** from the **Types** menu.

Symbols are modifiable icons. It's very easy to add them to a drawing and to customize them (to learn how to change these symbols or create new ones, read page 115, "The Symbol Editor").

- Pull down the **Symbols** menu and choose the two-story house from its third top row position.

- Click the **symbol tool**. It's between the text tool and the line tool.
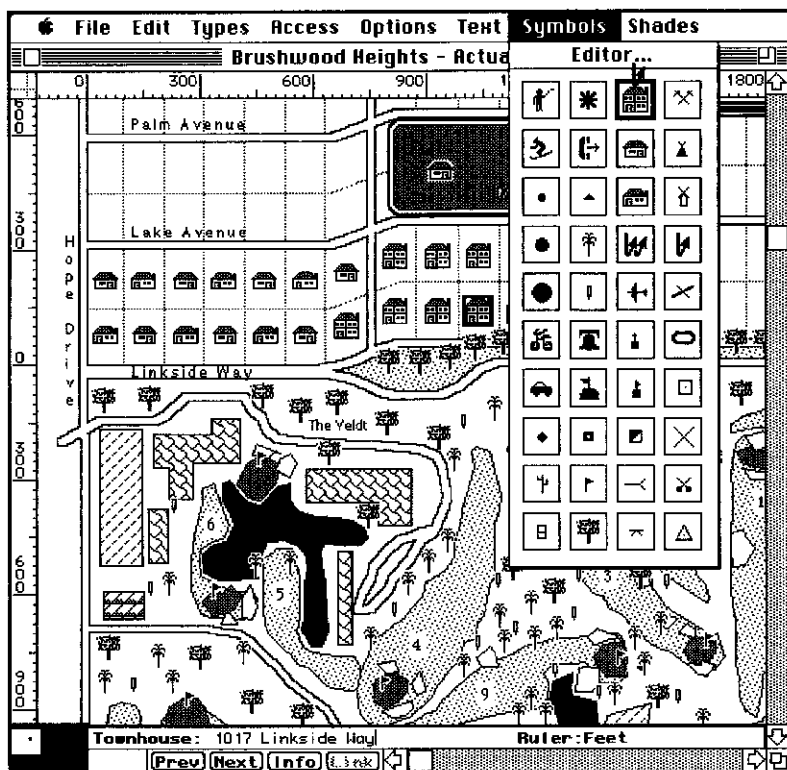
The pointer now resembles the two-story house you just selected. The symbol tool always takes the shape of the selected symbol.

- <u>Without</u> holding the mouse button down, position the townhouse as shown on the next page and click.
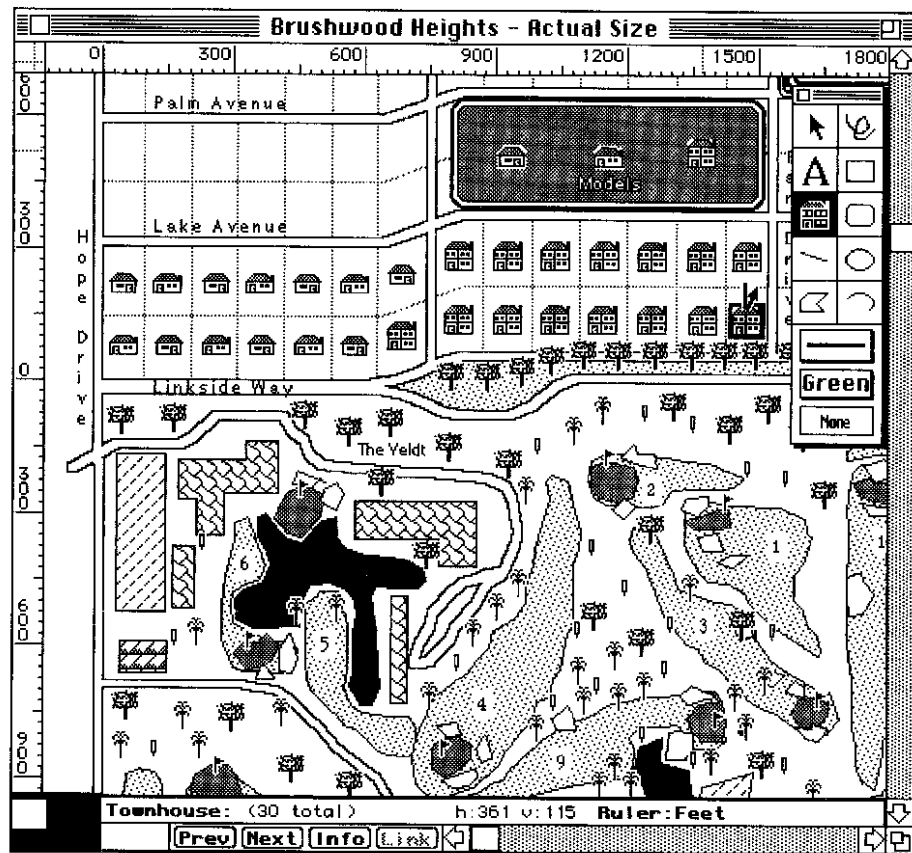
The townhouse is now placed. You've just added an object, though there's no information in its record.

- Look at the **selection information** area.

A blinking insert bar is waiting for you to type in an address next to the type name Townhouse.

- Type 1025 Linkside Way.
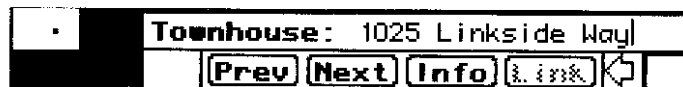


- Click the **Prev** button a few times.

Different townhouses are selected.

That's all there is to adding an object. Later you'll learn how to fill in the rest of the information in its record.

# Types

Objects are grouped by type. You're used to this method of classifying things in everyday life: knives, forks, spoons and plates are "objects" of the type dinnerware, while windshields, bumpers and fan belts are "objects" of the type automobile. Likewise, each townhouse in this file is an object of the type Townhouse.
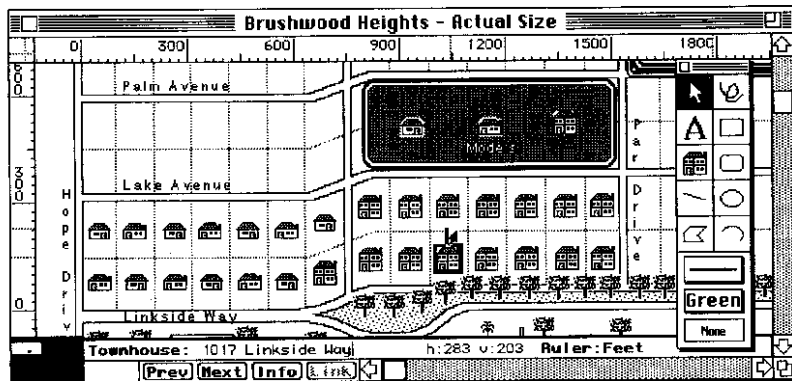


- Click 1017 Linkside Way to select it:

In the selection information area, the address, 1017 Linkside Way, is preceded by the word Townhouse, its type name. 1017 Linkside way is a single object of the type Townhouse.

- Move the pointer to the **Types** menu and hold down the mouse button while you examine the menu.
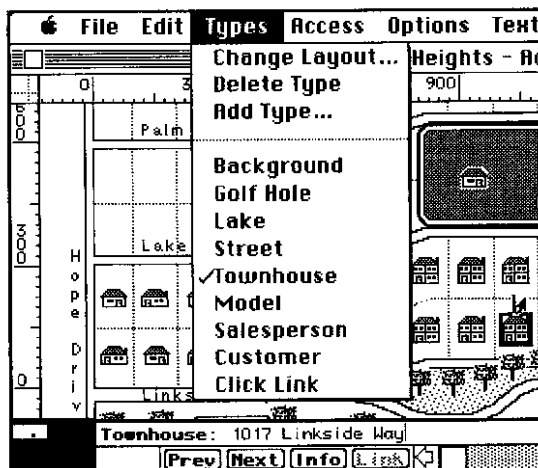


Not only does it list all the types in the file, it has a check beside Townhouse, the type of the selected object.

• Release the mouse button and click one of the models.
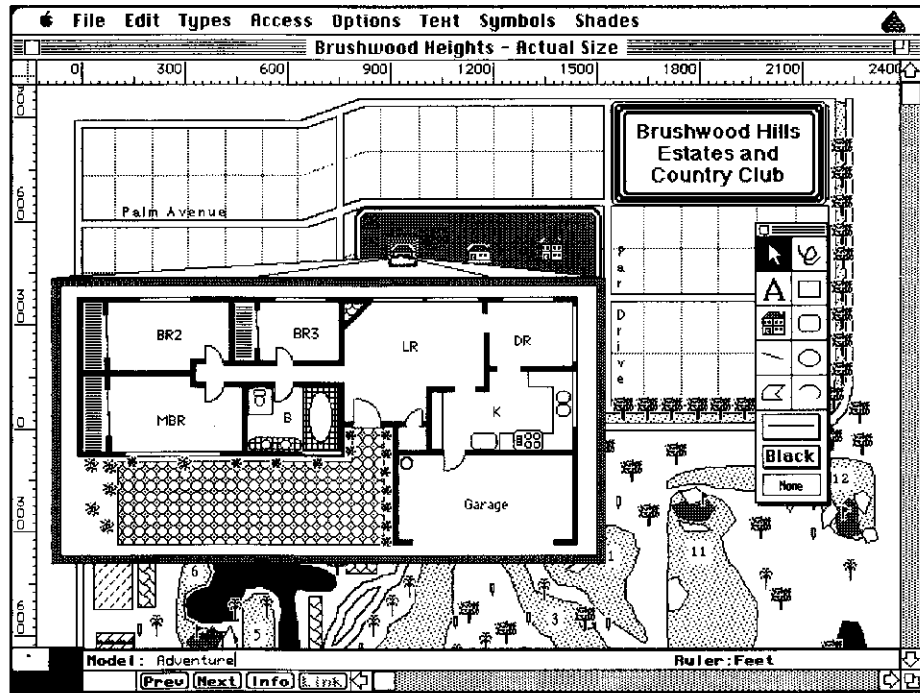


The floor plan appears. This is a special kind of graphic called a "pop-up" whose properties we'll explore later. Look at the selection information area. The type name in the selection information area changes to **Model**. That makes sense, since the object you just clicked is a Model.

• Once again, move the pointer to the **Types** menu and hold down the mouse button while you examine the menu.

This time the check is beside **Model**, which is now the selected type.

• Release the mouse button and click the **Prev** and **Next** buttons several times each.

You'll see different models selected, their floor plans appearing and disappearing as you go. If you keep clicking just **Next** or just **Prev** you'll begin to notice a pattern. Only models are selected. **Prev** and **Next** work only on objects of the currently selected type.

# Records

You should be looking at the Drawing display right now. (If the top of the screen reads "Info for this...", you're on the **Info** display and you should click the **Drawing** button.

- Choose **Salesperson** from the **Types** menu.

- Click **Next** until the **selection information** area reads **Salesperson:** Eusey.

- Click **Info**.



You are now looking at the record for the Sales Agent, Michael Eusey.

You've probably seen personnel records before, or patient records or insurance records. Here it's the same idea; information in a standard format. With Filevision, you can create those formats yourself in a flash. You can change them just as easily anytime.

- Click the **Drawing** button.

Nothing appears to be selected on the display. The reason is that we've selected a Salesperson record, and for this sample file we've chosen not to give Salesperson records a graphic part.

But there's a way to tell whether or not the currently selected object has a graphic part. Look to the right of the page miniature (at the lower left of the display). If you have been watching the page miniature up until now, you'll notice something new: the "record icon".

record icon ───────────────────

The record icon tells you that the currently selected object is a record with no graphic.

Now we'll explore records and their component parts a little more.

## Fields

Make sure the current type is Salesperson by choosing it from the Types menu, and make sure the current record is that of the Sales Agent, Michael Eusey, by clicking **Next** or **Prev** until the selection information area reads **Salesperson**: Eusey.

- Click **Info** to go to the **Info** display.

> **NOTE:**
> You can also double-click the record icon to access the Info record selected.

Take a look at the layout of the record. Each field has a name (in white letters on a black background) and a place for information (black letters on a white background).

In records of the type Salesperson, the field names are First name, Last name, Home Address, Title, Home Phone, Social Security Number, Sales Year to Date, Commission Rate, Annual Quota, Commissions, % of Quota and Photo. These are all data fields (including Photo). There are also two annotation fields (NOTE:...) that are used for information that does not change from record to record.

- Move your pointer over the white area where Eusey is entered.

Notice that the pointer has changed to a vertical bar that looks like an "I" beam.

- Click the area just to the left of the "E" in "Eusey".

There's a flashing vertical bar in the Last name field. You can type (or "enter") information where it appears.

Notice also that there are two handles on the Last name field, indicating that it's selected.

## editing the contents of a field

Let's use standard Macintosh editing techniques to change the information in a field.

- Without holding down the mouse button, move the pointer just to the left of the "M" in **Michael**.

- Now hold the mouse button down and drag the mouse to the right of the "l" in **Michael**.

Michael is now selected and ready to be edited. Double-clicking anywhere within a word is another way to select it.

| Last Name | Eusey |
| --- | --- |
| First name | Michael |

**Home address**

2345 19th Street
Santa Monica, CA 90405

| Home Phone | 213-987-4321 |
| --- | --- |

**Title**

Sales Agent

- Type **John**.

**John** replaces **Michael** in the first name field. Now let's restore **Michael** the easy way, using **Undo**.

- Choose **Undo** from the **Edit** menu.

**Undo** undoes the last action.

Michael reappears. **Undo** works with almost everything you do when you're using Filevision. Most actions that can't be undone are preceded by warnings to that effect.

- Choose **Redo** from the **Edit** menu.

**Redo** reverses **Undo**.

## Revert...

Clicking the Revert button at the bottom of the window would have been an alternate method to change back to the original record's information. Revert is generally used when several changes to a record are decided to be unnecessary.

- With the First name field back to reading John, click the **Revert** button.

| Commissions | $42,015 |
| Soc. Sec. # | 987-654-3210 |

```
NOTE: Sales
YTD/Quota=
% of Quota
```

[Prev] [Next] [Revert] [Drawing] [Link] ⟨⟩ ▯

Revert button ─────────────────────

The following alert dialog will be displayed giving you a chance to change your mind if you happened to click the wrong button.

⚠ **Do you want to revert to your original record?**
**You will not be able to undo this action.**

( Cancel )                                    (( Revert ))

- Click **Revert** to revert back to the original record's data.

The **First name** field should now read **Michael** again.

## moving from field to field

- Click the **Last name** field in the record for the Sales Agent, Michael Eusey.

If you're not on that record or that type, choose **Salesperson** from the Types menu. Then click **Next** until you reach the record for Michael (or John, if you didn't follow the procedure in the last section) Eusey.

- Press the **Tab** key.

The Tab key moves you from field to field in sequence.

The **First name** field is selected—handles appear on its top and on its lower right corner, and the text is reversed: white letters on a black background.

**First name**  Michael

You can also get to a field by clicking in it or by double-clicking if you want to change an existing entry.

- Double-click the **Sales YTD** field (in the data area).

Michael's sales for year to date have changed, so let's update the field.

- Type **$3,690,250.00.**

Notice that the two calculated fields change (**Commissions** and **% of Quota**). More on calculated fields later.

- Hold down **Shift** and press **Tab**.

The **Soc. Sec. #** field is now selected. Shift/Tab moves back one field.

- Hold down **Option** and press **Tab**.

Option/Tab always selects the first field.

Later you'll learn how to add fields of your own.

# Highlighting

Highlighting is a key to effective use of Filevision. It's used to show patterns and to filter information according to conditions you set.

Highlighting creates a subset of objects from the selected type. When you want to perform an operation on a specifically-defined part of your file, highlighting is the way to find that part. When highlighting is in effect, **Next** and **Prev** cycle through only the highlighted objects.

Highlighting is shown on the Drawing display by fading out all non-highlighted objects and by adding a shadow to the highlighted ones, giving them a three-dimensional appearance.

In this example, we'll highlight townhouses that are available for purchase at $200,000 or less.

## Highlight...

- Go to the **Drawing** page by clicking the **Drawing** button.

- Choose **Townhouse** from the **Types** menu.

- Choose **Highlight...** from the **Access** menu.

## filling in
## selection
## conditions

You'll see the Highlight... display. It's where you set the conditions for highlighting.

```
┌─────────────────────────────────────────────────────────────┐
│         Highlight "Townhouse"s meeting these conditions:      │
│ ┌───────────────────────┐         ■  Address is              │
│ │ Address               │            equal to                │
│ │ ┌─────────┐ ┌────────┐ │                                    │
│ │ │   is    │ │ is not │ │            ─●─ AND ─○ OR ─────     │
│ │ ┌───┐┌───┐┌───┐┌────┐ │                                    │
│ │ │ = ││ ≥ ││ ≤ ││ -- │ │  □                                 │
│ │ └───┘└───┘└───┘└────┘ │                                    │
│ │ ┌───────────────────┐ │            ─●─ AND ─○ OR ─────     │
│ │ │                   │ │                                    │
│ │  ● Value            │ │  □                                 │
│ │  ○ Rank(1 to 15)    │ │                                    │
│ │  ○ Field            │ │            ─●─ AND ─○ OR ─────     │
│ │     ┌──────────┐    │ │                                    │
│ │     │  Clear   │    │ │  □                                 │
│ │     └──────────┘    │ │                                    │
│ └───────────────────────┘                                    │
│ ┌──────────┐                               ┌──────────┐      │
│ │  Cancel  │                               │   Done   │      │
│ └──────────┘                               └──────────┘      │
└─────────────────────────────────────────────────────────────┘
```

The first step is to enter "**Available? is equal to yes**".

Here's how you do it.

The first field that you're interested in is Available?, but the field shown is Address.

```
┌────────────────────────────┐
│   Highlight "Townhouse"s    │
│ ┌────────────────────────┐ │
│ │ Address                │ │
│ │ Available?             │ │  □
│ │ Comments          ↖    │ │
│ │ Floor Plan  1st flr)   │ │
│ │ Front View             │ │  ■
│ │ Link                   │ │
│ │ Model                  │ │
│ │ No. of bathrooms       │ │
│ │ No. of bedrooms        │ │  □
│ │ Price                  │ │
│ │ Square feet            │ │
│ │    ┌──────────┐        │ │
│ │    │  Clear   │        │ │  □
│ │    └──────────┘        │ │
│ └────────────────────────┘ │
└────────────────────────────┘
```

- Click on **Address** with your mouse pointer and hold the mouse button down.

A pop-up menu will be displayed showing all of the field names of the Type Townhouse.

- Drag the mouse pointer down to the field name **Available?** and then release the mouse button.

The name in the pop-up menu now reads "**Available?**". Notice that the summary of conditions box to the right of the pop-up menu has also changed to read "**Available?**".

- Click the **is** button.

- Click the **=** button.

- Click the **Value** button.

- Type **yes** as the value you want to find.

- So far, your highlighting conditions look like this:



- Click the **AND** button between the condition boxes.

- Change the field to **Price** from the field pop-up menu.

- Click the **is** box.

- Click the "**less than or equal to**" (≤) box.

- Click the **Value** button.

- Type **$200,000**.

This is what your complete entry should look like:



As you can see, the right of the display shows a summary of the conditions you've entered. The condition you're currently working on is connected to the left side of the display, where you actually enter or change the condition.

- Click **Done**.

The Highlight... display is replaced by the Drawing display and a message telling you how many objects are left to check as Filevision searches for objects meeting your conditions.

After a moment's wait, eight townhouses are highlighted.
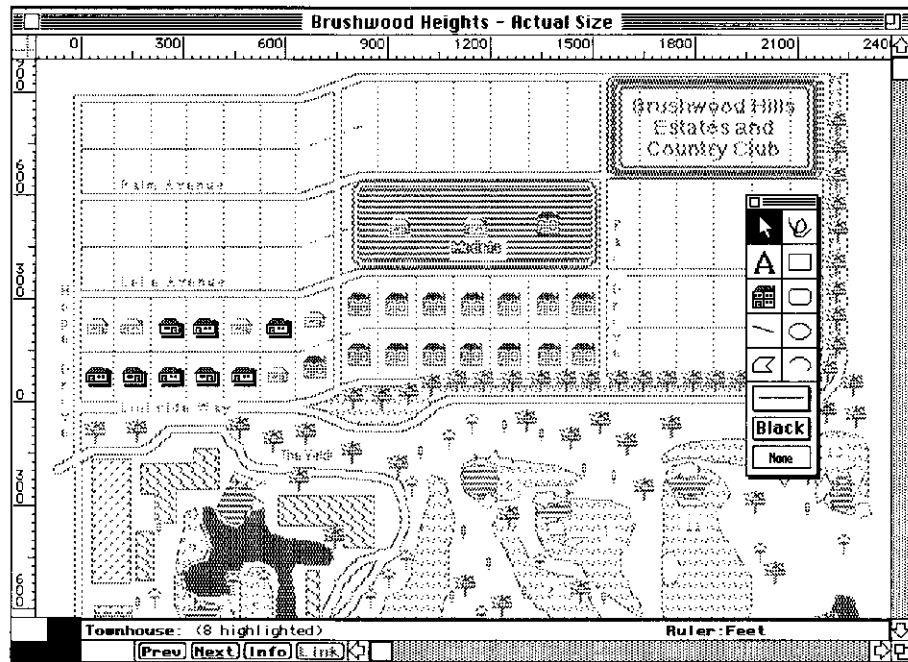


To cancel Highlighting you would select **Cancel Highlighting** from the **Access** menu. Don't do it yet.

# The Drawing page

## window zoom views



The work area you'll usually use on the Drawing page (the one you've been using up to now) is only part of the Filevision work area. What you've seen up to this point is a small area that is governed by the size of your monitor.

However, the actual work area is currently set to a 10" x 16" page even though there is only about 8" by 10" being used. The drawing page can be set to as large as 30" x 32". There are a number of options provided to be able to view other parts of the drawing page or to view all of the page at one time.

- From the **Options** menu, select **Show 33% Size**.

Notice that there is a command-key equivalent which is a shortcut method to perform the same function. Command-3 (hold the ⌘ key down while pressing 3) will do the same thing.

The full 10 x 16 work area is shown scaled down to 33%. The active working area is shown with a drop shadow rectangle. There is also a 50% and a 200% window zoom size available.
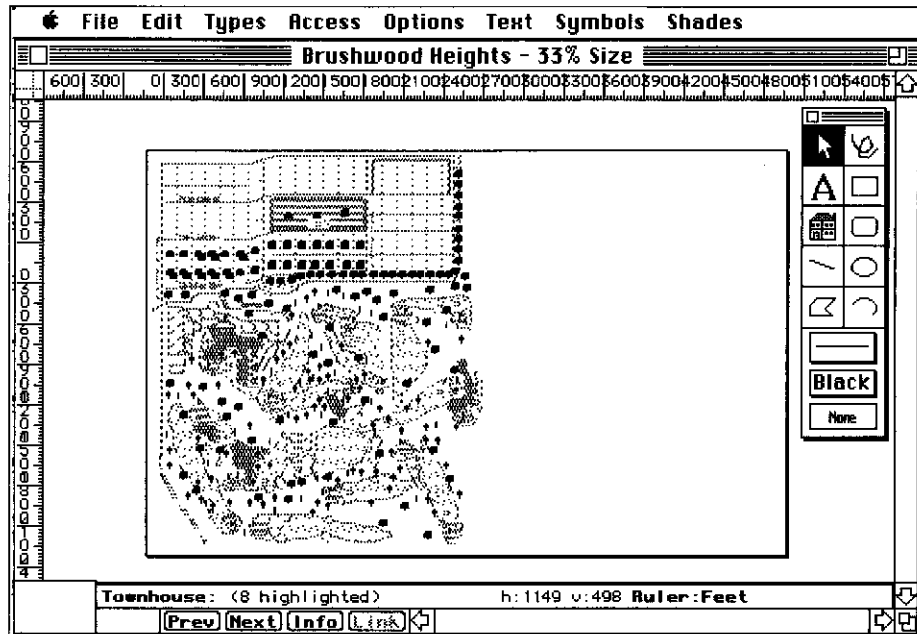


You can work on this area as easily as you can work on the full or actual size, moving, stretching, drawing and selecting objects.

Notice that the mini page now shows all white. The normal white rectangle on the black background represents the viewing area of the working page (the area that shows on your monitor) and as the full working page is now showing, the full mini page is white.

mini page

- Select **Show Actual Size** from the **Options** menu (or press Command-1).

## moving around on the drawing page

The mini page now shows the small white rectangle again with the rectangle positioned in the same area that you are currently viewing.

The mini page also has a scroller function.

- Move the pointer tool over the white rectangle.

The normal arrow pointer now becomes a four pointed arrow.

new viewing area
marquee
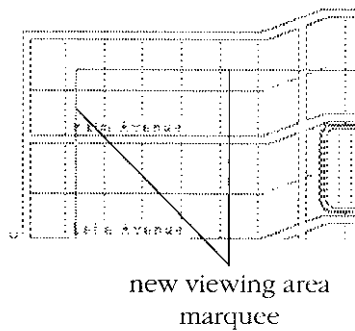
- Hold the mouse button down and drag the mini page down and notice on the drawing page that a "dotted" marquee has now appeared.

The marquee provides a reference to the new viewing position as soon as you release the mouse button.

The mini page also provides an easy method to find the center of your working page.

- Hold down the Command key ( ⌘ ) and click the white rectangle on the mini page.
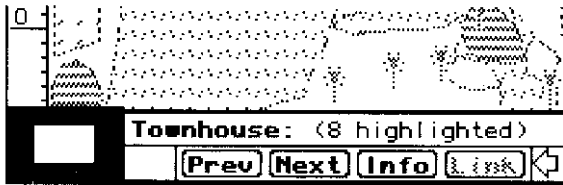


The drawing page is now centered in your overall working area. In this example, as the full working area is set to 10 x 16, the viewing area is on a partial blank part of the page.



Click **Next** a few times. Watch the page miniature and the selection information area.



**Next** (and **Prev**) now cycle through only the 8 highlighted townhouses, not all townhouses as they did before. Selected objects appear as dots in their relative positions on the mini page.

There remains yet another way to move around on your drawing page. This is the standard Macintosh method of scrolling using the vertical and horizontal scroll bars to the right and bottom of your screen.

Moving the pointer to the arrows at either end of the scroll bar and holding the mouse button down causes the page to scroll in small increments. Using the mouse pointer to "grab" the thumb slide and drag it to a new position causes the drawing page to scroll in one large increment.

If you move the pointer to any of the grey area between the arrows and then click with the mouse button, the working area will "page" either up, down, left or right depending on which bar and which side of the thumb slide you are clicking. The amount paged is dependent on the size of the monitor that you are using and the current window size.

**window control**   The size of the window can be easily adjusted by "grabbing" the double squares at the intersection of the vertical and horizontal scroll bars in the lower right corner of the screen.
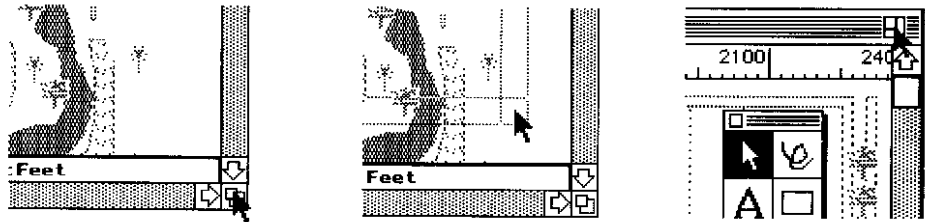
Move (drag) the pointer in any direction within the confines of your monitor and release the mouse button when you have the resize where you want it. A shadow marquee of the scroll bars will show your current position.

When you decide to return to the original window size, you have the option of dragging the resize squares back to their original position or you can click once on the window zoom box in the upper right corner of the window.

If you reduce the size of the window with the resize box and wish to move the window to a new position on your monitor screen, grab the window title bar a drag.
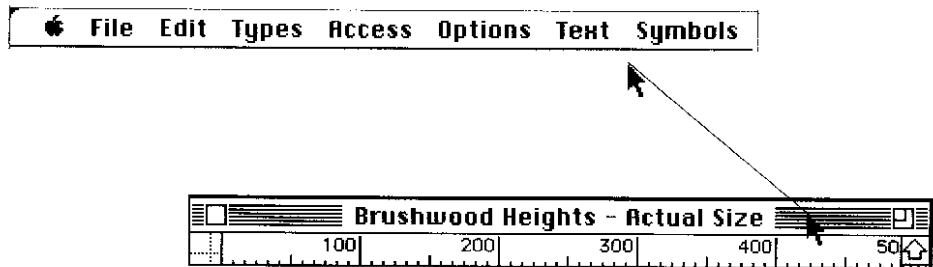
This also applies to the tool box as it is also a window with a title bar and close box.

Other window control functions will be described in Section Three.

# Printing a report on the highlighted objects

You can print records and information from records in three different ways with Filevision; as columnar reports, as forms, and as labels. You can create your own formats for all three kinds of printout, and you can save those formats in a library for future use.

In this example, you're going to print out a columnar report on the homes you just highlighted. Your report will use the information from these fields: Address, No. of bedrooms, Price, and Model.

Let's get ready to print now. You should be looking at the Drawing display, with 8 townhouses highlighted at the moment. If you're not, start back at page 46, "Highlighting".

- Choose **Print records...** from the **File** menu. You'll see this **Print Library** which shows you what print formats have been saved, and lets you customize them or create new ones.

```
Print Library

Print format          Type               Style

Listings              Townhouse          Report
Mail-Labels           Salesperson        Label
Sales Report          Salesperson        Report
Form-letter           Salesperson        Form
Form-letter           Customer           Form

   Delete              Edit              New

   Records to print:          Print to:
   ⦿ All                      ⦿ Printer
   ○ Highlighted              ○ Screen
   ○ Selected                 ○ File

   Quit              Page setup              Print
```

For a new file, you'll typically create a print format from scratch, but we've supplied six for this tour. The **Listings** report was left unfinished so you could learn about changing a typical format.

- Click **Listings**.

## editing a print format

Before actually printing the report, let's look at the format that will be used to print it and make one change to it.

- Click the **Edit** button.

You'll see this display:

```
 🍎  File  Edit  Types  Access  Text  Format  Shades
═══════════════════════════ Print Layout ═══════════════════════════
  |  |  |  | 1 |  |  |  | 2 |  |  |  | 3 |  |  |  | 4 |  |  |  | 5 |  |  |  | 6 |  |  |  |

              Format-name:  Listings

  Header:

     ┌────┐      Brushwood Hills Estates Development Company
     │ BH │         P.O. Box 4069, Malibu CA 90265-1369
     └────┘

     Street & Address          Model          Bedrooms

  Each record:

     Address                    Model          No. of bedroc

  Footer:
                                          Page &p

Cancel  Remove Field  Sort  Add Field  Done
```

The Price field was left off this print format. Let's put it in. First we'll have to scroll the print format to make room for it.

- If required, use the scroll bar at the bottom to scroll the print format until you see an open area to the right of **No. of Bedrooms**.

- Click the **Add Field** button.

A small dialog appears at the bottom of the display, giving you the choice to add a data field or an annotation field. We'll talk about annotation fields a little later.

```
         Cancel      Annotation Field      Data Field
```

- Click **Data Field**.

Another dialog box appears, asking which data field you want to add to the layout.

```
Address
Available?
Comments
Floor Plan    1st flr)
Front View
Link
Model
No. of bathrooms
No. of bedrooms
Price
Price
Sq Feet
```

○ Show field name and contents
◉ Show field contents only

[  Add  ]

- Use the field pop-up menu to select **Price**.

Leave the **Show field contents only** radio button selected.

- Click **Add**.

A Price field appears in the middle of the display.

- Using the move handle at the top of the field, drag the **Price** field to the right of the **No. of bedrooms** field in the **Each record:** area. To drag it, point at the move handle, hold down the mouse button, drag the field where you want it, and release the mouse button when you're satisfied with its placement.

```
≡≡≡≡≡≡≡≡≡≡≡≡≡≡≡≡ Print Layout ≡≡≡≡≡≡≡≡≡≡≡≡≡≡≡≡
|....¹....²....³....⁴....⁵....⁶....⁷....
          Format-name: Listings

ader:

  ⊞BH     Brushwood Hills Estates Development Company
              P.O. Box 4069, Malibu CA 90265-1369

treet & Address         Model         Bedrooms

ch record:
ddress                  Model       No. of bedroc        Price

oter:
                        Page &p

Cancel  Remove Field  Sort  Add Field  Done
```

- Choose **Numeric, Dollar sign, and Commas** from the **Format** menu.

Filevision will print commas and a single dollar sign in each Price field whether or not they were included when the data was entered. As the Price field was originally set up for general text entry, the Alphabetic attribute has to first be changed to Numeric before the Dollar sign and Commas are enabled.

Now let's prepare Price to give us the total inventory value of each model of highlighted homes at the end of this report.

- Click the **Price** field to select it.

- Choose **Statistics...** from the **Format** menu.

The Statistics dialog appears.

| Statistics for: Price | | | | |
|---|---|---|---|---|
| | Count | Total | Average | Standard deviation |
| Overall statistics . . . . | ☐ | ☒ | ☐ | ☐ |
| By Model . . . . . . . . | ☐ | ☒ | ☐ | ☐ |

Use "Sort" to select different detail statistic fields.
Select "Numeric" from the format menu to enable all statistics.

[ Cancel ]    [ Prev Field ]    [ Next Field ]    [ Done ]

- Click the **Total** checkbox for both **Overall statistics** and **By Model**.

- Click **Done**.

**annotation fields**  Look at the field in the upper left of the print format. It contains the company logo, and it's in an annotation field. Annotation fields are used to:

- **Print the contents of other data fields.**

- **Print fixed text or pictures, like "P.O. Box" or the logo used here.**

- **Create form letters.**

- **Print the page number of the report or forms.**

- **Print the system date or time.**

Annotation fields don't have names, just information or a picture. Annotation fields can also be used on the Pint Layout; see page 167, "adding an annotation field". For more about their use in printing, see "adding an annotation field" for printing, page 244.

Let's add an annotation field to serve as a column title.

- Click the **Add Field** button.

A small dialog appears at the bottom of the display, giving you the choice to add a data field or an annotation field.



| Cancel | Annotation Field | Data Field |

- Click **Annotation Field**.

An annotation field appears.

- Choose **Underline** and **Bold** from the **Text** menu.
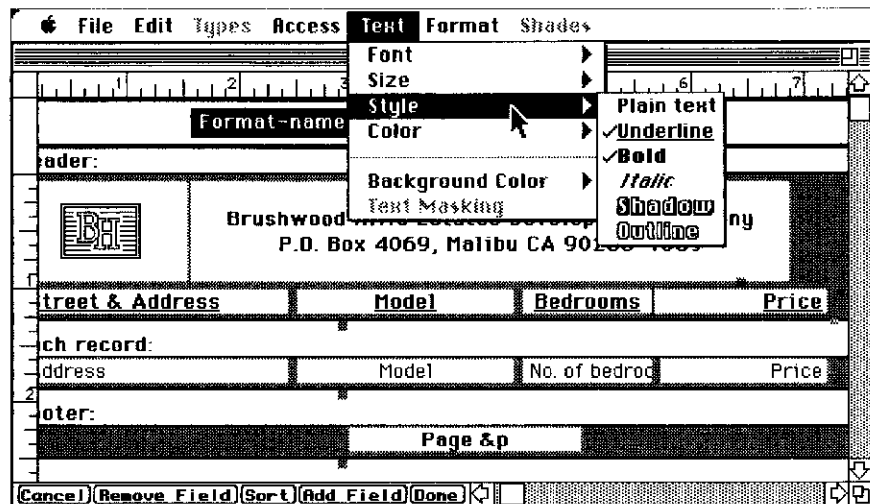


- Choose **Align Right** from the **Format** menu.

- Using the move handle at the top of the field, drag it just to the right of the Bedrooms field in the header and type Price.

It should look like this:



You've completed the print format.

- Click **Done**.

You are returned to the Print Library.

**printing it out**

If you don't have a printer, you'll still be able to use most of this section. **Print to: Screen** lets you preview on-screen what printed material will look like on the printer. **Print to: File** sends the output to a MacWrite-usable text file on disk.

- Click the **Highlighted** button.

- Click the **Screen** button.

- Click the **Print** button.

A message states that the print is sorting and as soon as it finishes, the following screen report is displayed.

≡≡≡≡≡≡≡≡≡≡≡≡≡≡≡≡≡≡≡ View Print ≡≡≡≡≡≡≡≡≡≡≡≡≡≡≡≡≡≡≡

**Brushwood Hills Estates Development Company**
**P.O. Box 4069, Malibu CA 90265-1369**

| Street & Address | Model | Bedrooms | Price |
|---|---|---|---|
| 1001 Linkside Way | Adventure | 3 | $184,850 |
| 1004 Lake Avenue | Adventure | 3 | $185,050 |
| 1005 Linkside Way | Adventure | 3 | $184,850 |
| | | Model Total: | $554,750 |
| | | | |
| 999 Linkside Way | Contempo | 3 | $199,950 |
| 1003 Linkside Way | Contempo | 3 | $199,900 |
| 1006 Lake Avenue | Contempo | 3 | $199,900 |
| 1007 Linkside Way | Contempo | 3 | $199,750 |
| 1010 Lake Avenue | Contempo | 3 | $199,950 |
| | | Model Total: | $999,450 |
| | | Overall Total: | $1,554,200 |

Cancel  Done

After you are satisfied with the appearance of the final screen printout, you can then send it directly to your printer. Its exact appearance may differ according to the printer you're using. The settings for a standard LaserWriter are shown below.

- Select these printing options:

LaserWriter  "LaserWriter"                                    5.2        OK

Copies: 1          Pages: ● All  ○ From: [    ] To: [    ]        Cancel

Cover Page:   ● No ○ First Page ○ Last Page                       Help

Paper Source: ● Paper Cassette  ○ Manual Feed

- Click **OK**.

A message appears telling you how many copies are left to print and how many objects remain to be printed in this copy.

Copies remaining to print          1

Records remaining in this
copy                               8

Cancel    Pause    Resume

You can stop printing anytime with **Cancel**, suspend it with **Pause** and continue it with **Resume**.

Here's a printout of the report printed with the LaserWriter When the printing is finished, you are returned to the Print Library.

Brushwood Hills Estates Development Company
P.O. Box 4069, Malibu CA 90265-1369

| Street & Address | Model | Bedrooms | Price |
|---|---|---|---|
| 1001 Linkside Way | Adventure | 3 | $184,850 |
| 1004 Lake Avenue | Adventure | 3 | $185,050 |
| 1005 Linkside Way | Adventure | 3 | $184,850 |
| | **Model Total:** | | $554,750 |
| | | | |
| 999 Linkside Way | Contempo | 3 | $199,950 |
| 1003 Linkside Way | Contempo | 3 | $199,900 |
| 1006 Lake Avenue | Contempo | 3 | $199,900 |
| 1007 Linkside Way | Contempo | 3 | $199,750 |
| 1010 Lake Avenue | Contempo | 3 | $199,950 |
| | **Model Total:** | | **$999,450** |
| | **Overall Total:** | | **$1,554,200** |

- Click **Quit**.

The objects you printed are still highlighted.

- Choose **Cancel Highlighting** from the **Access** menu.

Section Three describes this and other printed output in greater detail—Labels, Forms and more on Reports.

# Graphics

Although we've emphasized Filevision's capabilities for organizing written information, Filevision gives you the ability to manipulate graphics in ways that no other filing system or graphics program can.

- If you're on the **Info** display, click the **Drawing** button.

- Click any object.

Some objects aren't selectable. Most other objects indicate selection with handles. Symbols are shown with frames around them, and selected text is shown in reverse colors:

Selected symbols are shown with black frames around them.

Selected text is shown in reverse.

Most objects are shown selected with handles.
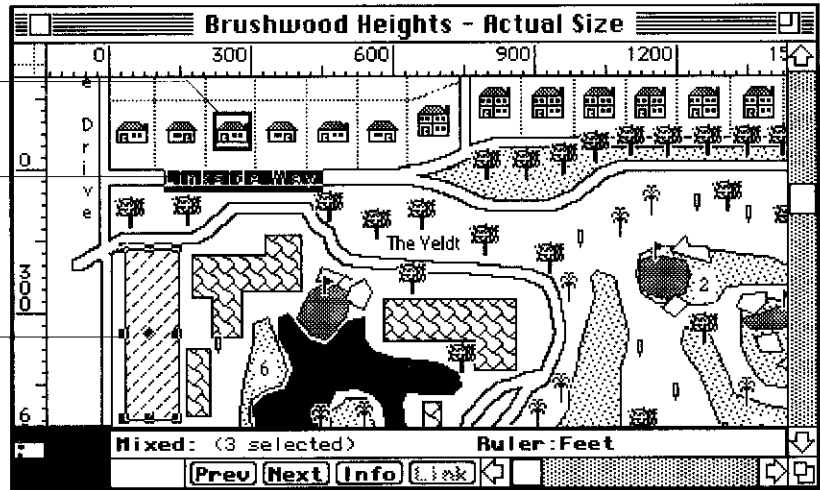


## pop-ups



- Click the middle townhouse symbol over the Models legend again.
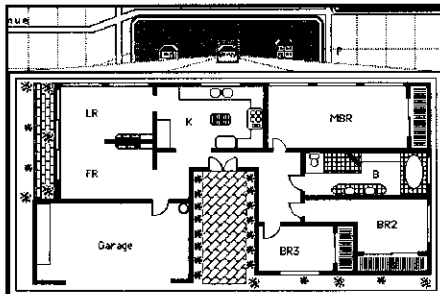
Its floor plan appears. The part of a pop-up that's always visible — the townhouse symbol, in this case — is called its button. As long as the button of a pop-up is selected, the rest of the pop-up will remain visible. As soon as the button of a pop-up is deselected, everything but the button disappears.

- Click the right model symbol.

The first pop-up disappears and a new pop-up appears. It's the floor plan for Ultima model townhouses.

## graphic layers (Types)

The Filevision drawing page is made up of a series of layers, each layer being attached to a "Type". The terms Type and Layers could be used interchangeably when working with the program, using Layers to refer to drawings and Types to refer to the attached databases.

In the Brushwood Heights tour, there are nine Types as can be seen in the **Types** menu. Six of the nine Types (Background, Golf Hole, Lake, Street, Townhouse and Model) have attached **Layers** on the drawing page. The other three (Salesperson, Customer and Click Link) are database **Types** only with no drawing page counterparts.

To see an example of the layered drawing page, first make sure that you are on the drawing page, and then:

- Select **Background** from the **Types** menu.

- Select **Show Only These** from the **Access** menu.

Notice at the top of the **Access** menu that the type **"Background"s**: is entered. <u>All</u> actions of the **Access** menu refer to the currently selected Type (where an action on a Type can be performed).

The drawing page now looks like this:
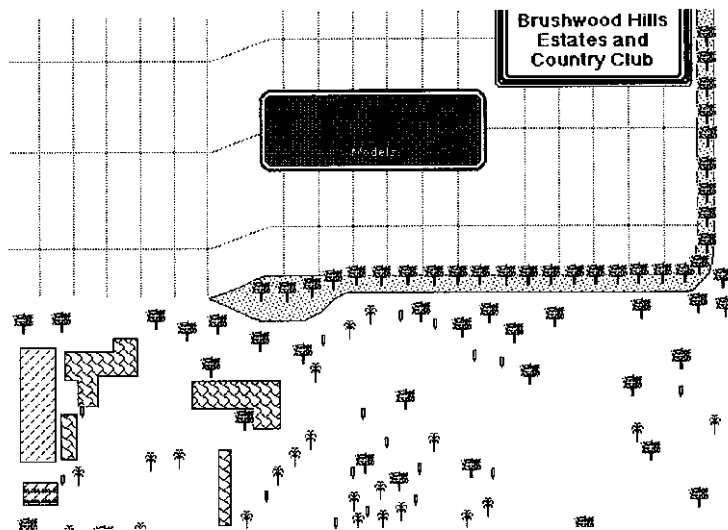
All of the golf holes, lakes, streets, townhouses, and models have disappeared. If you had selected **Townhouses** and **Show Only These**, only the townhouses would have been displayed. This provides an easy method to work on individual elements of a drawing without the clutter of all other objects on the drawing page.

To retrieve all of the Types that have been hidden:

- Select **Show All Types** from the **Access** menu.

The drawing page is back to normal.

## Adding a new Type

Suppose your townhouse development has some company-owned property: a recreation room, golfing facilities, maintenance buildings. Nothing currently on the Types menu is suitable for keeping track of the company property. You need to create a new Type.

The new type Property will be simple. The fields will be Name, Location, Cost and Property tax. We will use the Property field to demonstrate computed fields and Location to demonstrate initial text fields.

- Choose **Add Type...** from the **Types** menu.

The Layout for this Type display appears. The **Type-name** box comes with a nondescript name: "**Type I**".
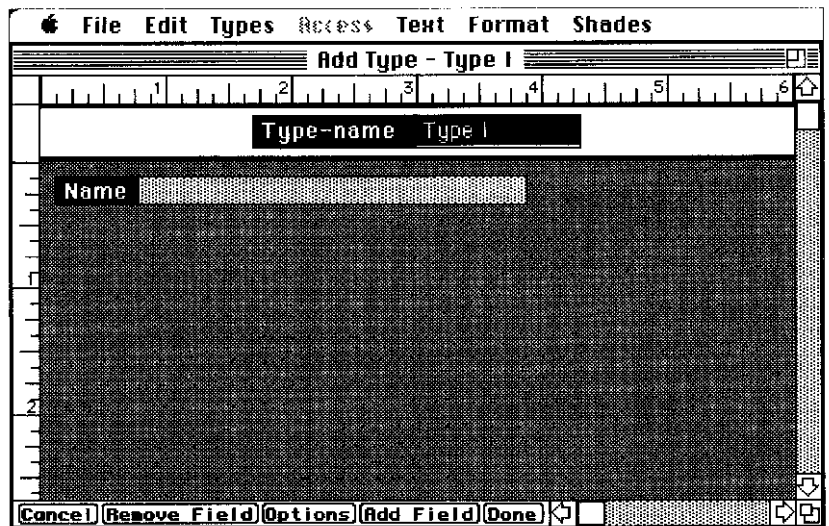


- Type in the name **Property**.

Typing Property automatically replaces the name Filevision had generated.

## adding fields to the Type layout
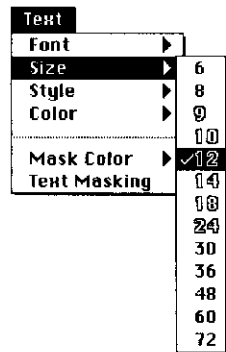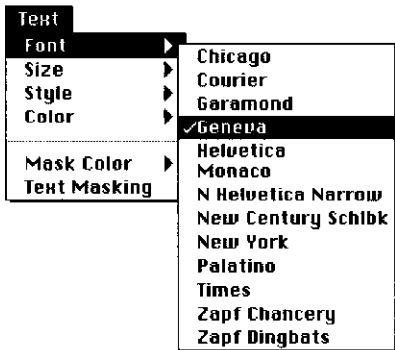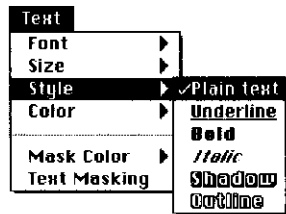
The **Name** field is fine. Next, we need a field telling us where the building is located.

- Click the **Add Field** button.

A small dialog box appears, asking whether we want a data field or an annotation field.

```
[ Cancel ]   [ Annotation Field ]   [ Data Field ]
```

- Click **Data Field**.

A field appears in the middle of the display.

- Choose **Plain text, 12** point, and **Geneva** from the **Text** menu.

The text in each field you add from now on will use these characteristics unless you change them. Each field can have different characteristics if you like.

- Type in the name **Location**.

- Using the move handle on top, drag it under the **Name** field, then release the mouse button.

- Using the stretch handle on the bottom right corner, stretch the **Location** field until it's the length of the **Name** field.

The picture should now look like this.
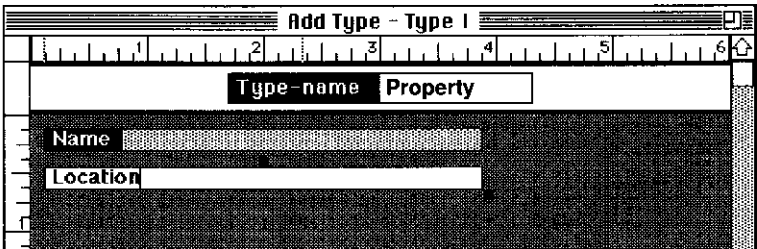


Since all buildings in this file are in Brushwood Heights, Location should be made into an initial text field. With the **Location** field selected:

Hierarchical
Text menu

## Field Setup

- Choose **Field Setup...** from the **Edit** menu.

The field setup dialog box appears.

```
Setup for the Location field:
○ Standard          ○ Copy from previous record
◉ Initial Text      ○ Compute using a formula
Initial text:
┌─────────────────────────────────────────────────────┐
│ Brushwood Heights                                    │
│                                                      │
│                                                      │
│                                                      │
│                                                      │
└─────────────────────────────────────────────────────┘

Field Names: [Location                    ]
[ Cancel ]    [ Prev Field ]    [ Next Field ]    [ Done ]
```

- Click **Initial Text**.

- Type **Brushwood Heights**.

- Click **Done**.

The field setup dialog box disappears. Now each record that's added will automatically fill in the **Location** field with the text **Brushwood Heights**. It can be edited like any other text. Now for the **Cost** field.

- Click the **Add Field** button.

- Click **Data Field**.

- Type **Cost**.

- Move the **Cost** field just below the **Location** field.

Last, the Property tax field.

- Click **Add Field** again.

- Click **Data Field**.

The field appears.

- Type **Property tax**.

- Move the **Property tax** field just below the **Cost** field.

There's not enough room for the data, so let's stretch it differently this time.

**Property Tax**

- Pull the stretch handle down, doubling the height of the field.

Now let's make it a formula field.

- Choose **Field Setup...** from the **Edit** menu.

You'll see the field setup dialog.

- Click **Compute using a formula**.

- Type in the formula shown below. Make sure you type square brackets (**[ ]**) around the word Cost.

```
Setup for the Property Tax field:
○ Standard            ○ Copy from previous record
○ Initial Text        ● Compute using a formula
Formula:
[Cost]*2.5%
```

NOTE: The percentage sign (%) following a number tells Filevision to multiply the number by .01 automatically.

There is a short-cut here for entering field names in calculations. You can enter the field name automatically by selecting it from the list of **Field Names:** at the bottom of the dialog box. By selecting the field from the pop-up menu, the name is entered into the formula box complete with square brackets.

```
Field Names:    Cost
                Link
 [ Cancel ]     Location        [ Next Field ]    [ Done ]
                Name
                Property Tax
```

It will calculate property tax by taking a percentage of cost. When you enter numbers into the Cost field later, the Property tax will be computed and entered automatically.

- Click **Done**.

- Choose **Dollar Sign** and **Commas** from the **Format** menu.

This will cause the contents of the **Property tax** field to be displayed with a leading dollar sign and a comma every thousand.

The layout should look something like this:



You've finished designing the "Type Layout" for your new Type, **Property**. You won't be able to enter information into it until you click **Done** and you are returned to the Info page.

- Click **Done**.

If the Drawing page reappears.

- Click **Info**.

## filling in information

Now you'll see the **Info** display for a **Property** record waiting to be filled in.
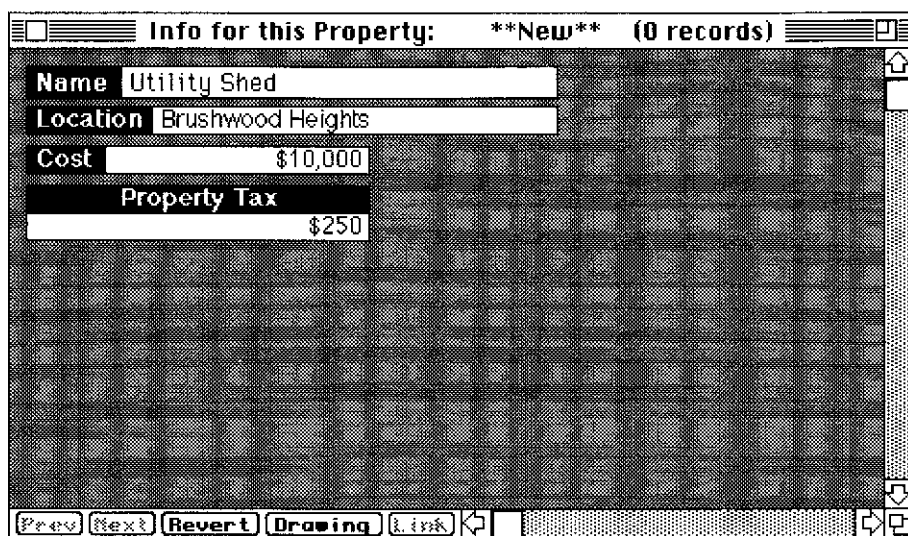
This will be the first object of the Type **Property**.

Because **Location** is an initial text field, it already has **Brushwood Heights** filled in.

- Type **Utility Shed** in the **Name** field.

- Press the Tab key to move to the **Cost** field.

- Type **$10,000** and press **return**.

The **Property tax** field immediately shows **$250**; it has computed the property tax correctly.

The record is all filled in and should look somewhat like this:



Even though this object is called **Utility Shed**, there's no graphic for the building itself.

- Click **Drawing**.

The record icon is visible next to the page miniature, indicating that the object selected doesn't have a graphic associated with it. But before we draw the utility shed, let's take a look at the Filevision drawing tools.

## using the drawing tools to create the utility building

The palette of tools located on the Drawing display will look familiar to people who have used MacPaint or MacDraw.

This is a floating palette that can be moved to any location on the screen to get it out of the way. It can also be closed by clicking on the close box in the upper left corner of the tool box or by selecting **Hide Tools** from the **Options** menu. To bring the tool box back to the drawing page screen, select **Show Tools** from the **Options** menu.

All text, symbol and graphic objects can be set to different foreground and background colors for use with color monitors and printers. Color will be covered in detail in Section Three.

- Use the pointer to select and deselect objects.

- Use the text tool to add text to a drawing.

- Use the symbol tool to add icon-like "symbols" to drawings. They're easy to create and add to the drawing.

## a first look at the drawing tools

- Use the line tool to draw straight lines. Hold the Option key down to constrain to horizontal, vertical or 45° angles.

- Use the polygon tool to draw polygons. Polygons are shapes with straight sides, often with asymmetrical angles. If you hold down the Option key while drawing, you will draw only 0°, 45° and 90°, angles. The polygon tool can also be used to draw semi freehand lines. Double-click at the end of the last "polygon" line to exit the polygon tool.

| | | |
|---|---|---|
| pointer | | freehand |
| text | | rectangle |
| symbol | | round rec |
| line | | oval circ |
| polygon | | arc pie |
| | | lines menu |
| | Black | color menu |
| | | shade |

- Use the freehand tool to draw as if you were using a pen.

- Use the rectangle and rounded rectangle tools to draw rectangles. If you hold down the Option key while drawing, you will draw squares. Double-click on the rounded rectangle tool to set the radius of the corners.

- Use the oval tool to draw ovals. If you hold down the Option key while drawing, you will draw circles.

- Use the arc tool to draw oval arcs and pie slices (filled arcs). If you hold down the Option key while drawing, you will draw circular arcs and pie slices.

## lines, shades, and multiple selection
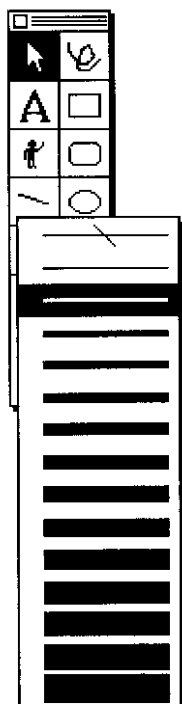
**Lines:** The line tool, the polygon tool, the freehand tool, the rectangle tools, the oval tool and the arc tool all have adjustable line widths, color and fill shades. Choose the line width you want from the lines menu and the shade from the Shades menu before you use the tool, or while the object is selected to change its line width or shade after the fact. The back slash line (————\————) indicates that no line will be drawn (for filled shades without line borders, etc.).

**Shades:** The polygon tool, the freehand tool, the rectangle tools, the oval tool and the arc tool all have adjustable shades and can draw filled shapes, just select the shade from the Shades menu before you use the tool, or while the object is selected to change its shade.

With the freehand and polygon tools, you'll have to make sure the beginning and end points of the shape meet for the object to be shaded. The shade box at the bottom of the tool box indicates the currently selected shade.

**Symbols:** The symbol tool is in reality an icon tool. Each of the symbols stored in the symbols palette is a 16 by 16 pixel icon that can be edited and changed much the same as a "fat bits" drawing in MacPaint.

When the currently displayed symbol is selected as the tool, the normal pointer will become that symbol. Move the symbol the same as though you were moving the pointer and when you have the symbol over the location that you want to have it placed, click the mouse button once.

**Multiple selection:** You probably know that when you're using the Finder you can select several neighboring icons at once simply by pointing at an imaginary upper left-hand corner, pressing the mouse button and, continuing to hold the mouse button, dragging the pointer to an imaginary lower right-hand corner and releasing the mouse button (known as dragging a marquee).

You can select multiple graphics the same way with Filevision. You can also select multiple objects by shift-clicking them. Hold the Shift key down while each object is being selected with the pointer tool.

You can use multiple selection on objects to change all of their lines or shades simultaneously to whatever line or shade you choose from the menu while they're selected.

After each object is entered or drawn, the tool used will revert to the pointer tool to allow you to adjust the position of the object. If you want to enter several objects of a kind without loosing the currently selected tool, hold the Shift key down until you are finished with the tool.

This illustration shows what tools were used to draw parts of the Tour drawing.

entered with the
text tool

drawn with the
symbol tool

drawn with the
line tool

drawn with the
rectangle tool

drawn with the
freehand tool

drawn with the
polygon tool
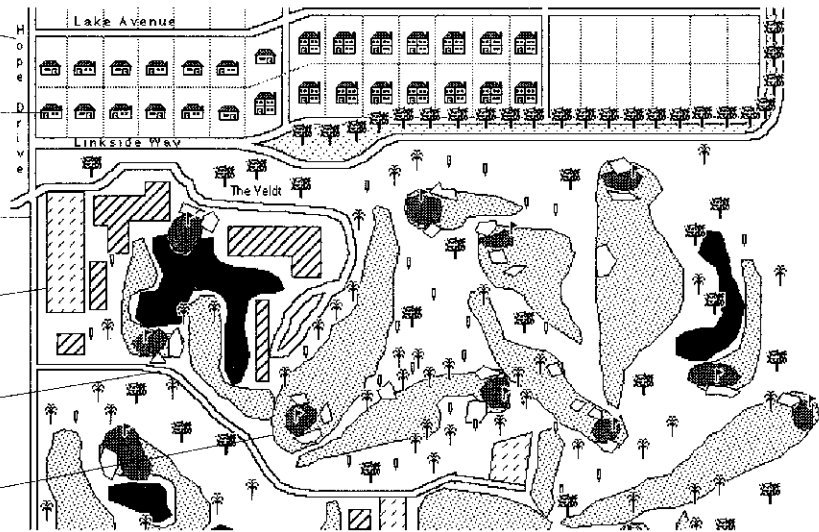
## drawing the
## Utility Shed

- Choose **Property** from the **Types** menu.

- Click the **rectangle** tool.
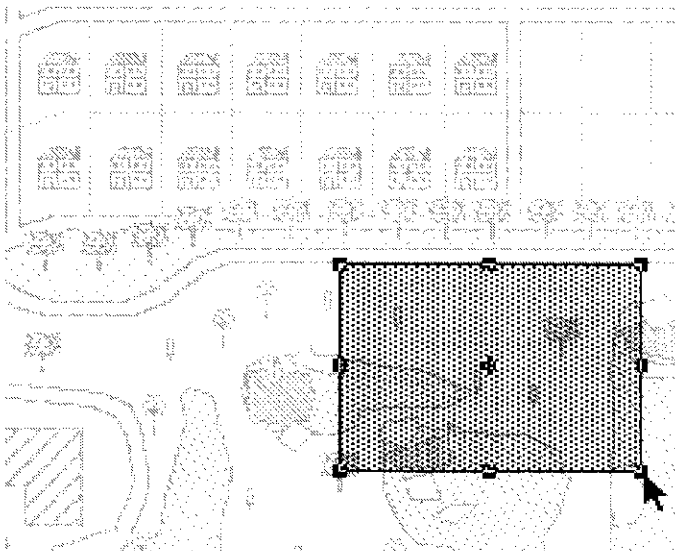
- Choose the **single-width line** from the **Lines** menu.

- Choose **Black** from the **Lines Color** menu.

- Choose one of the light gray shades from the **Shades** menu

- Point the mouse near the middle of the edge of the golf course, hold down the mouse button, and drag the mouse diagonally down.

- Release the mouse button when the rectangle is about this size.

It doesn't have to match the picture perfectly.

- Select the **polygon** tool.

- Choose the darker gray from the **Shades** menu.

- Draw a roof on the building by clicking at each corner, then single click the beginning corner to finish the polygon.
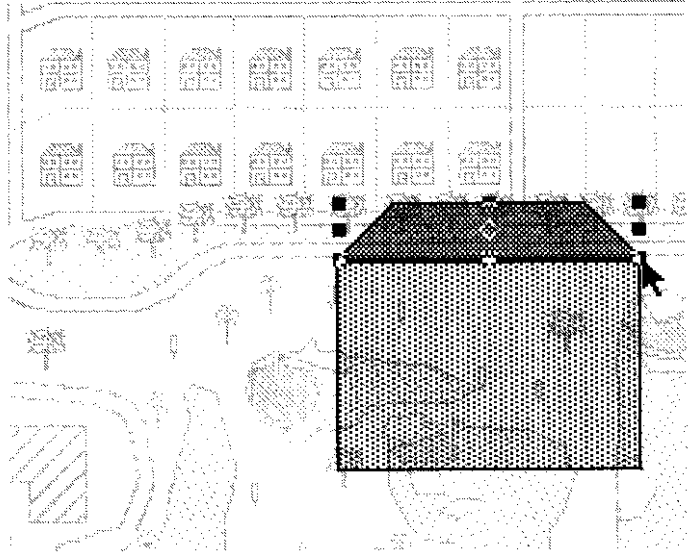


Now you have what looks like a building, but there are a few problems: the roof and wall are separately selectable, the information we typed in so far isn't connected to the drawing of the roof or wall, and the graphics are far too big.

This is a good time to learn about grouping, moving, and stretching.

## grouping graphics

Group lets you combine several graphics of the same type into a single object. Anything that can be grouped can be ungrouped just as easily. The objects that make up a group may share a single record among them, but no more than one.

- Choose **Property** from the **Types** menu to make sure it's selected, then press **Next** or **Prev** until the record icon appears and the selection information reads **Property: Utility Shed.**

The record icon ( ▤ ) has appeared. By having the record icon showing (selected) while grouping the individual elements of the graphic, the graphic drawing page object will also be connected to its Info page record during the "Group".

- Holding down the **Shift** key, click both parts of the building.
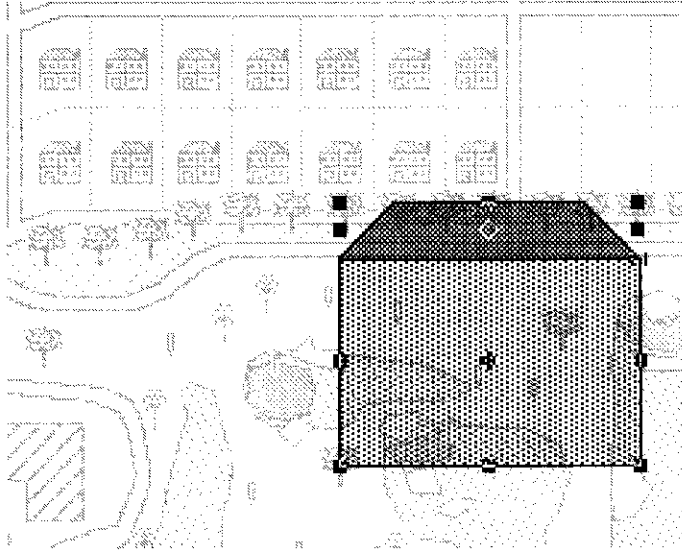


- Choose **Group** from the **Edit** menu.

The handles on the two objects merge into one set and the record icon disappears indicating that the record is now attached to the grouped object.

**moving and stretching**

You've created a grouped graphic. You can now select, move, and stretch it as one object. And you can always ungroup this or any graphic simply by selecting it and choosing **Ungroup** from the **Edit** menu.
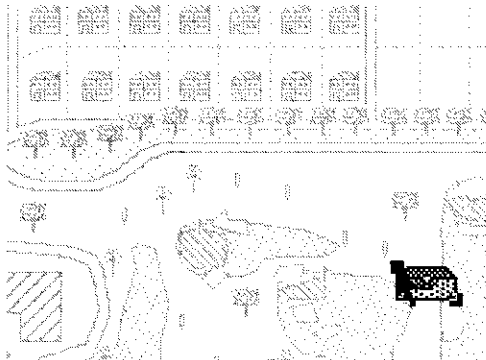


Filevision graphics can be moved, stretched and shrunk.

- Click a corner handle of the utility shed (handles on the outside of an object are called stretch handles), and, continuing to hold the mouse button down, shrink it until it's a convenient size.

Then click and hold the mouse button down anywhere within the graphic to move it into place.
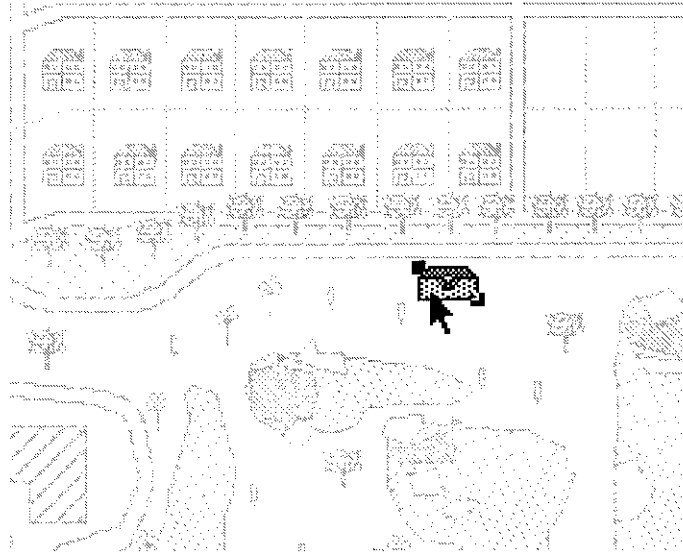


## changing an object's Type

Filevision provides you with an easy way to change objects from one Type to another. Now that we have a **Type Property**, we can move the guard house into that Type.
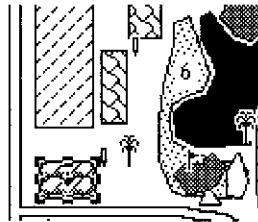


- Select the rectangle next to the entrance of the golf course (the guard house) by clicking on it.

- With the **Shift** key down, select **Property** from the **Types** menu.

The guard house is now located in **Type Property**.

- With the object still selected, type in **Guard house**.

The information display now has **Guard house** entered as the second object in the **Type Property**.

In this instance, as the guard house object had only a Name field in its Type with no information entered, there was no problem in changing the Type. However, had there been other fields and entries in any of those fields, a alert would have been displayed:

> ⚠ **You are about to change selected records into type "Property".**
>
> **If the layout for type "Property" is not a copy of the layout for type "Background", "Background" fields may be lost or inappropriately assigned.**
>
> **You will not be able to undo this action.**
>
> [ Cancel ]                              [[ Change type ]]
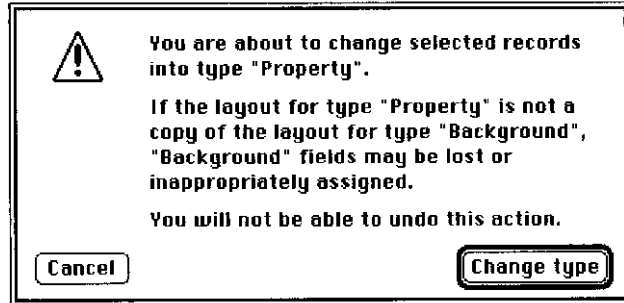
If you were confident that all fields were the same in both Types, then there would be no reason not to continue with the change. In the above example, there would be no information lost by attempting to change Background objects into type Property.

# Hiding and Showing

Filevision is good at handling visual clutter. Two of the techniques it uses are hiding and showing objects from the selected **Type**. **Hiding** makes objects disappear from the Drawing page. The objects remain in the file and you can see their records on the Info page, but you can't see the graphics. **Showing** causes the objects to reappear on the Drawing page.

- From the **Drawing** page, deselect any objects by clicking the pointer tool.

The display is now ready for a demonstration of hiding.

- Choose **Townhouse** from the **Types** menu.

- Choose **Hide All** from the **Access** menu.

All the townhouses vanish.

- Choose **Show All** from the **Access** menu.

The townhouses reappear.

## Ignoring and Activating

Ignoring makes the objects of a type unselectable. When you click them, nothing happens. Let's demonstrate on Townhouse.

- Choose **Townhouse** from the **Types** menu.

- Choose **Ignore** from the **Access** menu.

- Click a townhouse.

Nothing happens. It's not selected, and the selection information area reads:

```
Townhouse: (28 unselectable)
           [Prev] [Next] [Info] [Link] ◁ □
```
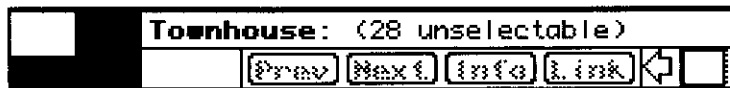
(Notice that none of the buttons are active.)

**Ignore** can be reversed by **Activate**.

- Choose **Townhouse** from the **Types** menu.

- Choose **Activate** from the **Access** menu.

- Click a townhouse.

## Linking to another file

Linking closes the current file and opens the one named in the Link field for that particular object. It's a very good way to connect and access related files conveniently.

Your tour is provided with a linked file.

- Select **Click Link** from the **Types** menu and the **Next** button.

Look at the information area at the bottom of the window. It shows that there is a record to link **To Ultima Floor Plan** and the **Link** button is now active (black type).

```
Click Link: To Ultima Floor Plan
[▭] [Prev] [Next] [Info] [Link] ◁ □
```

- Click the **Link** button.

The screen clears briefly, then a new display appears with the legend Ultima. This is a brand new file that was opened automatically because the **Link field** had the name of the file, Ultima, already entered.
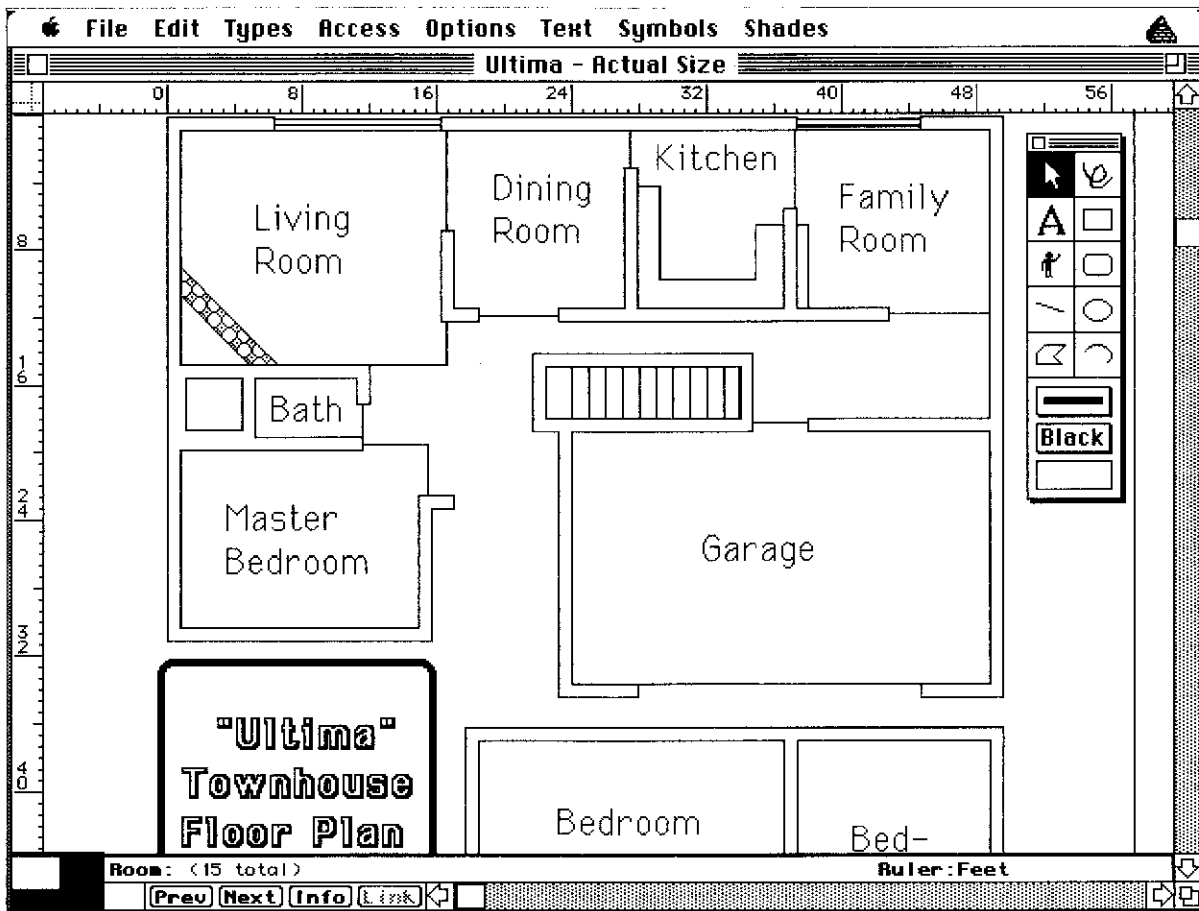


Ultima is a small file. It's designed strictly to demonstrate linking. Linking is a convenient way to get from one file to another, related file. Each object can have a different link file, so if you have 5,000 objects in a file, you could potentially have 5,000 different link files.

If you get the message "**Ultima cannot be found. Sorry**.", the Ultima file is missing from your disk. Copy it onto your disk from the original Start-Up disk.

**Returning**            •   To return to the Tour file you've been using, choose **Return to Brushwood...** from the **File** menu.

## Quitting

- To exit the tour, choose **Quit** from the **File** menu.

After a moment, you return to the desktop.

**Don't turn off the Macintosh before you choose Quit from the Filevision File menu. That could make the file unusable to Filevision.**

## Congratulations

You've finished your tour of Filevision. The Tour introduced you to the basics, but you've barely scratched the surface of Filevision. Where do you go from here?

- Browse the other **Types** and **Print Formats** to get a feel for the many different ways that a Filevision file can be set up and used.

- ...Read Section Three. Section Three shows you how to use all of Filevision's features. Although you don't have to memorize them all, you'll at least know what to look for when you want to try something new.

- .......You can start work on your own applications, if you haven't already.

- ..........Browse through the numerous example files that have been included with Filevision. Considerable insight can be gained by looking at what others are doing to create their own solutions.

# Section Three

# *Using Filevision IV*

# MY BUTTERFLY COLLECTION

Hunting butterflies with a camera and 200 mm. lens using
extension tubes – Karen, nr. Nairobi, Kenya, July 1977 to May 1978.
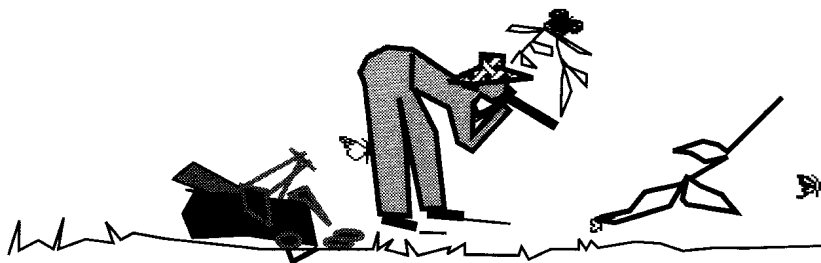
## FAMILY

Danaidae - Monarchs
Pieridae - Whites
Papilionidae - Swallowtails
Lycaenidae - Blues
Nymphalidae - Nymphalids
Satyridae - Browns
Acraeidae - Acreas
Unidentified

## SLIDE ALBUM

### Info for this Slides: (33 records)

| **Name** | Acraea Oncaea | **Family** | Acraeidae |
|---|---|---|---|

| **English Name** | Window Acraea |
|---|---|

| **Page** | **Date** | **Slides** | **Notes** |
|---|---|---|---|
| 1 | Sept. | 7 | Good. It just sat on the end of a dry stick posing for me. |
| 2 | 77 | 37, |  |
|  | " | 38 |  |

[Prev] [Next] [Revert] [Drawing] [Link]

Link

### r this Butterflies: (65 records)

| caea | **Habitat** | Bush Country. |
|---|---|---|

**Illustration**

ACRAEA ONCAEA

Window Acraea

Family – Acraeidae (Acreas)

Light orange-red

Black

**Description**

Wingspan 4.5 – 5 cm. Rather thinly scaled on forewing with dark streaks below apex. Narrow black apical patch and black spots on both wings.

Male light orange-red, female pale to dark brown.

[Prev] [Next] [Revert] [Drawing] [Link]

### Info for this Family: (7 records)

| **Name** | Acraeidae-Acreas | **Information** |
|---|---|---|

A family of medium-sized butterflies related to the Monarchs, with long narrow wings and slow, buoyant flight. Like the Monarchs they are distasteful to predators. Their predominant colours are red and orange. They are often sparcely scaled with semi-transparent patches.

Cells of both fore and hindwing closed; inner margin of hindwing without abdominal groove.

[Prev] [Next] [Revert] [Drawing] [Link]

Courtesy D.M. Dennison

# Using Filevision IV

**Overview**

Section Three contains step-by-step instructions for everything Filevision does. Read Section Three through once just to get an idea of what Filevision can do, then use it as a reference when you need to.

Part 1, "The parts of a Filevision file", contains a brief summary of the parts of a Filevision file and what they do: the file itself, Types, objects, records, and fields. If you want to create your own file but aren't sure where to begin, this may be all you need to get started.

Part 2, "Context Sensitive Help", describes the features and how to use Filevision's on-line context sensitive help utility.

Part 3, "The Drawing Page" covers all of the drawing page window features including the information area, page size, rulers, grid, guides, alignment, zoom views and display modes .

Part 4, "Graphics and drawing" shows you how to select and draw Filevision graphics, using the tool box, grouped graphics, pop-ups, color and importing and exporting graphics .

Part 5, "Pop-ups" explains the ways to create and use the versatile pop-up.

Part 6, "Hiding and Showing Objects" explains how to create and maintain total visual control on the drawing page. Hide all objects of a Type or hide only those selected. Show only the objects of the currently selected Type, etc..

Part 7, "Importing and Exporting Graphics" shows the methods to import PICTs, MacPaint (bit and pixel mapped) and EPSF (Encapsulated PostScript Format) graphics. This section also shows some of the versatility in using the Clipboard to import and export both graphic objects and their records.

Part 8, "Creating a type", shows you how to create the layout for a Type and set up its fields.

Part 9, "Adding information", shows you how to enter data in records, connect a record to a graphic, and change an object's Type.

Part 10, "Importing and Exporting Text" explains the many facets of Filevision's ability to import and export to most standard applications and to and from different hardware systems.

Part 11, "Linking Filevision files", shows you how to set up objects so that they'll automatically open another file when you click the Link button.

Part 12, "Sort and Find", explains how the drawing page objects (or Info records) are rapidly found searching on the first 22 characters of the sort field (the key field) and how to reorder that field. More complex sorts are handled by the Print Records function and more complex finds are handled by the Highlight function.

Part 13, "Highlighting" goes into detail on how to make the best use of the powerful highlighting feature. Highlighting or selecting records and displaying their graphic objects for various visual effects.

Part 14, "Printing Reports, Forms and Labels" covers the many print formats that can be developed and stored in Filevision. Setting up the Print Layouts for Report, Form, Labels are covered in detail.

Part 15, "Form Letters and Mail Merge" shows the simplicity of setting up form letters for general mailings.

Part 16, "Printing Recap" shows a number of examples for creating information on reports that goes beyond setting up Reports, Forms, Labels and form letters.

Part 17, "Special Printing Features", shows you how to make the most out of Filevision's tools when setting up reports.

Part 18, "Editing Tools and Other Features", is a section for miscellaneous information, tips and how to achieve the best use of Filevision. The Macintosh tools allow you to cut, copy and paste text and pictures, you can also cut, copy and paste graphics with their records, Type Layouts, Print Formats, and the symbol and shade palettes. This section covers the terms and concepts you'll use when you translate your ideas into a Filevision file.

# 1. The parts of a Filevision IV file

Here's how files, types, objects, records, and fields fit into the Filevision picture.

## Files

Filevision keeps the information you work with in a file: text, numbers, and graphics. File icons look like this:

Brushwood Heights

Filevision® IV

the Filevision
program icon

- To start a new file, insert your working copy of the **Filevision Start-Up Disk** in your internal drive.

  If you are using a hard disk, double-click the Filevision icon and disregard the next two steps.

  - Insert your working copy of the **Filevision Program Disk** in your external drive.

  - Click the **Filevision** icon, then choose **Open** from the **File** menu.

  A quicker way to open a file from the Finder (your starting desktop) is to double-click on its icon.

  - After the **Filevision** menu bar is showing, select **New** from the **File** menu.

  - Type in the name for the new file and click the **New** button.

  - To use an existing file, select **Open** from the **File** menu, then select the file you wish to launch and then click **Open**.
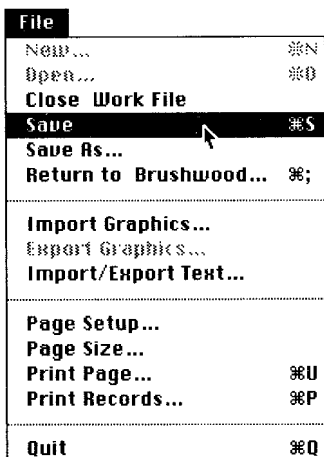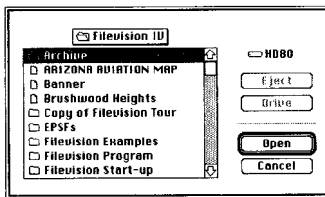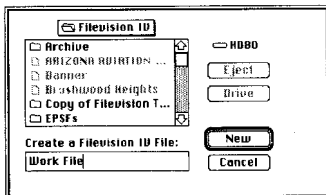
Filevision updates your file on disk as you use it, so it's a good idea to duplicate an important file before using it. Also, it is a very wise practice to save your working file frequently while you are modifying it. Should you loose power to the computer or have any other inadvertent system failure, you will at least be able to recover the file up to your last **Save**.

  - To back up a file, choose **Save As...** from the **File** menu.

  - To save your working file, choose **Save** from the **File** menu or **Command-S** for a short cut.

As Filevision does do intermittent updates to your disk file, in the event of an inadvertent closure, much of the Info page data would be recovered from after your last **Save**. Any graphics or other information entered in the drawing page, after your last **Save**, would be lost.

# Types

You'll often have different categories of information in a Filevision file. These categories are called **Types**. In Section Two, the Tour file included the Types **Background, Golf Hole, Lake, Street, Townhouse**, **Model**, **Salesperson**, **Customer**, **Click Link** and **Property**.

You can add new Types from the **Types** menu.

**Types**

| Change Layout... |
| Delete Type |
| Add Type... |

Background
Golf Hole
Lake
Street
✓Townhouse
Model
Salesperson
Customer
Click Link
Property

**Info for this Salesperson:  (7 records)**

| Last Name | Beasley | photo |
| First name | Matt | |

Home address
4512-B Slowway
Austin, TX 78751

| Home Phone | 512-456-7890 |

Title
Filevisionary

| Annual Quota | $1,760,000 |
| Sales YTD | $850,000 |
| Commission Rate(%) | 3% |

NOTE: Sales * Comm. Rate =
Commissions

| Commissions | $25,500 |
| Soc. Sec. # | 598-50-0000 |

NOTE: Sales
YTD/Quota=
% of Quota

| % of Quota | 48 |

Prev Next Revert Drawing Link

**Info for this Customer:  (6 records)**

| Last name | Merz | First name | Gina |
| Phone/Home | 213-457-4037 | Salespe | Bob Fos |
| Phone/Work | (not available) | |
| Current Mailing Address | | Model | Contemp |
| 27330 Atlantic Coast Highway | | Down Payme | $25,600 |
| Malibu, CA 90265 | | | |

Spouse, children's names | none, Sharon, Sam

Have they already purchased? | N

Enter 'Credit Info'
scale from 1.0 to
9.9 is high

| Last Contact | 08-06-87 |
Enter date info in MM/DD/YY Format

Credit info

Remarks

Prev Next Revert Drawing Link

**Info for this Property:  (2 records)**

| Name | Utility shed |
| Location | Brushwood Heights |
| Cost | $10,000 | Comments |

Built in October 1975
1,200 square feet

| Property tax | $250 |

records of
different Types

**Info for this Townhouse:  (27 records)**

| Address | 999 Linkside Way | |
| Model | Contempo | Square feet | 1,900 |
| Price | $199,950 | Front View |
| No. of bedrooms | 3 | Comments |
| No. of bathrooms | 3 | • Central heating |
| Available? | yes | • Recreation room |
| Floor Plan ( 1st flr) | | • Deep-pile carpet |
| | | • Microwave oven |
| | | • Cool in summer |

LR    K    MBR

FR    B

Garage    BR3    BR2

Prev Next Revert Drawing Link

# Objects

Objects are the things you file. In the Tour file of Section Two, each townhouse and salesperson record is an object.

Some objects, like the decorative border of a picture, are there only to improve the appearance of the display. For other objects, like townhouses in Section Two, you may want information connected to the graphic. And for other objects, like those of the type "salesperson" in the Tour file, you may want to use just information without graphics.

graphic object
(several grouped
objects)
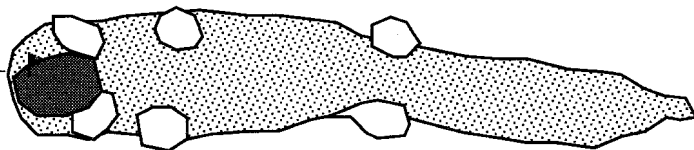
a record
without a
graphic object



**Info for this Salesperson: (7 records)**

| Last Name | Allen |
| First name | Robert |
| Home address | |
| 10980 Straitmore, #10 | |
| Los Angeles, CA 90049 | |
| Home Phone | 213-478-9876 |
| Title | |
| Customer Service Manager | |
| Annual Quota | $500,000 |
| Sales YTD | $750,000 |
| Commission Rate(%) | 3% |
| NOTE: Sales * Comm. Rate = Commissions | |
| Commissions | $22,500 |
| Soc. Sec. # | 543-50-0000 |

photo

NOTE: Sales YTD/Quota= % of Quota | % of Quota | 150

[Prev] [Next] [Revert] [Drawing] [Link]

a graphic object
and its record

**Info for this Townhouse: (27 records)**

| Address | 1026 Lake Avenue |
| Model | Square feet | 2,300 |
| Ultima | |
| Price | $225,950 |
| No. of bedrooms | 5 |
| No. of bathrooms | 3 |
| Available? | yes |
| Floor Plan ( 1st flr) | |

Front View

Comments
• Central heating
• 3 car garage
• Central air-conditioning
• Oak-panel den
• Extra-thick insulation
• Lead-glass front door

LR   DR   K   FR

B

BR (1st Flr)   Garage

[Prev] [Next] [Revert] [Drawing] [Link]

# Records and fields

A record contains information about an object. Records are divided into fields; each field is a placeholder for a piece of information.
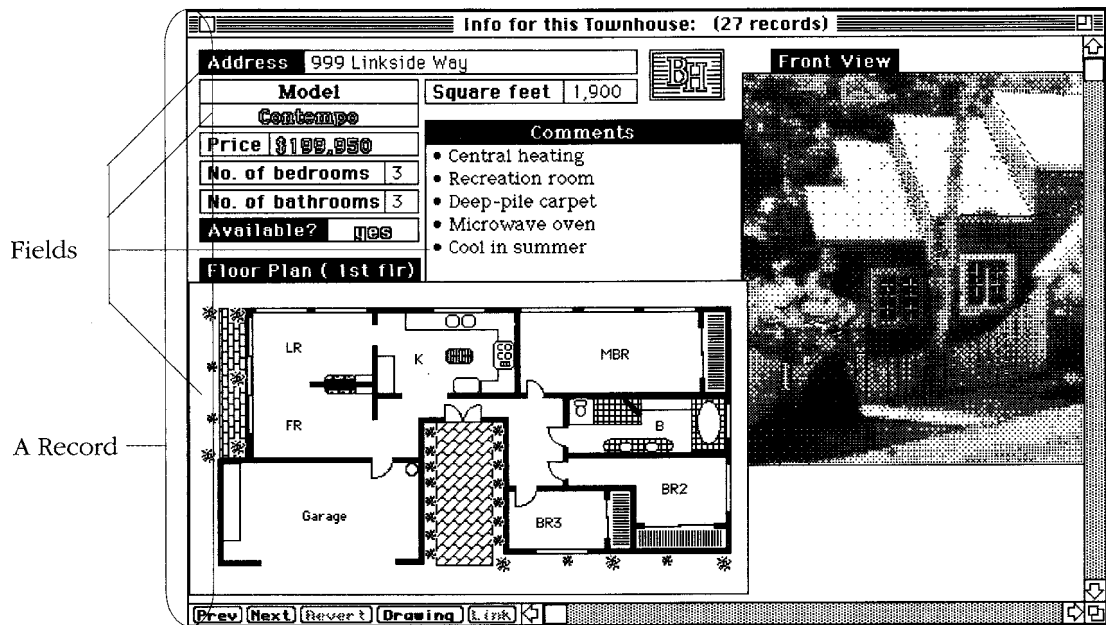


All of the records of one Type share the same field arrangement. That arrangement is known as the Type Layout. Different Types usually have different Type Layouts.

Unlike other database programs, there are only two basic field types to consider, the **data field** and the **annotation field**. The data field can have different information in every record and the annotation field has the same information in every record.

The information in data fields can only be changed while working in the Info page while the information in an annotation field can only be changed in the **Add Type...** or **Change Layout...** modes.

Filevision does not care what you put into a field and is smart enough to determine if it is text, a number or a picture. After you have established the field, you have the option of changing its format, position or size at any time without leaving the Info page. The format could include text style, size, border, show field name or not, invert and alignment. Filevision will support up to 255 fields per Type and a field can contain up to 4,000 characters or a 30" x 30" picture. Each record can contain up to 8,000 characters total (about 3 typewritten pages).

# 2. Context Sensitive Help

Before we get too deeply involved in the workings of Filevision, the context sensitive help file should be covered in case you need some quick help while creating your new file.

The On-line Context Sensitive Help file describes all major functions of Filevision, and may include some items that are not covered in this User Manual as additions may be made after this has "gone to print". Where there is additional information on a subject in this User Manual, the Help Page references the User Manual page numbers to provide an easy way to locate the topic.

## finding the Help file

While Help is made easily available from any Filevision file in any folder, there is a recommended configuration for optimizing the use of the Help file. The Help file should be located in the same folder as your Filevision program. All accesses of Help will be automatic in this configuration with no need to locate the Help file.

If you are unable to keep the Help file in the same folder as your program, the first attempt to use Help will open a dialog that requests that you "Please Locate a Help File". At this point, you will have to show the program where Help is located.
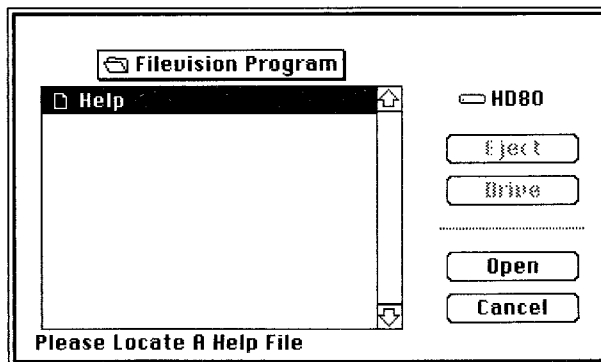
## entering Help from the Apple menu
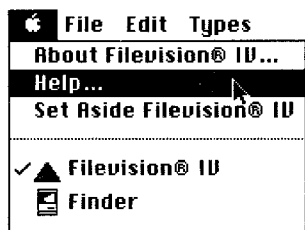
If your Help file is located in the same folder as your Filevision program when you first launch, you will be able to access Help directly from the Apple Menu.

- From the **Apple** ( ) menu, select **Help....**

The following help screen appears:
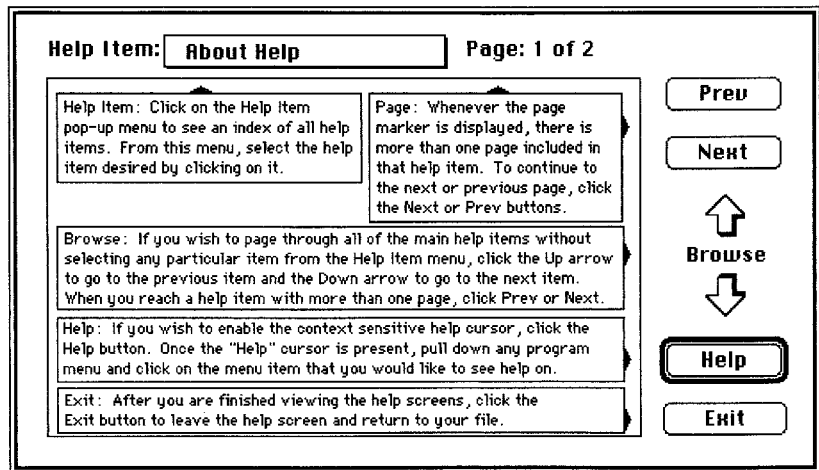


## Help Item: pop-up menu

Once in the Help window, you have the option to select a major Help Item topic by pulling down the pop-up menu, Help item:.

- Click and hold the mouse pointer on the **Help Item:** pop-up menu and drag down to **Highlight....**
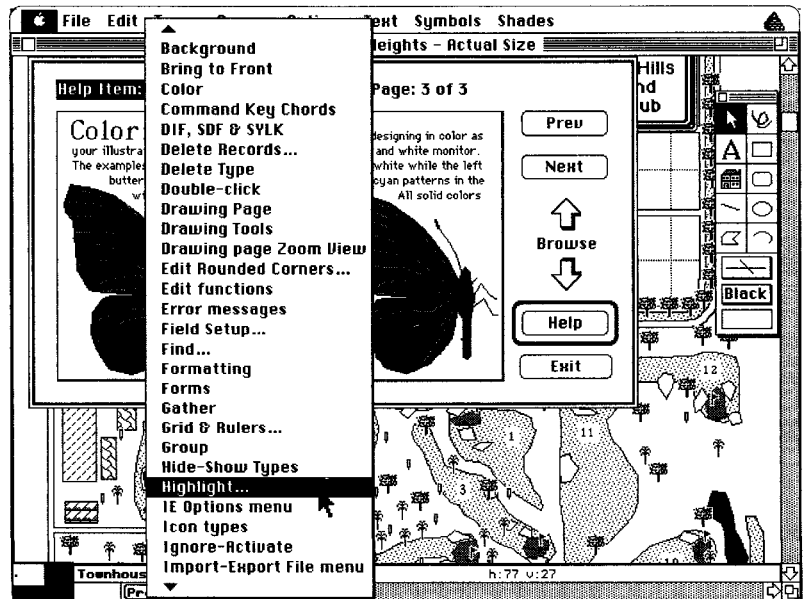


After you release the mouse button the screen will change to show help page on Highlighting.

Highlight... emphasizes objects that pass these conditions

Summary of one condition ┐

Price

Price is less than or equal to $3,500

—●AND—○OR-

Use this pop-up menu to select another field
between
less than or equal to
greater than or equal to
equal to

─○ Value
─○ Rank (1 to 37)
─○ Field

Type in a value here

Clear — Use this to erase selected condition

Prev

Next

Browse

Help

Exit
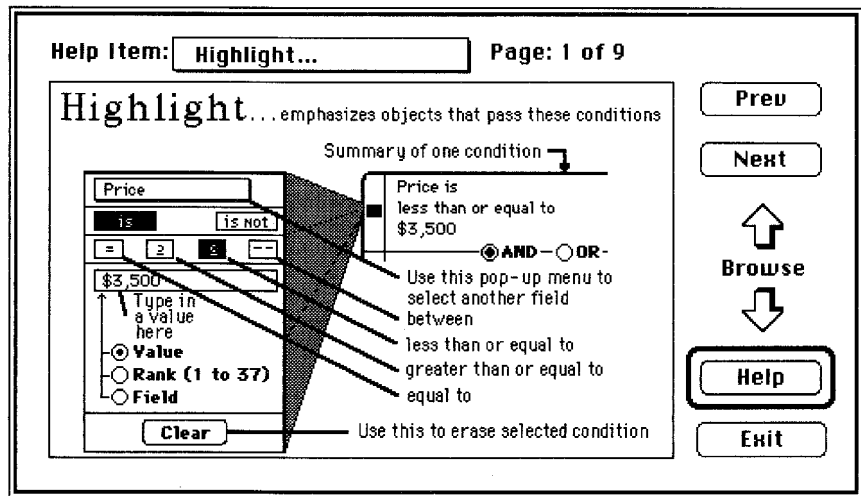
Just select the topic that you want information on and the first page of multiple page topics or the only page of single page topics will be displayed.

The **Help Item:** pop-up menu will not necessarily show all of the program menu items which is done to restrict the number of Help menu items to a manageable number. For instance, if you click "10" point in the Text menu when in the context sensitive mode, the help item that would be automatically linked is Text Size. Also, there are many pages of help that have no menu counterpart. These are listed by topic name in the **Help Item:** pop-up menu

## entering context sensitive Help

There are several ways to access a particular help item, via the **Help Item:** pop-up menu or from the context sensitive mode. The context sensitive mode is entered by pressing **Command-?**. It is not necessary to shift the **?** key as it will read the key press either in shifted or non-shifted mode.

**Help**

the help cursor

- While working in either the **Info** page or the **Drawing** page, press **Command-?**.

The cursor will change to the word Help.

By moving the Help cursor to open the menu (same as with the normal pointer cursor) and then moving it to the menu selection that help is required on, the help page on that item would be shown as soon as the mouse button is released.

| File | Edit | Types | Access |
|------|------|-------|--------|
| New... | | | ⌘' |
| Open... | | | ⌘O |
| Close ⌘ | | | ⌘K |
| Save     Help | | | ⌘S |
| Save as... | | | |
| Return to... | | | ⌘; |

- After the **Help** cursor is showing, pull down the **File** menu and release on **Save**. After a brief moment, the **File menu** help screen appears.

```
Help Item:| File menu        |     Page: 1 of 2

File functions                   Addenda page 336      [ Preu ]

 • New... opens a new file under the name you enter. (⌘-N)        [ Next ]

 • Open... opens an existing file. (⌘-O)

 • Close... closes the file that is currently open and leaves you in the        ⇧
   Filevision IV program.
                                                                   Browse
 • Save saves the current file without closing the file. In the event of a
   power failure or other unexpected system failure which could cause      ⇩
   severe damage to the file, the Save function would assure that
   the file is in tact to the point of the last Save (⌘-S).         [ Help ]

 • Save as... provides a back up copy of the current file. HIGHLY RECOM-
   MENDED to provide an additional safety factor against lost files.    [ Exit ]
```

In Help, if the topic has more than one page, a **Page 1 of X** will be shown next to the pop-up menu. To view all pages, click the **Next** or **Prev** buttons. This operates as a carousel and will return you to the first page after you have pressed **Next** from the last page.

## multiple help topic pages

If you are interested in browsing through the main topics of the Help file, click the up and down arrows to view the next or previous topic. If you find that you need to locate a specific Filevision menu item and it is not shown in the Help Item list, click the **Help** button and you will be returned to the context sensitive Help cursor. From here you can again pull down a program menu and select the specific item for help.

```
Help Item:| Highlight...     |     Page: 1 of 9

Highlight...emphasizes objects that pass these conditions    [ Preu ]

                    Summary of one condition ⌐                 [ Next ]

 [Price    ]            [Price is
  [ is  ] [is not]       less than or equal to                  ⇧
                         $3,500
                                                               Browse

                                                                 ⇩

                                                               [ Help ]

                                                               [ Exit ]
```
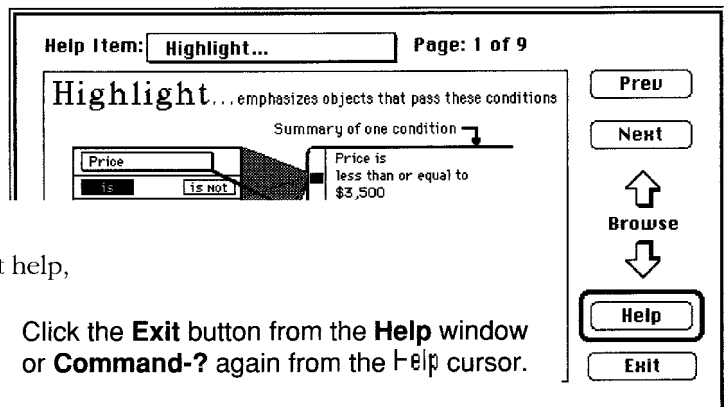
## exiting help

To exit help,

- Click the **Exit** button from the **Help** window or **Command-?** again from the Help cursor.

# 3. The Drawing Page

It is difficult to place the importance of the Drawing page over the Info page in setting up a database; however, as both are important to the operation of Filevision, let's start with the first thing that greets you when you enter Filevision - the Drawing page. If you plan to use Filevision as a file manager only, without graphic objects, then you can skip ahead to Part 8, Creating a Type.

**the drawing page window**

The drawing page window is typical in many ways with the standard Macintosh user interface. It has a window title bar, standard scroll bars, a zoom box and resize box. Unlike the standard Macintosh window, the close box is used to close the window only, not the file. This is to allow the user full access to the MultiFinder (see your Apple Macintosh User Manual) desktop without closing the file or resizing the window.

There are several unique elements to the window which provide a considerable amount of control and information about your file. These elements are all contained at the bottom of the window and include:

- A mini page viewer and mini page scroller.
- The information display.
- Cursor tracking coordinates and ruler information.
- Record icon box.
- **Prev**, **Next**, **Info** and **Link** buttons.

ruler info
cursor tracking coordinates
information area
mini page

| Townhouse: (20 total) | h:89 v:172 | **Ruler:Feet** |

[Prev] [Next] [Info] [Link]

record icon box

mini page scroller

Link to specified file button

Info button - brings up the Info page

Next object/record button

Prev object/record button
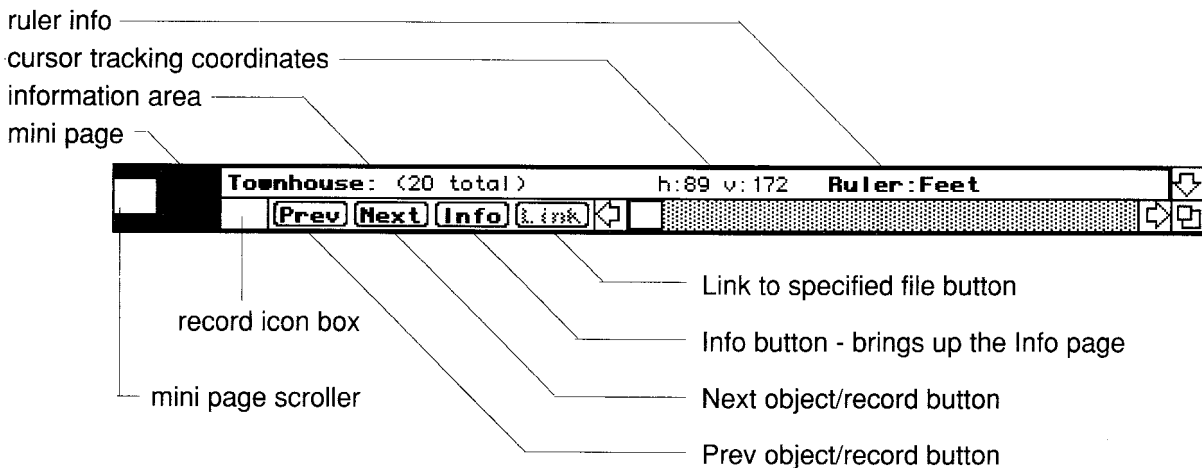
## the mini page

The mini page (the black rectangular area) is a scaled down view of the drawing page working area. As you change the page size of the working area, the mini page will also change to represent the new window area.



8" x 10" drawing page          30" x 32" drawing page
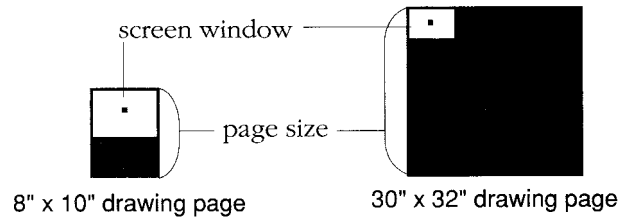
The mini page scroller (the white rectangle) is a scaled down view of the window area that you are currently working in (the on screen area). It can be dragged to any position on the mini page and the window to your working area will track its position.



Start Position                    End Position

Besides showing the mini views of the working page and viewing area, any selected object or group of objects will be represented by reversed pixels. Objects selected within the mini page scroller will be shown as black and objects selected outside the scroller will be shown as white.



Selected Objects

## centering the window on selected objects

When moving between the Info page and the drawing page or to different scaled views, the viewing screen area will always try to center around any selected object or group of objects. For instance, if you are working in the Info page and have a record selected who's object is outside of the current drawing page viewing area, as soon as you click the **Drawing** button from the **Info** page, the drawing page window will be relocated to bring that object into view.

## centering the window

If you wanted to center the viewing area in the middle of your working page, hold the Command key down while clicking on the mini page. In this case, a selected object may be placed out of view.

## drawing page size

The drawing page size can be changed from the **File** menu.

- Select **Page Size...** from the **File** menu.

The following dialog is displayed:

**Select a drawing page size:**

[ Cancel ]

[ OK ]
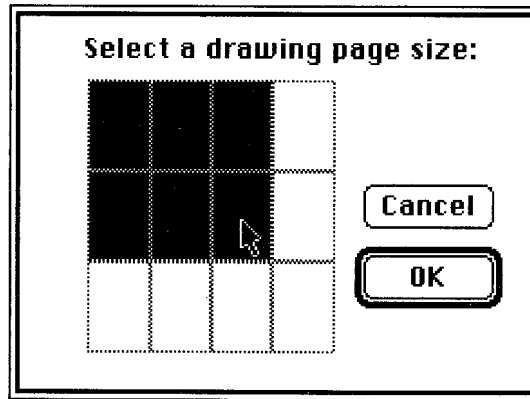
From this dialog, you have the option of selecting any of twelve drawing page configurations. Each page rectangle represents an 8" by 10" area which matches standard printer output.

The currently selected size shown here is 20" high by 24" wide (six 8 x 10's side by side). To change the page size to 30" by 32", click on the lower right rectangle.

The drawing page size can be changed at any time. No information will be lost if you have objects entered on a large drawing page and then reduce it to a smaller page. Even though you won't be able to see any objects that are no longer in the active page area, clicking the **Prev** and **Next** buttons will let you know that they are there and the mini page will invert a pixel as close to the object as possible when the object becomes selected.

## the information area

The information area provides the current **Type** selected and the name of the current **object** selected. If no object has been selected, the total number of records in the selected Type is shown. If records have been highlighted, the total number of **highlighted** records is shown. If the Type selected is currently set to **Ignore**, the information will be for the total number of objects in that Type and that they are **not selectable**. If the Info page sort field connected to the object contains a picture, the information area will display **-- Picture --**.

As soon as you have entered an object on the drawing page, a blinking cursor will appear in the information area. Without having to select the text tool, you can enter a name for that object by just typing it in directly.

**Background:** Symbol|

[Prev] [Next] [Info] [Link]
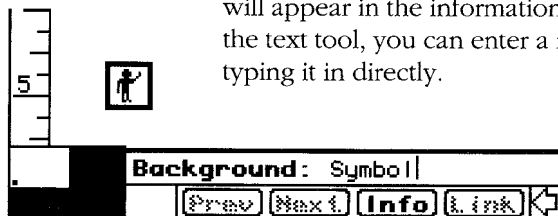
The name that you type in will be entered at the same time in the sort field of the **Info** page. If you later change the sort field and continue to add objects and type in their names from the drawing page, the object's name will be entered incorrectly in the Info page (assuming that you want all of the objects' names in one field).

The field that is automatically set as the sort field, when first adding a new type, is the **Name** field. This can be changed after the **Type** is established by resorting on a new field using **Sort By...** from the **Access** menu.

You may also enter an object's name in the sort field of that object's record and it will be automatically displayed in the information area of the drawing page. As the sort field can be large enough to accept 4,000 characters of text, the information area will show two periods (..) after all of the field information that can be displayed (22 characters).

```
┌─────────────────────────────────────────┐
│ ≣☐≣ Info for this Background: (1 records) ≣☐≣ │
│        ❋                          ⇧       │
│     ┌──────────────────────────┐         │
│     │          Name            │         │
│     │This is a symbolic representation│   │
│     │of the species homo sapien.│        │
│     └──────────────────────────┘  ⇩      │
│  [Prev][Next][Revert][Drawing][Link]⇦  ⇨ │
└─────────────────────────────────────────┘
```

```
  5┤  [👤]

     Background: This is a symbolic rep..
        [Prev][Next][Info][Link]⇦
```
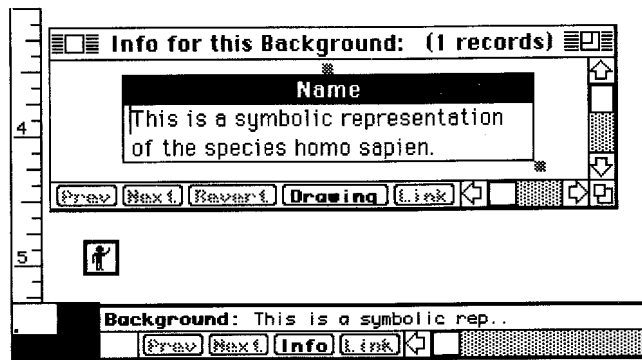
**cursor Tracking**

Cursor **Tracking** can be turned on and off from the **Options** menu and represents the screen position of the cursor at any given time. The **h:v** coordinates are a measure of pixels (usually 72 per inch) with the lowest number occurring in the upper left corner (h:1 v:1) and the highest in the bottom right corner (depending on the size of your monitor).

Tracking is toggled on and off each time that it is selected with a check mark indicating that it is currently **ON**. The tracking coordinates will only display while the cursor is over an active part of the screen.

If you attempt to resize the window to less than 6 1/4" horizontally, the tracking coordinates will no longer be displayed.

| Options | |
|---|---|
| Show Ruler | ⌘R |
| Hide Toolbox | ⌘T |
| Hide Mini Page | ⌘K |
| Hide Titles | |
| Hide Window | |
| ✓Show Actual Size | ⌘1 |
| Show 50% Size | ⌘5 |
| Show 33% Size | ⌘3 |
| Show 200% Size | ⌘2 |
| Ruler Origin at Bottom Left | |
| ✓Tracking | |
| Grid | |
| ✓Guidelines | |
| Snap to Guide | |
| Snap to Alignment | |
| Edit Rounded Corners... | |
| Show Grid & Guides in Front | |

## display mode preferences
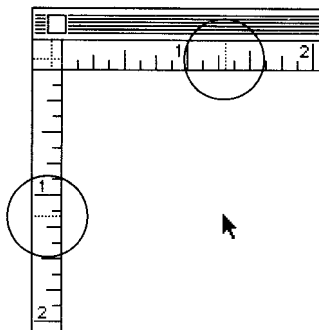


When the rulers are showing, the cursor position is also tracked on the rulers as dotted lines.

The combined tracking features provide a more precise method to enter objects on the drawing page.

## record icon box and attaching graphic objects

The record icon is displayed in the record icon box anytime a record having no object is selected. This provides visual evidence of the records selection when working on the drawing page and is most useful in attaching objects to objectless records at a later time.

Whenever you want to attach an object to a record, use the following procedure:



- First select the record while working in the **Info** page to make sure that it is the record that you want.

- Click the **Drawing** button to move to the drawing page.

- With the Shift key depressed, select the object that you wish to attach. This now selects both the record and the object.

- From the **Edit** menu, select **Group**.

| Edit | |
|---|---|
| Undo | ⌘Z |
| Cut | ⌘H |
| Copy | ⌘C |
| Paste | ⌘U |
| Clear | |
| Bring to Front | ⇧⌘F |
| Send to Back | ⇧⌘B |
| **Ungroup** | ⌘G |
| Gather | ⇧⌘T |
| Reshape | ⇧⌘R |
| Add Record | ⌘A |
| Duplicate Record | ⌘Y |
| Delete Records... | |
| Preferences... | ⌘E |
| Grid & Rulers... | |
| Field Setup... | ⌘= |

Your record is now attached to the new object.

To change an object's record or record's object:

- First select the record or its object.

- Select **Ungroup** from the **Edit** menu (**Group** and **Ungroup** are toggles to the same menu entry).

A dialog will appear warning that:

- Click **OK**.



Ungrouping will result in a record that has no graphic.

Cancel          OK
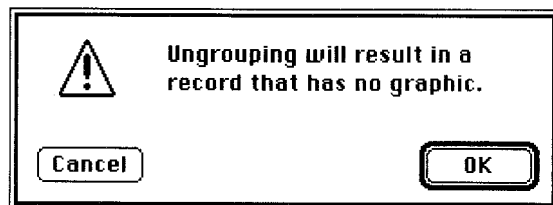
You can now repeat the procedure for attaching an object and record.

Double-clicking on a record icon is the same as double-clicking on an object with an attached record. If the selected **Type** is set (via the Options dialog in Add Type or Change Layout) to transfer you to the **Info** page for a double-clicked object, a double-click on the record icon will produce the same results.



## Prev and Next buttons

The **Prev** and **Next** buttons are for the sequential selection of records and objects. The action of clicking either of these buttons in the **Info** page or **Drawing** page are the same. Each click advances you to the next or previous record of the selected **Type**.

If the next or previous record does not have an object attached on the drawing page, the record icon will appear as described above.

Records and their attached objects are stored in sort order. As Filevision handles records dynamically (constantly moving them in and out of memory and changing the sort position), the next or previous record will always follow in alphabetical order. If an object is entered and is not identified in the information area, it will become the last in the series of unidentified objects but will be placed before any identified objects or records. In other words, "null" sort fields precede "non-null" fields in the collating sequence.

## Info and Link buttons

The **Info** button is used to access the database record for the currently selected Type and object, while the **Link** button is used to link your current file to the one named in the Link field of the currently selected record.

The **Prev**, **Next**, **Info** and **Link** buttons all have their counterparts in the **Access** menu. You can also use Command-key short cuts to access the various options described here.

| Access | |
|---|---|
| "Background"s: | |
| Sort By... | |
| Find... | ⌘F |
| Find Same | |
| Highlight... | ⌘H |
| Highlight Selected | ⌘U |
| Highlight All | ⇧⌘A |
| Hide All | ⇧⌘H |
| Show All | ⇧⌘S |
| Show Only These | |
| Ignore | |
| Show All Types | |
| Cancel Highlighting | ⌘J |
| Previous Record | ⇧⌘P |
| Next Record | ⇧⌘N |
| Info Page | ⌘I |
| Drawing Page | ⌘D |
| Link | ⌘L |

## drawing page grid and rulers

The drawing page rulers differ from the Info page rulers in providing several options for set up and display. Those options can be activated from the **Grid & Rulers...** option in the **Edit** menu.

•   From the **Edit** menu, select **Grid & Rulers...**.

The following dialog is displayed:

```
Edit drawing page rulers and grid for this file:

• Show ruler in: | Inches                    |


• Set initial reference point at:
   ⦿ Upper left – positive numbers down & right.
   ◯ Lower left – positive numbers up & right.
   Initial ruler starting values:   Horiz | 0    |  Vert | 0   |

• Grid ..........| 6    | 12ths of an inch   ☐ Show grid
• Alignment .| 9    | 72nds of an inch   ☐ Snap to alignment
• Guides........   ☒ Show guide          ☐ Snap to guides

 ( Cancel )                                      (( Done ))
```

As can be seen, there are a number of options when defining the Grid and Rulers.

## Show ruler in:

By clicking the pointer on the pop-up menu, you will be given these options for setting the ruler measure. The list provides for most standard linear measure from points to miles.

```
• Show ruler in: ✓Inches
                  Feet
                  Yards
                  Miles
                  Centimeters
                  Meters
                  Kilometers
                  Points
                  Picas
                  Pixels
```

**Points** and **Picas** are printer's measure, while **Pixels** is a computer screen measure. Pixels and Points are generally the same measure, depending on the monitor being used. If the monitor has a resolution of 72 pixels per inch, the Points measure will be accurate. However, if the monitor has a resolution other than 72 pixels per inch, which is the case with some color monitors, the Point measure will be slightly off.

## Set ruler scale

The selection that first displays in **Show ruler in:** is **Inches**. This would provide standard inch rulers on the drawing page.

- **Show ruler in:** Inches
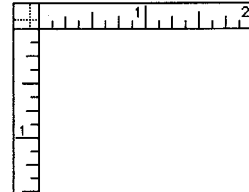
If you select **Feet** from the **Show ruler in:** pop-up menu, a box becomes visible to enter the scale that you want reflected by the rulers. If you wanted to do an architectural drawing and have the rulers show a scaled measure in **Feet** with 4 feet = to 1 inch (quarter scale), then set the scale accordingly.

- **Show ruler in:** Feet
  **With 1 inch =** 4  Feet
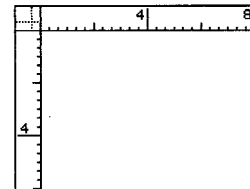
Set to **Picas** for desktop publishing:

- **Show ruler in:** Picas
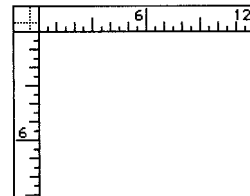
Set to **Miles** for a scaled map:

- **Show ruler in:** Miles
  **With 1 inch =** 100  Miles
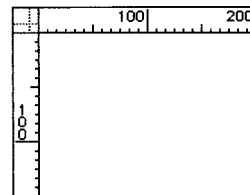
As can be seen, you must set a scale for the rulers if you select other than a measure that can be scaled at a 1:1 ratio.

## Set initial reference point at:

If you select the **Upper left** radio button for initial reference, the rulers would show as below with vertical measurement increasing downward:

```
≡□≡════════════════ Ruler File – Actual Size ═════════════════□≡
      1        2        3        4        5        6       ⇧

  1



     Background: (0 total)                    Ruler:Inches          
        [Prev][Next][Info][Link]◁                               ⇨⊡
```
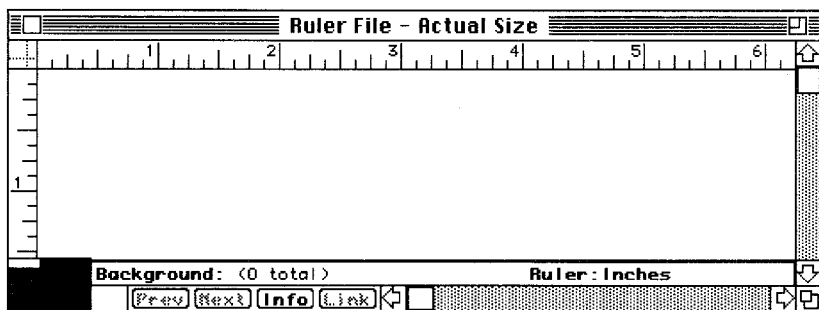
If you prefer that your rulers show at the bottom of the screen with vertical measurement increasing upward, select the **Lower left** radio button: (Notice the location of the mini page scroller.)

```
≡□≡════════════════ Ruler File – Actual Size ═════════════════□≡
                                                              ⇧

  1


  0
     Background: (0 total)                    Ruler:Inches          
        1        2        3        4        5        6      ⇩
        [Prev][Next][Info][Link]◁                               ⇨⊡
```
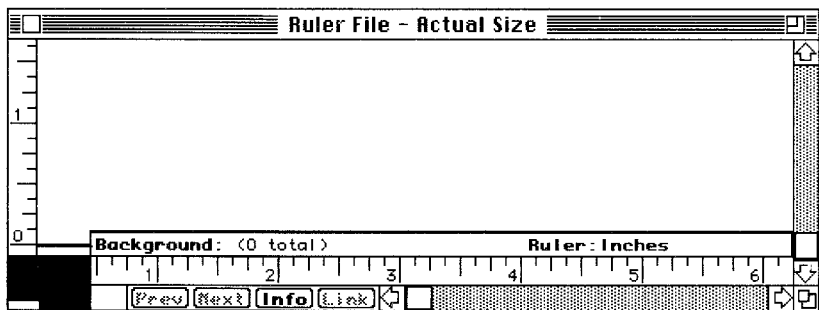
If you need to show the intersection of the two rulers when displayed at the bottom, select **Hide Mini Page** from the **Options** menu. You can also hide the information display area by selecting **Hide Titles** from the **Options** menu. Your drawing page and rulers would then appear as:

```
≡□≡════════════════ Ruler File – Actual Size ═════════════════□≡
                                                              ⇧

  1



  0
        1        2        3        4        5        6      ⇩
        [Prev][Next][Info][Link]◁                               ⇨⊡
```
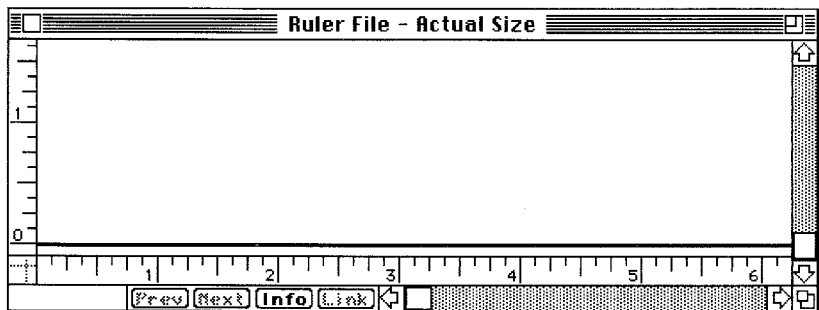
## Initial ruler starting values:

It is not necessary to have your rulers always start at 0,0. Using the Horiz and Vert boxes, the ruler can have a beginning reference of anything you wish from 0 up to 9999 by 9999. This provides a method to start a reference relative to some fixed point, to continue a large drawing in more than one file and have the rulers start where the previous file ended or whatever your needs may be.

## adjusting the ruler zero position

You can also set your true zero or relative zero position to any location on the drawing page. This is easily done by holding your mouse button down with the pointer in the ruler intersection and dragging to a new position. As you drag out of the intersection box, a vertical and horizontal guide line will display letting you know where your new zero position will be as soon as you release the mouse button:
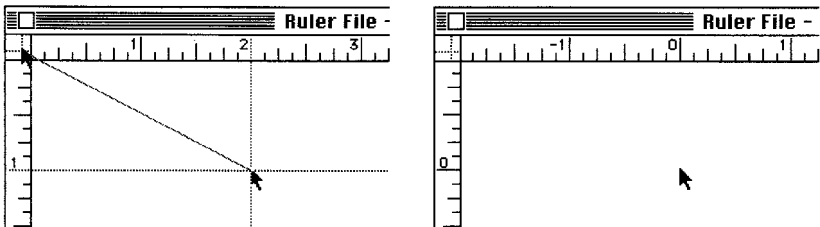


To return the rulers to their original zero position, click once inside the intersection box with your mouse pointer.

## Grid

You can also display a grid on the drawing page which can be set to twelfths of an inch. Setting the grid to 6 (or 6 twelfths) would be the same as setting it to 1/2 inch (6 ÷ 12). The acceptable range for setting the grid is from 1 (1/12 inch) to 120 (10 inches).

| Options | |
|---|---|
| Show Ruler | ⌘R |
| Hide Toolbox | ⌘T |
| Hide Mini Page | ⌘K |
| Hide Titles | |
| Hide Window | |
| ✓Show Actual Size | ⌘1 |
| Show 50% Size | ⌘5 |
| Show 33% Size | ⌘3 |
| Show 200% Size | ⌘2 |
| Ruler Origin at Bottom Left | |
| Tracking | |
| ✓Grid | |
| ✓Guidelines | |
| Snap to Guide | |
| Snap to Alignment | |
| Edit Rounded Corners... | |
| Show Grid & Guides in Front | |

The grid can be turned on and off by either clicking the **Show grid** check box in the **Grid & Rulers...** dialog or by selecting **Grid** from the **Options** menu.

• To turn on the grid, choose **Grid & Rulers...** from the **Edit** menu.

You'll see the **Grid** option in the dialog box.

• Grid ........... | 6 | 12ths of an inch ☒ Show grid

• You can type in the alignment spacing in 12ths of an inch, or you can simply leave it at its current value.

- Click the Grid button to turn it on if there's no X in the checkbox, and to turn it off if an X is present.

The grid can be shown either behind or in front of all objects on the drawing page display and is selectable from the Options menu.
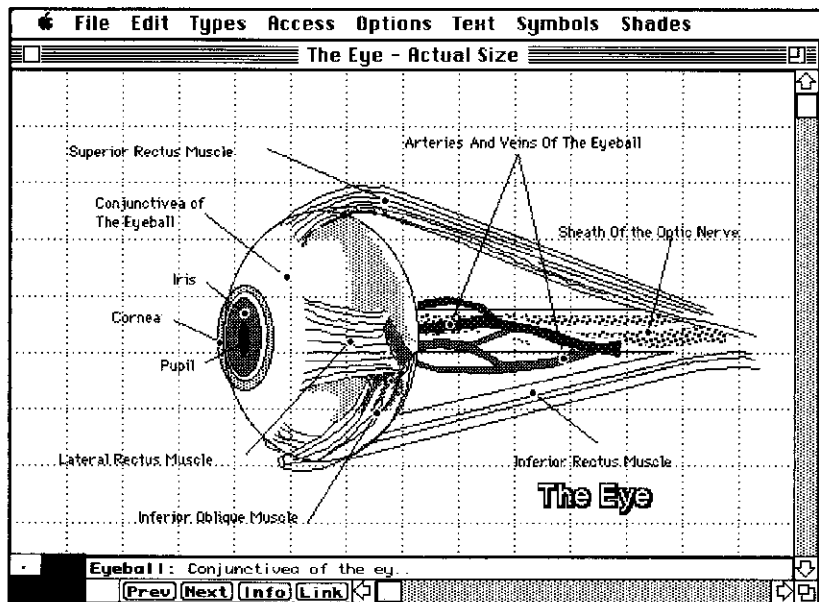


## Alignment

Alignment provides a method to draw or to move graphics in fixed increments. **Alignment** can be turned on by either selecting the **Snap to Alignment** option from the **Options** menu or by clicking in the check box **Snap to alignment** in the **Grid & Rulers...** dialog box.

Alignment can be set to any value from 1 (1 pixel or 72nd of an inch) to 72 (1 inch).

- Alignment . [9] 72nds of an inch ☐ Snap to alignment

Alignment can be used for several drawing page functions:

1. To move graphics, symbols or text blocks in alignment increments.

For instance, if you wanted all objects on the drawing page to align every half inch, set Alignment to 36 (36 ÷ 72 = 1/2 inch) and turn alignment on. When you attempt to move an object, it will "jump" in half inch increments either horizontally, vertically or diagonally. Once an object is moved, it will always come to alignment in common with all other objects that have been moved (with alignment on) to the same vertical or horizontal alignment plane.

2. **To draw graphic objects to the same or to a precise proportional size.**

For instance, if you set alignment to 54 (54 ÷ 72 = .75 inch), all shape objects would be drawn in increments of 3/4 inch. If you wanted to draw a rectangle 3/4 inch tall by 1 1/2 inches wide, start the rectangle and drag down one click (jump) then drag to the left or right two clicks (jumps).

Ovals and arcs can also be drawn to a precise height:width ratio by using alignment. If you want an oval that is precisely twice as wide as it is high, draw it with alignment on and then turn alignment off and proportionally resize the oval (Shift-Option-drag) until it is the size that you want it. It will remain twice as wide as it is high.

3. **To remove "reshape" points. (Reshape is covered in Part 4: "Graphics and drawing" in this section.)**

Reshape points are easily added to a line by clicking the pointer tool wherever you want the point added on that line. However, removing a reshape point requires that it is moved to a precise alignment with another existing reshape point. The easiest way to insure that they are precisely aligned is to move them both to an alignment point.

When working with alignment turned on, it is important to understand how alignment functions. Due to the nature of aligning to an invisible alignment plane, alignment was designed to align based on the direction that the object is being moved. This prevents erratic movement that would normally be experienced if an object was slightly smaller or larger than the alignment distance.

Alignment occurs on the leading edge of the object that is being aligned which is determined by the direction that movement of the object begins. For instance, if you wished to align an object on its right edge, you would have to start to the left of the alignment plane and move the object to the right until you reached that alignment plane.

As an example, the following illustration shows three 54 pixel by 54 pixel squares two of which were aligned to common alignment planes.

Squares 1 and 2 are to align at opposite corners of an invisible alignment intersection (dotted lines). Square 3 is to align to the next intersection of the 72 pixel alignment planes.
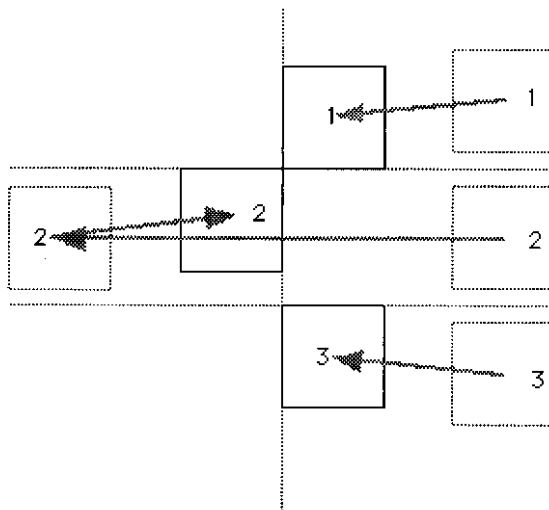


In this example, square 1 must be dragged from above and to the right of the intersection. Square 2 must be dragged to the left of the alignment plane, the mouse button is then released and repressed and the square is then moved to the right and up to the intersection. Square 3 must be dragged to the left and up to its intersection.

Symbols align in the center of the symbol and alignment plane.

A single line of text aligns at its baseline and left edge. A block of text with several lines of text aligns at the baseline of the top line of text.

**Guides**

**Guides** provides another method to align objects on the drawing page. The guides are displayed by dragging them from the rulers. Dragging from the horizontal (top) ruler creates a horizontal guide line. From the vertical (side) ruler creates a vertical guide line. You can drag as many guide lines onto the drawing page as you need.

To "grab" a guide line, first move your pointer tool over the ruler. Depress and hold the mouse button (the pointer tool changes to a double arrow) and while you are still holding the mouse button down, drag the guide line out of the ruler and position it where you need it. To remove a guide line, grab it with the pointer tool and drag it back to the ruler.



Once you have your guide lines in place, you have the option of turning on the **Snap to Guide** function from either the **Options** menu or the **Grid & Rulers...** dialog box.

> • Guides........ ☒ Show guide     ☒ Snap to guides

**Snap to Guide** creates what is best described as a "magnetic force" that causes an object to "jump" to the guide line as soon as it is moved within a few pixels of the line. If you are working with a color monitor, guide lines are colored in magenta so that they don't conflict with the grid lines colored in cyan.

You also have another option which is to either show or hide the guide lines. This feature is useful if you are continuing development on the drawing page and wish to leave the guides in place but don't want them to show when you are in one of the display modes (display modes are covered under Display Mode Preferences at the end of this section).

The guide lines can be shown or hidden by clicking the **Show guide** check box in the **Grid & Rulers...** dialog or by selecting **Guidelines** from the **Options** menu. If **Guidelines** is checked, the lines will show.

## drawing page zoom views

Filevision has four drawing page zoom views, 33%, 50%, Actual Size (100%) and 200%. The question as to why these unusual zoom view percentages has an easy answer. These were the only zoom sizes that could be translated by the mini page and as the mini page is an important feature of Filevision, it pretty much governs the drawing page sizes.

The zoom views can be entered from the **Options** menu or by Command key chord sequences of:

- Actual Size (100%)     ⌘ -1
- 200% Size              ⌘ -2
- 33% Size               ⌘ -3
- 50% Size               ⌘ -5

All drawing functions including text entry can be performed in any of the zoom views.

The following U.S. Map example is a double page (10" x 16") setup shown on a 13" monitor with zoom set to Actual Size. The map shows a thematic representation of median family income in the United States.

Notice the mini page and viewing area of the map.
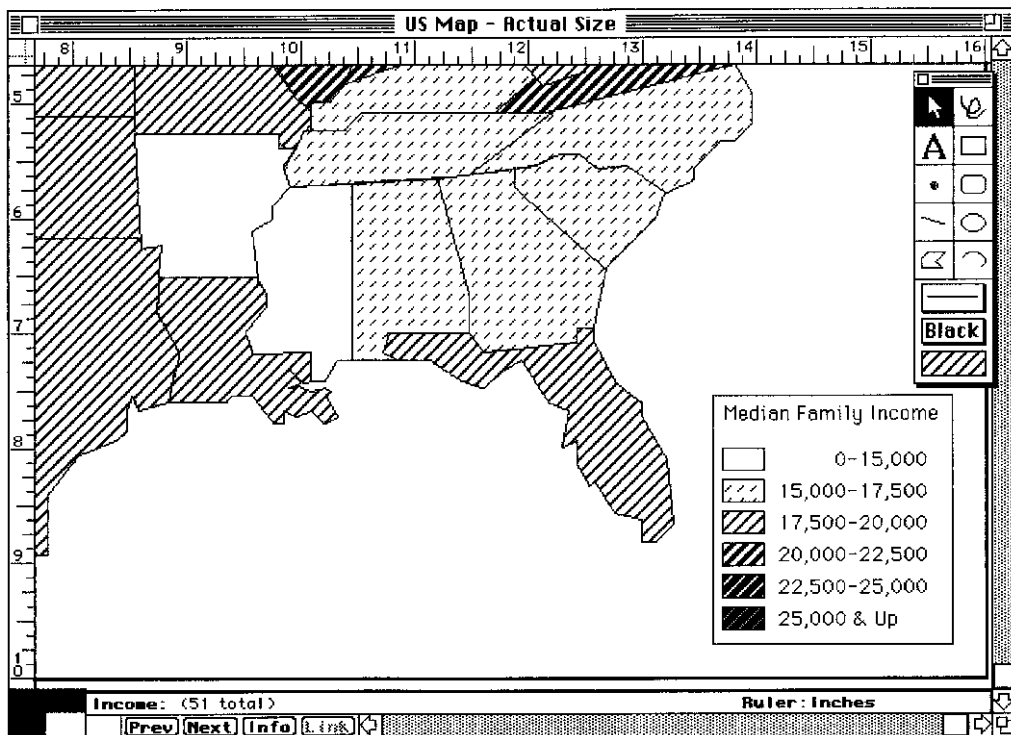
The following example is of the same U.S. Map zoomed to 50% size. In this example, the drawing page area is in full view and is shown as a drop shadowed rectangle. As the full drawing page is now in view, the mini page reflects it by showing all white.
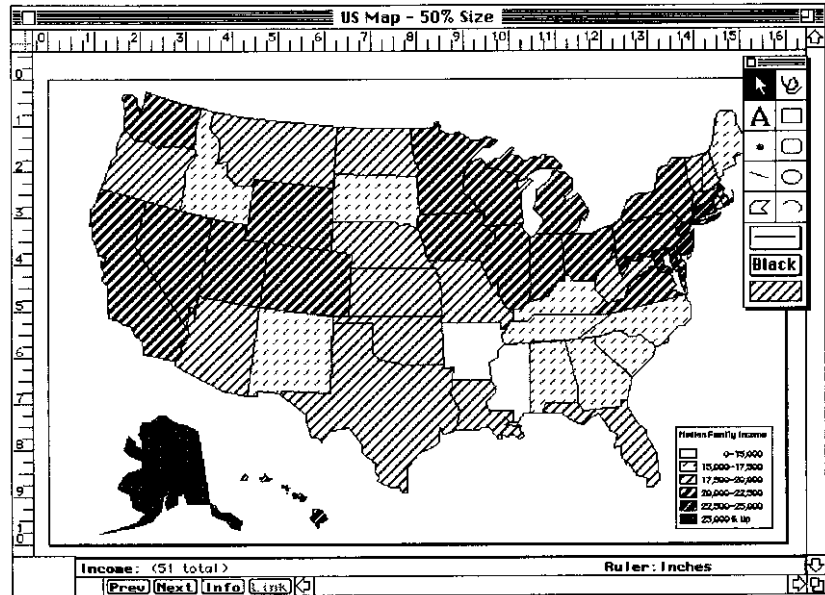


The view below is a 200% zoom which allows you to work in much greater detail. The area of the drawing page that is zoomed to is controlled by first selecting the object that is to center in the window.
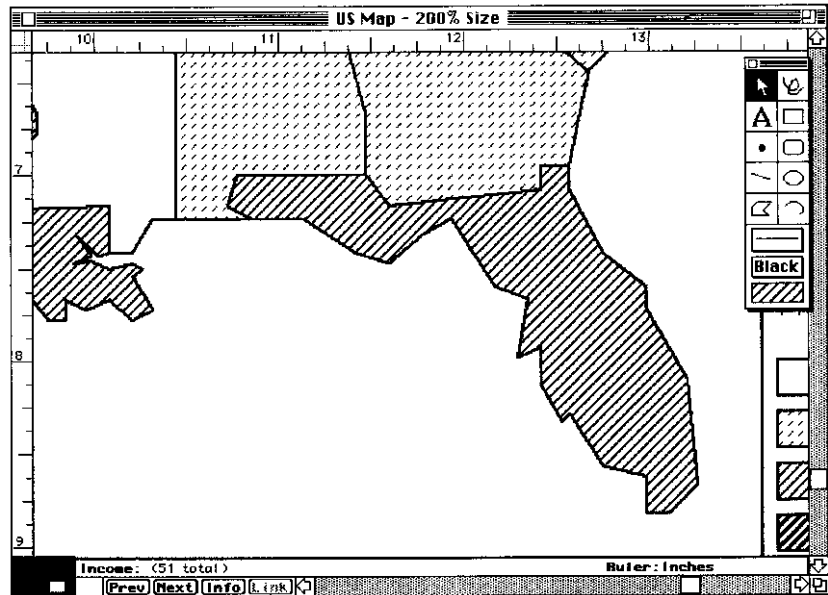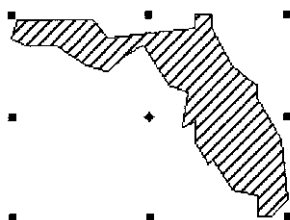
## display mode preferences

Filevision is not only a powerful tool for creating an object oriented database. It also has several features to allow various modes of display. The current display mode is controlled from the **Preferences** selection from the **Edit** menu.

By either selecting **Preferences** or issuing a ⌘-E, the following dialog is displayed:

**Edit**

| | |
|---|---|
| Undo | ⌘Z |
| Cut | ⌘H |
| Copy | ⌘C |
| Paste | ⌘U |
| Clear | |
| Bring to Front | ⇧⌘F |
| Send to Back | ⇧⌘B |
| Group | ⌘G |
| Gather | ⇧⌘T |
| Reshape | ⇧⌘R |
| Add Record | ⌘A |
| Duplicate Record | ⌘Y |
| Delete Records... | |
| Preferences... | ⌘E |
| Grid & Rulers... | |
| Field Setup... | ⌘= |

**Preferences for this file:**

• Show selected graphics using:
  ◉ Handles  ○ Black  ○ Blinking  ○ Nothing

• Double-click on graphics:  ◉ Accept  ○ Ignore

☐ Info & Form rulers on:  ◉ Inches  ○ Metric

[ Cancel ]                    [ Done ]
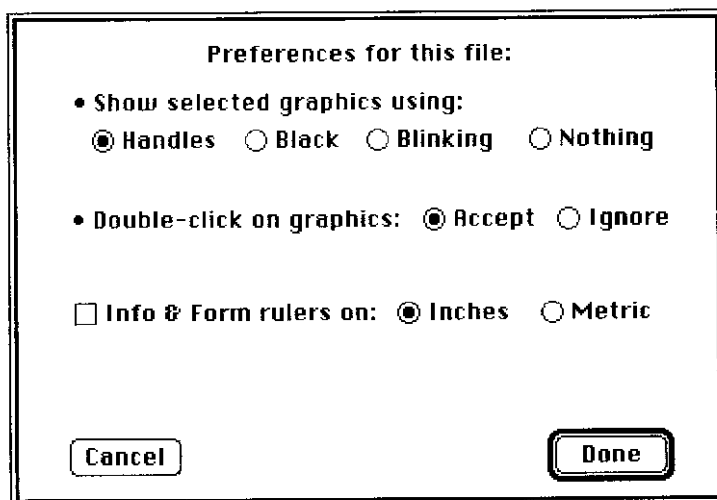
The first entry, **Show selected graphics using:** sets the way that each object will react on the drawing page when it is selected. Under normal development, where objects are being entered on the drawing page, **Handles** must be selected. **Handles** is the working mode and describes the handles that are displayed when a shape or line is selected. **Handles** also controls the display of the tool box, which is automatically removed from the drawing page when other than **Handles** is selected.

All other options cause drawing page objects to react as described by the option. **Black** causes the selected object to turn black, **Blinking** causes the object to flash and **Nothing** causes no action even though the object is selected which can be verified by the changing information area and mini page.

The **Double-click on graphics:** entry is used to force a single-click reaction where you do not want the **Info** page to be displayed or to be linked to a link file if an object is inadvertently double-clicked. In this case, set the option to **Ignore**.

**Info & Form rulers on:** is for selecting the method and display of rulers in the Info and Layout pages ONLY .

Handles

# 4. Graphics and Drawing

**Graphics, drawing, and information:** Filevision has the unique capability of letting you create graphics, then connect information to those graphics. A typical example was used in Section 2's Tour, where you could double-click a graphic of a townhouse and instantly see a record of information about that townhouse.

**How drawings are put together:** Filevision drawings are made up of individual pieces, like a jigsaw puzzle. Those pieces can be "grouped" in order for them to behave as if they were a single object, and objects can be ungrouped just as easily. Complex shapes are always made up of simpler ones; using Filevision's graphic tools is a process similar to creating a collage.

**Symbols and pop-ups:** Filevision features two unusual graphics options in addition to the standard drawing tools: symbols and pop-ups. Symbols are small, icon-like graphics that are particularly easy to use with Filevision. They lend a professional look to a file and you can create your own. Pop-ups are grouped graphics with only one normally visible part. When you click the visible part (called the "button") the rest of the graphics appear. Pop-ups let you take full advantage of the limited screen space of the Macintosh and create startling effects.

**Using Color:** Filevision can create color graphics (and text) using a Macintosh II with a color monitor. The use of color in Filevision is easy to learn and can emphasize both your drawing page objects and Info page layouts. (Vintage Macintoshes can also display in color with color monitors and color cards.)

**Importing and Exporting graphics:** Filevision allows you to import graphics either from the Clipboard or directly from a graphic file. Besides the common MacPaint and MacDraw (PICT) formats, you can also import (and export) Encapsulated PostScript Format (EPSF) graphics. Using EPSF graphics allows you to create files with the ability to store and print high resolution graphics much the same as a standard desktop publishing program.

## The toolbox

**The tool box:** The small floating window (palette) of icons usually found in the upper right of the drawing page window is called the toolbox. As you can see, it's where you find the Filevision drawing tools. This section is where to learn how the Filevision drawing tools work.

## The pointer

The pointer, which looks like an arrow at the top of the toolbox, works just like it does when you're using the Finder.  To select the pointer, click it.

## selecting a single object with the pointer

- Click the pointer tool.

- To select a single object, click it.
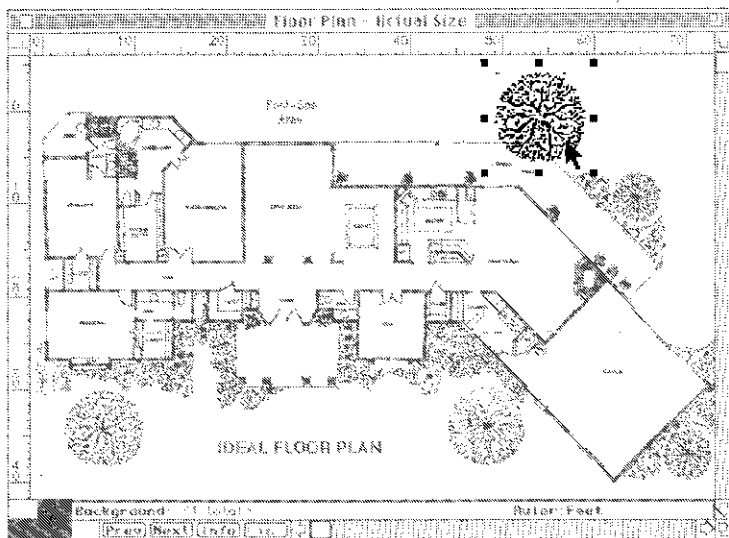
Notice how handles appear around it.

## selecting several neighboring objects with the pointer

- To select several neighboring objects at once, point to an area near the group of objects that isn't itself occupied, hold down the mouse button, and drag the pointer diagonally across the group of objects.

A dotted rectangle appears as you drag, which is referred to as a "marquee". When you release the mouse button, all the objects within the rectangle will be selected (assuming that they have not been set to **Ignore** from the **Access** menu):
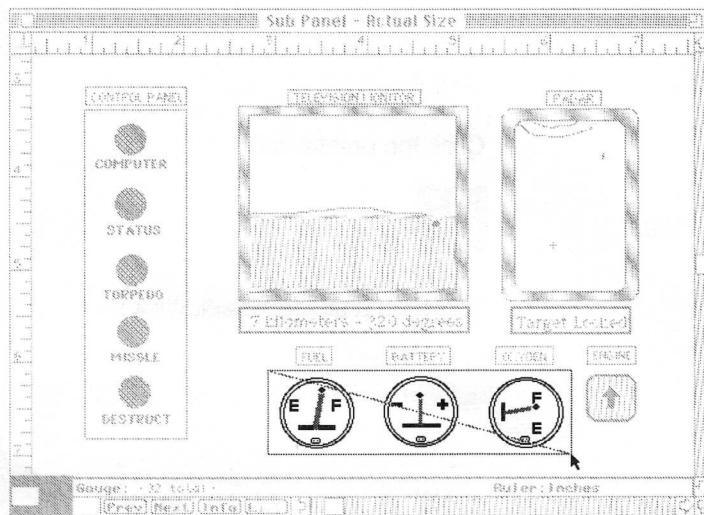
**selecting neighboring objects of one Type with the pointer**

- You can use the above method of selecting several neighboring objects, but constrain it to select only objects of the currently selected **Type** by holding down the Option key while you draw the marquee by dragging over a set of objects.

**selecting several non-neighboring objects with the pointer**

- To select several objects that aren't neighboring, hold down the Shift key while you click each object. If you click it again the object will be deselected, though the others won't be.

This method can be mixed with the previous methods. Items that were selected will become deselected and vice versa.
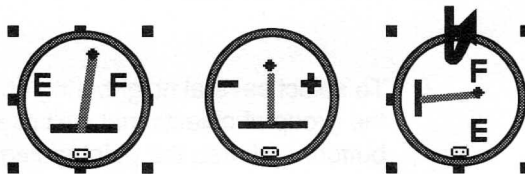


**The text tool**

With a few limitations, text is handled like any other graphic in the drawing area. You can't stretch it, but you can move it around the drawing area, and change its size, font, style, masking and color using the **Text** menu.

- Select the text tool from the toolbox:



- Choose a style, size, and font from the Text menu.



The "I" beam will appear as soon as you move the mouse.

- To add text to the drawing, select a starting point by clicking on it wherever you've moved the I beam.

A flashing vertical bar will appear when you select an area. That's where the text will begin when you start typing (the insertion point).

- Now type, using the keyboard just as you would a typewriter.

You can type up to 4,000 characters at a time. There are no word wrap functions when entering text and you will have to hit the Return key at the end of each line.

- To finish using the text tool, click the pointer or any other tool.

## The Text menu

Text can be any of a number of different fonts, sizes, styles or colors. You can also provide a mask for the text being entered so that it will show up against shaded or colored backgrounds. All of these attributes are selectable from the **Text** menu.



The **Text** menu is hierarchical and presents sub menu items when you drag to a selection. The sub menus work the same as a normal or non hierarchical menu by sliding the mouse pointer over to the sub menu and then releasing on the selection required.
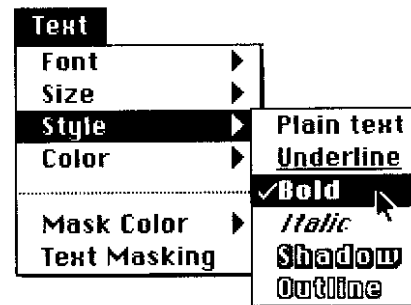
There are five hierarchical menus on the **Text** menu that appear as follow:

**Text**
- Font ▸
  - Avant Garde
  - Bookman
  - Brush Script
  - Cairo
  - CalligraphyLaser
  - Carta
  - Chicago
  - Courier
  - Garamond
  - Geneva
  - ✓Helvetica
  - Hobo
  - Mobile
  - Monaco
  - N Helvetica Narrow
  - New Century Schlbk
  - New York
  - Palatino
  - Times
  - Zapf Chancery
  - Zapf Dingbats
- Size ▸
- Style ▸
- Color ▸
- Mask Color ▸
- Text Masking

**Text**
- Font ▸
- Size ▸
  - 6
  - 8
  - 9
  - 10
  - ✓12
  - 14
  - 18
  - 24
  - 30
  - 36
  - 48
  - 60
  - 72
- Style ▸
- Color ▸
- Mask Color ▸
- Text Masking

**Text**
- Font ▸
- Size ▸
- Style ▸
  - ✓Plain text
  - Underline
  - **Bold**
  - *Italic*
  - Shadow
  - Outline
- Color ▸
- Mask Color ▸
- Text Masking

**Text**
- Font ▸
- Size ▸
- Style ▸
- Color ▸
  - ✓Black
  - White
  - Red
  - Green
  - Blue
  - Cyan
  - Magenta
  - Yellow
- Mask Color ▸
- Text Masking

**Text**
- Font ▸
- Size ▸
- Style ▸
- Color ▸
- Mask Color ▸
  - Black
  - ✓White
  - Red
  - Green
  - Blue
  - Cyan
  - Magenta
  - Yellow
- Text Masking

- The **Font** menu provides storage for up to 256 different fonts.

- The **Size** menu allows the selection of point sizes from 6 to 72 points. The sizes shown in outline style indicate that the font chosen has a corresponding accurately scaled screen font to match the printer font.

- The **Style** menu selects the style that the currently select font will print in.

- The **Color** menu allows you to select any of 8 colors (including black and white). This menu works in conjunction with the **Mask Color** menu to provide foreground (text color) and background (mask color) combinations.

Even if you are not fortunate enough to be working with a color monitor, the combination of text and mask colors have other uses. For example, a white mask with black text will block out backgrounds that prevent the text from being read easily. Don't forget to turn on Text Masking by selecting it (a check mark means that text masking is on).

## working with drawing page text

In entering text on the drawing page, it should be noted that text is primarily used to identify objects, describe object button functions, for banners and titling, and some brief instructions or descriptions. It is not intended to function as a word processor, even though a business letter could be created with a little effort.

Text attributes (font, style, size, etc.) apply evenly to a single block. For instance, if you set underline ON, all text in that block will be underlined. If you wanted a block of text to show without underlining but wanted one word in that group of text underlined, you would have to leave a blank space in the block and then create a separate underlined word to move into the empty space.

This is a block of plain
text that requires one word
to be                         for
emphasis.                                              underlined

      **Main block**                                 **Insert**

      This is a block of plain
      text that requires one word
      to be underlined for
      emphasis.

**Combined drawing page text block**
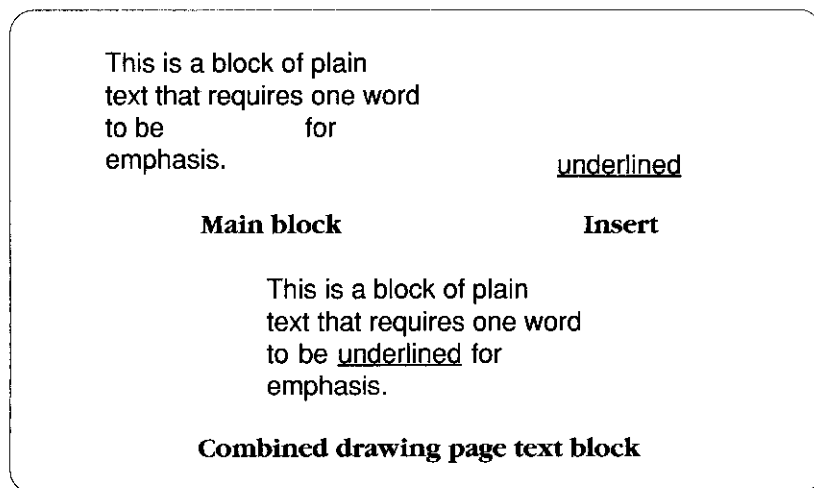
Text editing features also apply to drawing page text blocks. To select an individual word or group of words within a block for editing, you can either place the text cursor at the beginning or end of the word(s) and "sweep" across the word(s) with the mouse button down. You can also double-click on a single word to select it. You could also insert the cursor at the beginning of a word and while holding the Shift key, click at the end of the word(s) or block of text to be selected. This will select all text in between.

Once the word or words are selected (shown in inverse) you can type in a new word replacing the old. Also, all functions of the **Edit** menu will apply to the selected text.

This is a block of plain text that shows the words
"plain text" as being selected for editing.

While the Filevision drawing page is not a word processor, with a little imagination you can still get the job done.

## The symbol tool

Symbols serve several purposes; they're convenient, they lend a consistent and professional look to drawings and they're easy to create.

- To add a symbol to your drawing, click the symbol tool.

When you move to the drawing area, the pointer takes on the shape of the symbol you just selected. In reality, the symbols are all cursors that replace the pointer tool as the active cursor.

- Click where you want the symbol on your drawing.

- To change the symbol in the tool box, choose the symbol you want from the **Symbols** menu.

The Symbols palette can be shown by pulling down the **Symbols** menu. The **Symbol Editor** can also be accessed by double-clicking on the symbol tool in the tool box or by selecting the **"Editor..."** option from the **Symbols** menu. A symbol can be both selected or edited from the **Symbol Editor**.

If your drawing already has symbols entered and you would like to use one of the symbols already being used, click on the drawing page symbol while holding down the Option key and the tool box symbol will change to match automatically.
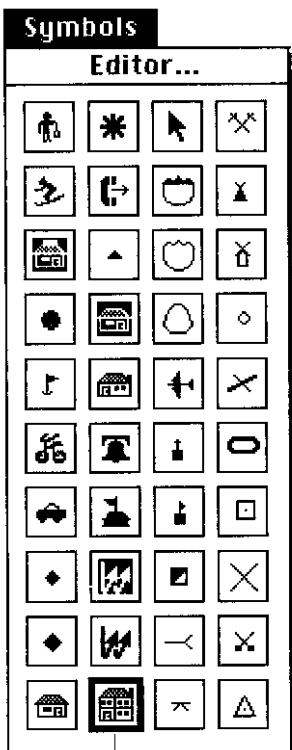
The symbol being edited ⎯⎯⎯

magnified about 600%. ⎯⎯⎯
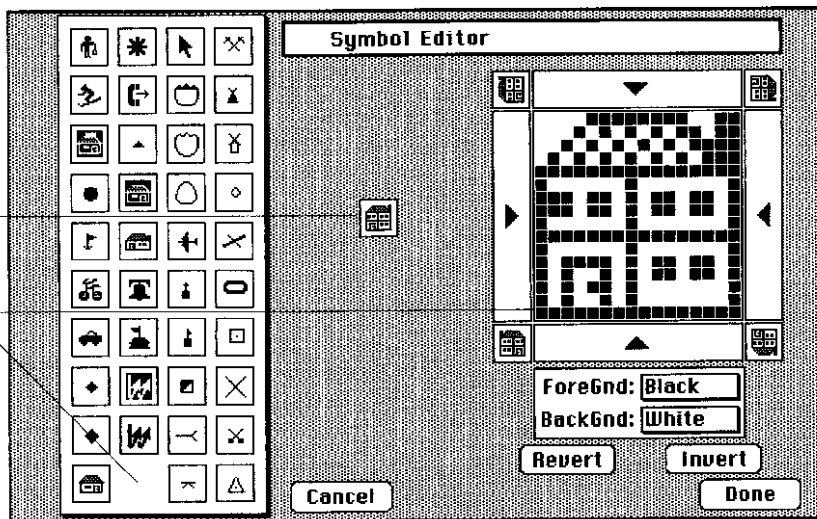
# The
# Symbol Editor

Whenever you need to modify existing symbols or create new symbols, use the **Symbol Editor**. As mentioned previously, the **Symbol Editor** can be accessed by either double-clicking on the symbol icon in the tool box or by selecting **Editor...** from the **Symbols** menu palette.

- **Double-click the symbol icon on the tool box.**

The **Symbol Editor** is displayed (previous page). Besides the full palette of symbols, the editor has an edit box and other button and pop-up menu options.
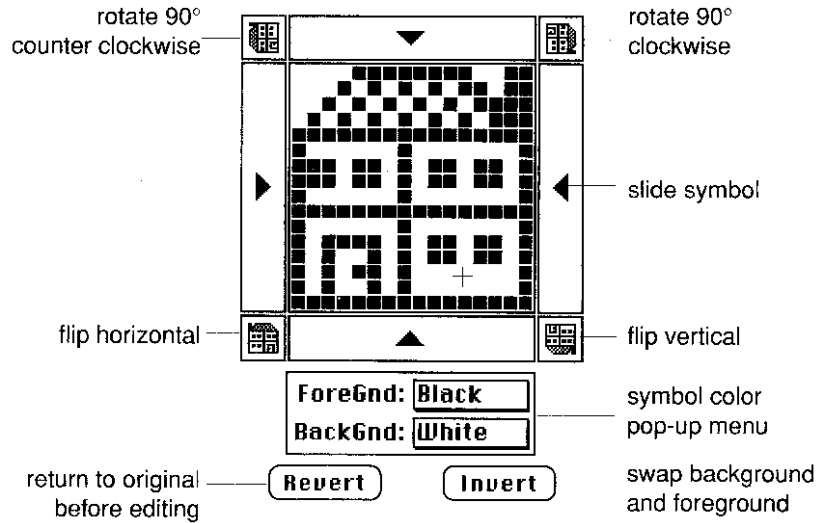
The editing box is designed to allow each magnified pixel (square) to be turned on (black) or to be turned off (white) by clicking on it with the cross hair (+) cursor. This operates much the same as "fat bits" in some paint programs.

The triangle shaped arrow heads to each side and the top and bottom will move the current group of pixels one pixel in the direction of the arrow each time the arrow is clicked. This allows you to center a small symbol or to get a little more room to work if you miscalculated the position when you started designing your new symbol.

**symbol rotation**   The small icons in the four corners allow you to rotate or flip the symbol to the indicated orientation. It should be noted that if an icon is rotated after it has already been used, every occurrence of that icon will also be changed to appear the same as the edited version. If your drawing requires more than one rotation of a particular symbol, copy the primary symbol, select an unused symbol from the palette and then paste the symbol into that unused position.

Once the primary symbol is in the new palette location it can then be edited or rotated and used independently of the primary symbol. This same procedure could be used to generate several views of any symbol, i.e. the primary plus two 90° rotations and a flip horizontal or vertical with the "flipped" views allowing further rotation.

The **Invert** button creates a "negative" image of the symbol by making all black pixels white and vice versa.

The **Revert** button allows you to change your mind if you want to start over when editing an existing symbol. By clicking **Revert**, all editing is erased from the time you selected the current symbol for editing.

## symbol colors

**ForeGnd:** and **BackGnd:** are pop-up menus to set the foreground and background colors of the symbols palette (not the individual symbol). Here again, you have the option of setting the symbols palette to any of 8 foreground and 8 background colors for a potential total of 56 different combinations (using the same color for both the foreground and background would not be a good option) with each symbol. If you then include the 40 different symbols, you have a total of 2,240 different symbol combinations (with a color monitor and/ or printer).

As with text and other graphic objects, once you have a symbol designed and one or more placed on the drawing page, to re-use the same symbol attributes, just click on it with the Option key down and the symbol tool in the tool box will change to that symbol and color combination. You can then select the symbol tool and place additional symbols of that type.

Not only will the symbol tool change to the colors of a selected "working" symbol, the symbol palette will also change to the same color combination. This allows the selection of associated symbols of that color.

A subtlety in using background color with symbols should be mentioned. The symbol background color is a mask of the foreground image and will "paint" approximately two pixels around the foreground image. There is no mask for a background image which means that if you Invert the image, where the foreground becomes the background, the background will become a solid square.



Symbol       Background mask          Inverted background
             (color only)

## changing a symbol's color
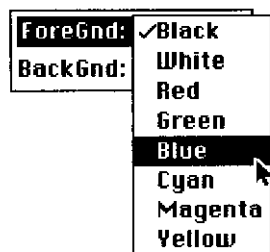
Once a symbol has been colored, changing its color requires a specific sequence of operations. To change a symbol's color:

| | |
|---|---|
| **ForeGnd:** | ✓Black |
| **BackGnd:** | White |
| | Red |
| | Green |
| | Blue |
| | Cyan |
| | Magenta |
| | Yellow |

- Change the symbol palette colors by using the Symbol Editor or by clicking on another symbol of the desired color combination with the Option key held down.

- Select the symbol to be changed.

- Open the symbol palette from the **Symbol** menu.

- Click on the symbol palette's icon that is currently bordered by a heavy line (your selected symbol).

- Click **Done**.

Your symbol has now been converted to the new color(s).

## Using colors with symbols

Using color, whether it is with symbols or graphic objects, should be done with some thought as to those who might be working with your Filevision file and what kind of Macintosh hardware they will be using.

All background colors will be automatically converted to white (no color) if your file is run on a black and white monitor. This is obviously necessary as a colored background and a colored foreground would combine to produce a solid black object on a black and white monitor.

If you or others will be using your file on a black and white monitor, be sure that you don't design symbols or objects with background colors that are essential to the recognition of different object meanings.

---

**DESIGN TIP:**
In illustrating architectural or mechanical drawings, try designing symbol arrows to attach to the ends of dimension lines.

↓ → ↘ ↗

↑ ← ↖ ↙

←——— 48' ———→     12 in

---
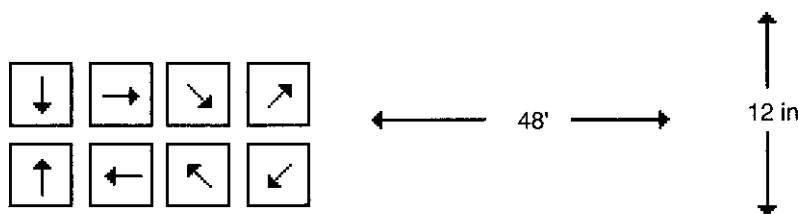
## saving your symbols for use in other files

Filevision allows you to save your newly created symbols (the full palette) to the Scrapbook for use in other files. You can save as many palettes as the Scrapbook will hold. These can then be used to replace the symbols in your current file.

> **DESIGN TIP:**
> If you find that you need more than the 40 symbols provided in Filevision, any of several symbol fonts can be used. Carta provides cartographic symbols if you are developing various maps. Symbol, Mobil and Cairo are common symbol fonts that are supplied with the Laser-Writer.
>
> A font editor, available from most dealers, would allow you to develop your own special symbol fonts for most any purpose.

You can only use up to 40 symbols at one time and if you change symbol palettes after you have used symbols from the original palette, any changes in the new symbol palette will be reflected in those same positions. For instance, if the upper left palette symbol was the stick man symbol, if you change palettes and the stick man is replaced with some other symbol, every occurrence of the stick man that had been used on your drawing would change to the new symbol.

Color combinations of symbols are not included in the 40 symbol restriction; however, any symbols with defined colors which are replaced with the new palette's symbols will retain the same old color patterns. If the old stick man symbol had a foreground color of red and a background color of yellow, any symbol that replaces the stick man will have a foreground of red and a background of yellow.

To copy the current symbol palette to the Scrapbook:

- Access the **Symbol Editor** by way of the **Symbols** menu or by double-clicking on the symbol tool.

- Hold the **Option** key down and select **Copy** from the **Edit** menu.

This will place the symbol palette image in the Clipboard for copying into the Scrapbook or directly into a new Filevision file if you don't intend to archive the palette.
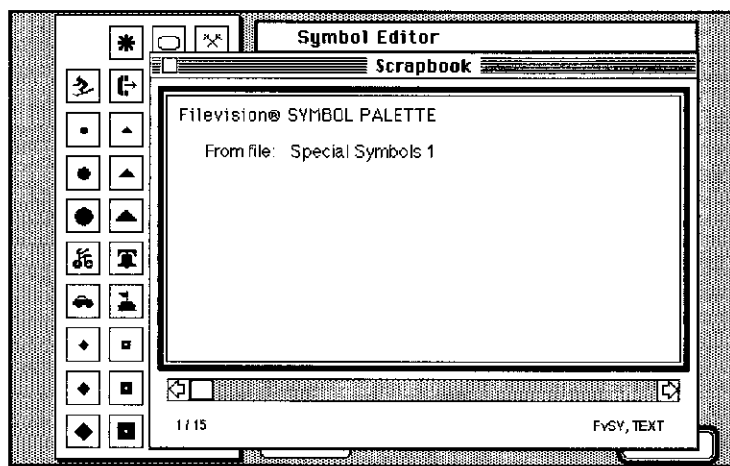


- From the **Apple** menu ( ),
  select **Scrapbook**.

If **Scrapbook** is not in your desk accessories, you will have to install it with Font/DA Mover (See your Macintosh manual).

- After the **Scrapbook** opens, select **Paste** from the **Edit** menu.

The symbol palette will be copied to the Scrapbook which will be indicated by the message to the left.

Notice that the identification used to announce where the symbols were created is the file name of that file. In the example, the file was purposely named Special Symbols 1 so that a more specific identification could be provided. The file could have been named Cartographic if you were developing a set of mapping symbols just to keep archived in the Scrapbook.

Normally, you won't have the option to create the Scrapbook symbol archive under an identifiable name and you will have to accept what ever your Filevision work file was named when you developed those special symbols.

## load a symbol palette from the Scrapbook

To change your current symbol palette to one which has been previously saved in the Scrapbook, reverse the procedure for copying to the Scrapbook:

- Bring up the **Symbol Editor** by double-clicking on the symbol tool or from the **Symbols** menu.

- From the **Apple** menu (⬛), select **Scrapbook**.

- Find the palette that you want to replace the current palette with.

- Select **Copy** from the **Edit** menu.

- **Close** the **Scrapbook** from the **File** menu or by clicking the close box.

- Select **Paste** from the **Edit** menu.

The following alert dialog will be displayed warning that the paste cannot be undone:

> ⚠ **Pasting will replace the current Symbol Palette with the one on the Clipboard.**
> **You will not be able to undo this action.**
>
> [ Cancel ]                    [ **Paste** ]
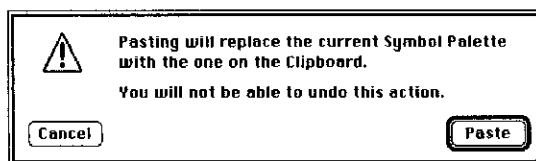
- Click the **Paste** button.

The Scrapbook palette is now transferred into your current file.

---

**DESIGN TIP:**
Another method to provide an unlimited number of symbols for use in your file would be to create a separate Type for that purpose. Standard symbols can be stored in any of the possible 255 fields per record and several records can be used. If your need is for non-standard symbols, create them on the drawing page or in another drawing program and store them in the same way.

# The line tool

The line tool is the basic drawing tool for drawing straight lines. However, the line can be more than just a straight line. It can be any width from 1 pixel (point in printers measure) to 14 pixels. It can be any of 8 colors (including gray) or it can be white. It can also be set to no line at all ( [ —\— ] ).
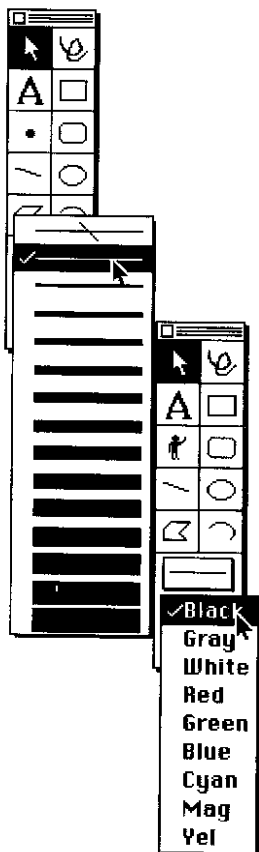
- To draw a straight line, select the line tool from the toolbox.

- Choose a line width and line color from the tool box pop-up menus.

As soon as you move the pointer off of the tool box and over the drawing page, it will change to an open crosshair cursor (✛). After selecting any drawing tool the pointer will change to the crosshair.

- Press the mouse button where you want the line to start.

- Holding the mouse button down, drag to an end point and release the button.

As soon as you release the mouse button, your drawing cursor will return to a pointer tool and the line will remain selected. This is to allow you to make any fine adjustments to the position of the line after you have drawn it.

> **DESIGN TIP:**
> To draw several lines, symbols or graphic objects without returning to the pointer tool each time you finish an object, hold the **Shift** key down before selecting the drawing or symbol tool and continue to hold the Shift key until you are finished .
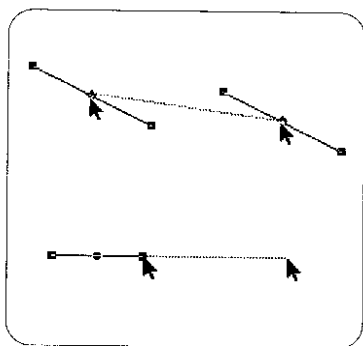
To move the line, click anywhere on the line and while holding the mouse button down, drag the line to its final position. To restrict the movement to a horizontal or vertical plane, hold the **Option** key down before "grabbing" the line.

To change the length of the line, click on either of the two end handles and drag to the new length. If the line was constrained when first drawn and you wish to retain that constraint, be sure to hold the option key down before clicking on the end handle.

## drawing constrained lines

To constrain the line to horizontal, vertical or 45° angles, hold the **Option** key down before you start to draw the line. You can also turn alignment on by selecting **Snap to Alignment** from the **Options** menu to constrain lines. Set your alignment value in the **Grid & Rulers...** dialog (**Edit** menu) to control angular lines.

You can use either the line tool or the polygon tool to draw straight lines. If you use the polygon tool for straight lines, double-click the mouse button at the end of the line to be drawn. (See polygon tool below.)
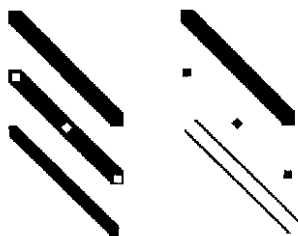
**DESIGN TIP:**
To create precise width double lines, select a line width of three pixels or more and draw the first line. While the line is still selected, copy it using **Copy** from the **Edit** menu or Command-C. Then paste the copy back to the drawing using **Paste** from the **Edit** menu or Command-V. Reduce the copied line by 2 pixels (select a line width from the lines pop-up menu 2 pixels smaller). Change the color of the copied line to white and move over the original black line.

## The polygon tool

The polygon tool is used primarily to draw shapes with straight sides. The polygon is automatically filled with the current shade unless you leave one side open.
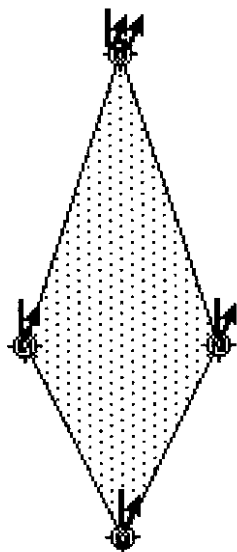
- To draw a polygon, select the polygon tool from the tool box:

- Choose a line width and line color from the tool box pop-up menus.

- Choose the fill shade from the **Shades** menu, unless you're drawing an open polygon.

- Click the mouse button where you want to begin the polygon.

- Draw each side by clicking once at each change of direction (to create an anchor point).

It is not necessary to hold the mouse button down between points as the line will be automatically drawn between mouse clicks. If you do attempt to draw the line while holding the mouse button, the line will end as soon as you release the button and attempt a change direction with another mouse click. You will be returned to the pointer tool in this case, without finishing your polygon.

To finish the polygon, do one of these two things:

- Click twice without moving the cursor,

or

- Click the starting point to close the shape.

---
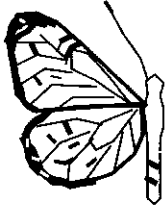
**DESIGN TIP:**
Besides drawing polygons and straight lines, the polygon tool is a good choice for freehand lines for those that have trouble controlling the freehand tool. Using the polygon tool for freehand lines works much the same as "connect-the-dots" type drawings. By clicking frequently while drawing, a precision freehand can be achieved. NOTE: You must move <u>more</u> than 2 pixels before clicking or you will end the line.

---

## limiting line and polygon angles

You can limit the line and polygon tools to drawing lines with only 0°, 45°, or 90° angles.

- Hold down the **Option** key while using the polygon tool.

You can also limit or constrain your angles by turning on **Snap to Alignment** from the **Options** menu.

## The freehand tool

The freehand tool has a singular use for "sketching". This could be compared to using a pencil to doodle with.

- Select the freehand drawing tool from the toolbox:

- Choose a line width and line color from the tool box pop-up menus.

- Hold down the mouse button and draw.

- Release the mouse button when you're finished drawing.

You can adjust the lines shape by choosing **Reshape** from the **Edit** menu; see page 131, reshaping, for details.

## Squares and rectangles

- Select one of the two rectangle tools from the toolbox: (Standard or rounded corner)
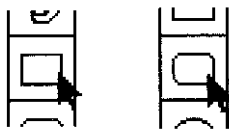


- Choose a line width and color from the tool box pop-up menus.

- Choose a fill shade from the **Shades** menu.

- Move the crosshair to where you want the corner.

- While holding down the mouse button, drag the mouse to the opposite corner.

- Release the mouse button when you're satisfied with the square or rectangle.

- If you want to draw a square, hold down the **Option** key while drawing the rectangle.

- If you want to adjust the radius of the corners on a rounded rectangle before you begin to draw, double-click on the rounded rectangle tool.

## Edit Round Rect Corners
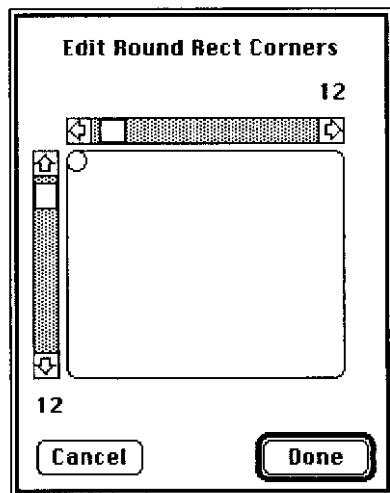


This will bring up the **Edit Round Rect Corners** dialog box. By then adjusting the thumb slides on the scroll bars (either by dragging or with the scroll arrows) you will be able to adjust the corner radii.

The corner adjustment has a wide range of radii from a very "tight" radius to an object that looks very much like an oval. You can also set the adjustment non proportionally by making the horizontal value differ from the vertical value. This results in a graphic that resembles a "drum".
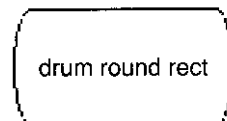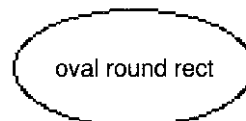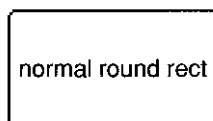


**Rounded Rectangles**
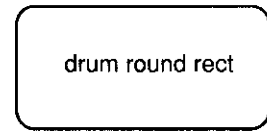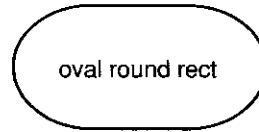
To adjust the corners on an existing rounded rectangle:

- Select the rounded rectangle to be adjusted.

- Select **Rounded Corners** from the **Options** menu.

- Adjust the **Edit Round Rect Corners** dialog by using the horizontal
  and/or vertical slide bars.

- Click **Done**.

## Circles and ovals

- Select the oval tool from the toolbox:

- Choose a line width and line color from the tool box pop-up menus.

- Choose a fill shade from the **Shades** menu.

- Move the crosshair cursor to a starting location.

- While holding down the mouse button, drag the mouse until the
  object is the size you want.

- Release the mouse button when you're satisfied.

- If you want to draw a circle rather than an oval, hold down the **Option**
  key while drawing the circle.

# Arcs

**eliptical arc**

**circle arc (Option key)**
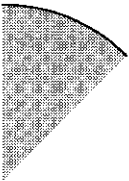
**circle arc reshaped
to a pie slice arc**

- Select the arc tool from the toolbox:

- Choose a line width and line color from the tool box pop-up menu.

- Choose a fill shade from the **Shades** menu.

- Move the pointer to a starting location.

- While holding down the mouse button, drag the mouse until it's the size and shape you want.

- Release the mouse button when you're satisfied.

- If you want to draw an arc based on a circle (a pie slice), hold down the **Option** key while drawing the arc.

A constrained arc drawn holding the **Option** key will result in a full quadrant of the circle being drawn. If you then want to adjust it to a smaller or larger "pie slice", use **Reshape** from the **Edit** menu ( ⇧⌘R  Shift-Command-R) to change the angle of the arc. This angle can be **Reshaped** to a full 360° circle.

---

**DESIGN TIP:**
To create a pie chart, first draw the circle arc and then **Reshape** it to a full circle. With the full circle arc selected, copy it and then paste back a copy. Change the shade for the second arc and repeat this step as many times as there are pie slices. Move all of the full circle arcs to overlap and then using **Reshape** again, adjust each pie slice to its final size when the new circle comes into view. This same sequence can be used with an oval arc for a 3D pie chart affect.
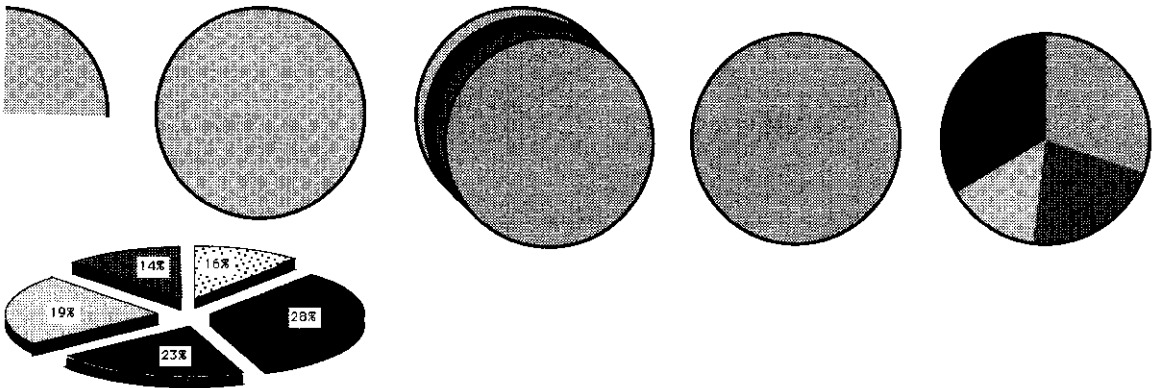
# The Shades palette

The **Shades** palette comes with 40 shades. You can change 38 of them using the Shade Editor.

**None** and **Glass** have special properties. **None** means the shape won't be filled and the outline is the only selectable part. **None** is "transparent", of course, so if you draw a rectangle using **None** as its shade, only the sides will be drawn.

**Glass** is transparent but selectable. If you draw a pie slice using **Glass** as its shade, for example, you'll be able to select it by clicking the inside of the slice, even though it's transparent.

**None** and **Glass** can't be edited. If you can't bring up the Shades Editor, it is probably due to either the None or Glass shades currently being selected.

The Shades palette can be shown by pulling down the **Shades** menu. The **Shade Editor** can also be accessed by double-clicking on the Shade preview box in the tool box or by selecting **"Editor..."** from the **Shades** menu. A shade can be both selected or edited from the **Shade Editor**.

If your drawing already has shaded objects and you would like to use one of the types of shades already being used, click on the drawing page object with that shade while holding down the Option key and the palette shade will change to match automatically.
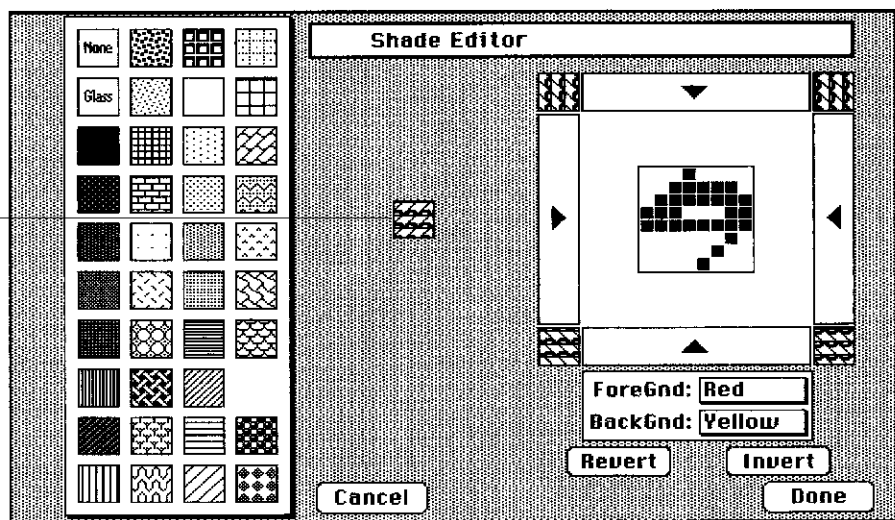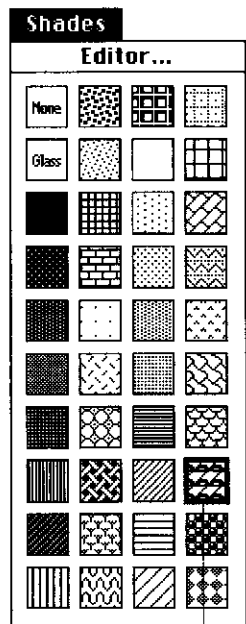
# The Shades Editor

Whenever you need to modify existing shades or create new shades, use the Shade Editor. As mentioned previously, the Shade Editor can be accessed by either double-clicking on the Shade preview rectangle in the tool box or by selecting **Editor...** from the **Shades** menu palette.

- Double-click the Shade rectangle on the tool box.

The **Shade Editor** is displayed (previous page). Besides the full palette of shades, the editor has an edit box, other buttons and pop-up menu color options.
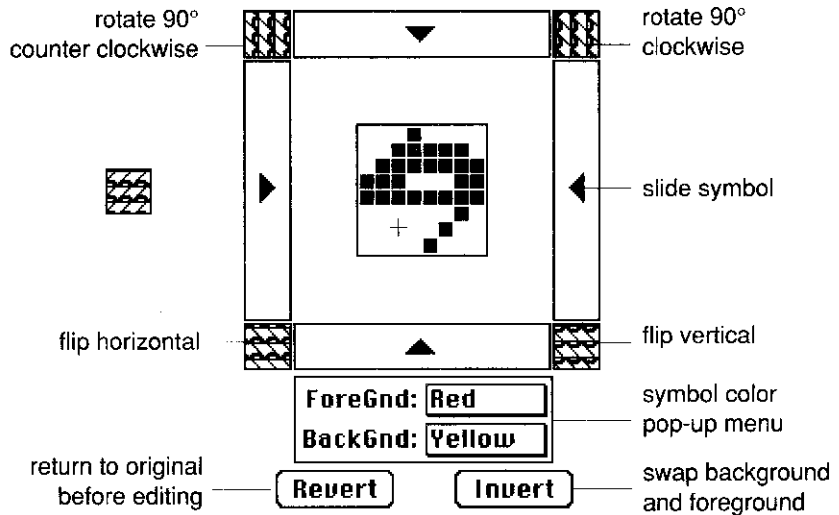


rotate 90° counter clockwise — rotate 90° clockwise

slide symbol

flip horizontal — flip vertical

ForeGnd: Red — symbol color pop-up menu
BackGnd: Yellow

return to original before editing — Revert — Invert — swap background and foreground

The editing box is designed to allow each magnified pixel (square) to be turned on (black) or to be turned off (white) by clicking on it with the cross hair (+) cursor. This operates much the same as "fat bits" in some paint programs.

The triangle shaped arrow heads to each side and the top and bottom will move the current group of pixels one pixel in the direction of the arrow each time the arrow is clicked. This can be used to create some interesting affects with the shade being edited.

The small icons in the four corners allow you to rotate or flip the shade to the indicated orientation. It should be noted that if an shade is changed or rotated after it has already been used, every occurrence of that shade will also be similarly changed. If your drawing requires more than one version of a particular shade, copy the primary shade, select an unused shade from the palette and then paste the shade into that unused position where you can then edit it.

**shade rotation**

Once the primary shade is in the new palette location it can then be rotated and used independently of the primary shade. This same procedure could be used to generate several views of any shade, i.e. the primary plus two 90° rotations and a flip horizontal or vertical with the "flipped" views allowing further rotation.

The **Invert** button creates a "negative" image of the shade by making all black pixels white and vice versa.

The **Revert** button allows you to change your mind if you want to start over when editing an existing Shade. By clicking **Revert**, all editing is erased from the time you selected the current shade for editing.

## shade colors

**ForeGnd:** and **BackGnd**: are pop-up menus to set the foreground and background colors of the Shades palette (not the individual shade). Here again, you have the option of setting the Shades palette to any of 8 foreground and 8 background colors for a potential total of 56 different combinations (using the same color for both the foreground and background would not be a good option) with each shade. If you then include the 38 different shades, you have a total of 2,128 different shade combinations (with a color monitor and/or printer).

As with text and other graphic objects, once you have a shade designed and one or more placed on the drawing page, to re-use the same shade attributes, just click on it with the Option key down and the Shade preview rectangle in the tool box will change to that shade and color combination. You can then select a drawing tool and draw additional shaded objects of that type.

Not only will the Shade rectangle change to the colors of a selected "working" shade, the Shade palette will also change to the same color combination. This allows the selection of associated shade patterns of that color.

---

**DESIGN TIP:**

If you are designing a complex drawing and plan to use several different symbols, symbol colors, shade patterns, shade colors, line widths and line colors, create a palette on your drawing page. Once you have the palette created, any time you want to draw a new object with existing patterns, shade colors, line widths or line colors, all you have to do is click on the existing palette object while holding the Option key down and all of the attributes of that object are automatically loaded.

| 4 pt blue line | Shade/line patterns | Pattern Blu FG/Yel BG | Sym  Gr F/Yel B |
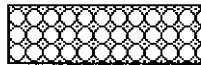
---

## changing a shade's colors

Once a shade has been colored, changing its color requires a specific sequence of operations. To change a shade's color:

- Change the shade palette colors by using the Shade Editor or by clicking on another shade of the desired color combination with the Option key held down.

| ForeGnd: | ✓Black |
|---|---|
| BackGnd: | White |
| | Red |
| | Green |
| | Blue |
| | Cyan |
| | Magenta |
| | Yellow |
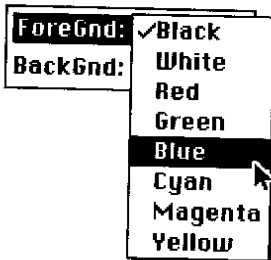
- Select the shaded object to be changed.

- Open the shade palette from the **Shades** menu.

- Click on the shade palette's icon that is currently bordered by a heavy line (your selected shade pattern).

- Click **Done**.

Your shaded object has now been converted to the new color(s).

## using colors with shades

Using color should be done with some thought as to those who might be working with your Filevision file and what kind of Macintosh hardware they will be using.

All background colors will be automatically converted to white (no color) if your file is run on a black and white monitor. This is obviously necessary as a colored background and a colored foreground would combine to produce a solid black object on a black and white monitor.

If you or others will be using your file on a black and white monitor, be sure that you don't design shades or objects with background colors that are essential to the recognition of different object meanings.

## saving your shades for use in other files

Filevision allows you to save your newly created shades (the full palette) to the Scrapbook for use in other files. You can save as many palettes as the Scrapbook will hold. These can then be used to replace the shades in your current file.

You can only use up to 40 shades at one time and if you change Shade palettes after you have used shades from the original palette, any changes in the new Shade palette will be reflected in those same positions.

Color combinations of shades are not included in the 40 shade restriction; however, any shades with defined colors which are replaced with the new palette's shade patterns will retain the same old color patterns. If the old brick shaded object had a foreground color of red and a background color of yellow, any shade pattern that replaces the brick shade will have a foreground of red and a background of yellow.

To copy the current Shade palette to the Scrapbook:

- Access the **Shade Editor** by way of the **Shades** menu or by double-clicking on the Shade preview box.

- Hold the **Option** key down and select **Copy** from the **Edit** menu.

This will place the Shade palette image in the Clipboard for copying into the Scrapbook or directly into a new Filevision file if you don't intend to archive the palette.

- From the **Apple** menu (🍎), select **Scrapbook**.
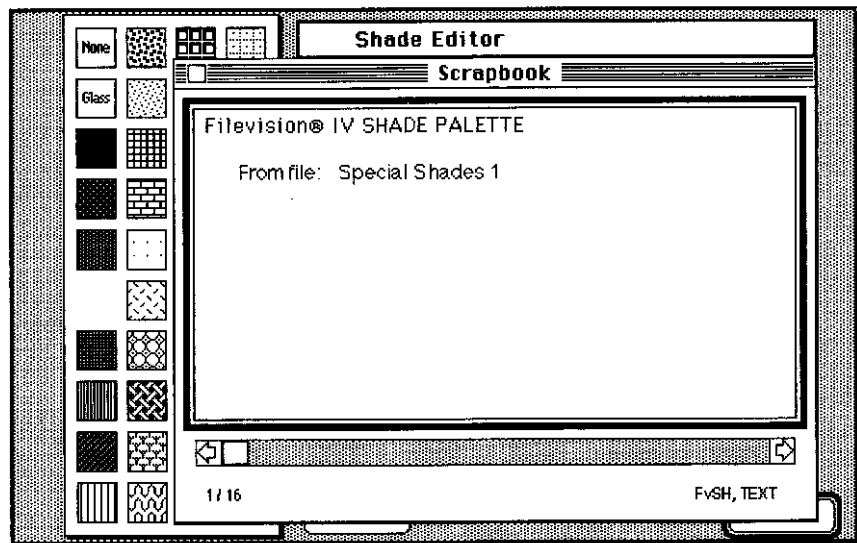


If the **Scrapbook** is not in your desk accessories, you will have to install it with Font/DA Mover (See your Macintosh manual).

- After the **Scrapbook** opens, select **Paste** from the **Edit** menu.

The Shade palette will be copied to the Scrapbook which will be indicated by the message above.

Notice that the identification used to announce where the shades were created is the file name of that file.

Normally, you won't have the option to create the Scrapbook shade archive under an identifiable name and you will have to accept what ever your Filevision work file was named when you developed those special shades.

## load a shade palette from the Scrapbook

To change your current Shade palette to one which has been previously saved in the Scrapbook, reverse the procedure for copying to the Scrapbook:

- Bring up the **Shade Editor** by double-clicking on the Shade preview box or from the **Shades** menu.

- From the **Apple** menu (**&**), select **Scrapbook**.

- Find the palette that you want to replace the current palette with.

- Select **Copy** from the **Edit** menu.

- **Close** the **Scrapbook** from the **File** menu or by clicking the close box.

- Select **Paste** from the **Edit** menu.

The following alert dialog will be displayed warning that the paste cannot be undone:

> ⚠ **Pasting will replace the current Shade Palette with the one on the Clipboard.**
>
> **You will not be able to undo this action.**
>
> [ Cancel ]                    [ Paste ]
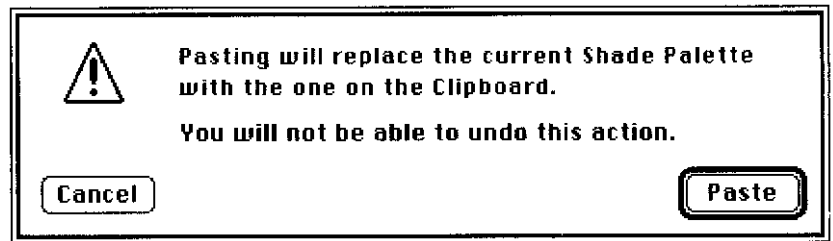
- Click the **Paste** button.

The Scrapbook palette is now transferred into your current file.

## Reshaping

**Reshape**, from the **Edit** menu, is used to modify lines, arcs, rectangles and polygons. Obviously, if a rectangle or square is reshaped, it becomes a polygon. A line can become almost anything.

To reshape, you can use the existing or add "reshape handles" to an object, then stretch or shrink the object using those handles. The handles are actually the "anchor" points of the graphic's line and occur every time the line changes direction. The line between the anchor points is like a "rubber band" and can be stretched to any length.

In this example we're going to reshape a line into a star:

- Select the line tool and draw a horizontal line about 3" long.

- Select the line.

- Choose **Reshape** from the **Edit** menu.

- Add reshape handles to the line by clicking where you want them. Add two to the line.
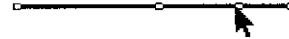
- Pull down the right handle.
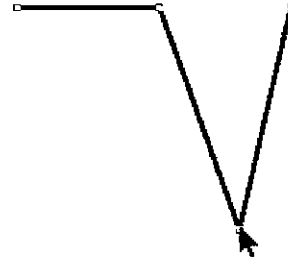
- Pull down the left end so that it's parallel to the bottom of the "V"
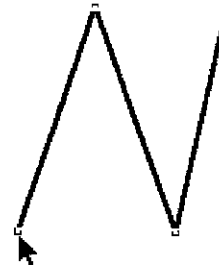
- Pull the top right edge down to the bottom left edge and add a reshape handle by clicking on the middle of the bottom of the triangle.

- Pull up on the reshape handle you just added to the bottom of the triangle. Add three reshape handles in the middle of the left side.
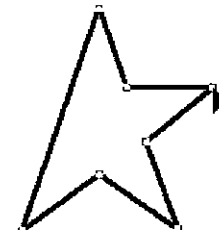
- Repeat the process on the left side: add three reshape handles and pull the middle one out.
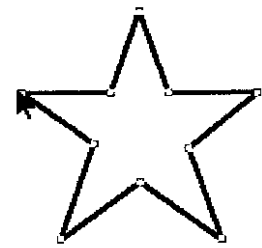
The star is now complete. You can fill it by selecting a shade from the **Shades** menu; you can also change the style of the line around it by selecting a new line width or line color from the tool box pop-up menus.

You can remove points by dragging one point on top of another, a process that's made easier when alignment is on. You can turn on alignment temporarily by holding down the Command key before you drag the point.

- Click the pointer tool to end reshaping.

## Bringing to front and sending to back

You can change the order in which graphics overlap with **Bring to Front** and **Send to Back** from the **Edit** menu or by using the Command key chords ⇧⌘F (Shift Command F) for Bring to Front and ⇧⌘B (Shift Command B) for Send to Back.

- Select a graphic object that's partly behind another object.

- Choose **Bring to Front** from the **Edit** menu.

The object is now on top of the objects that concealed it.In fact, it's considered to be the front most object in the file regardless of the Type that it belongs to and which Type is the topmost drawing layer.

**Send to Back** works the opposite way. Try moving the object behind all other objects by clicking the object and choosing **Send to Back** from the **Edit** menu. The object is now the backmost object on the drawing page and is behind all other objects of all other Types.

**Bring to Front** and **Send to Back** also work on:

•• Several selected objects

•• Highlighted objects (if nothing else is selected)

•• All objects of a Type (if no objects are selected or highlighted, all objects of the current Type will be sent to the back or brought to the front).

Drop Shadow
Highlight Box
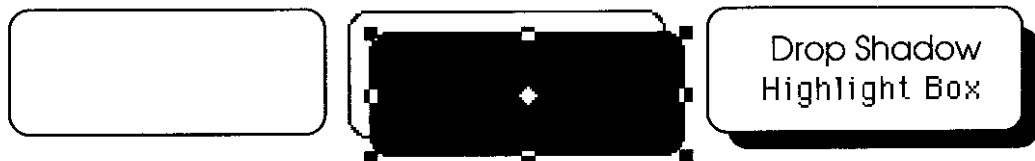
## Grouped graphics

Frequently you'll want several graphics to function together as a single object. That allows you to click on any of its parts to select the object as a whole. If you group the parts of an office floor plan, for example, you can double-click anywhere on the floor plan to get the record for the office.

You can only group graphics of the same type, and they can't have more than one record among them. To move and stretch graphics of more than one Type or with several records among them, use **Gather**.

**Pop-ups** are a variation on grouped graphics. A pop-up has only one visible part until the pop-up is selected. When that part is selected, the rest of the pop-up "pops up" into view. When the pop-up is deselected, it disappears except for the part that was visible to begin with (called a button).

Often you don't need to group or gather graphics to perform an operation on several of them at once. Highlighting and multiple selection can frequently do the same thing with less effort. For instance, all you have to do to change the fonts of several different text objects at once is to select them all at once, then choose the new font from the Text menu.

## Group

You can combine graphics using **Group** so that they behave as if they were a single object. Clicking any part of the grouped graphic will result in the appearance of a single set of handles around all of them. If you need to group the graphics temporarily for moving or stretching, use **Gather**. Both are available from the **Edit** menu or by using the Command key chords ⌘G (Command-G) for **Group** and ⇧⌘T (Shift Command-T) for **Gather**.

- Select the graphics using Shift-click or by holding down the mouse button and drawing a dotted rectangle (marquee) around them.
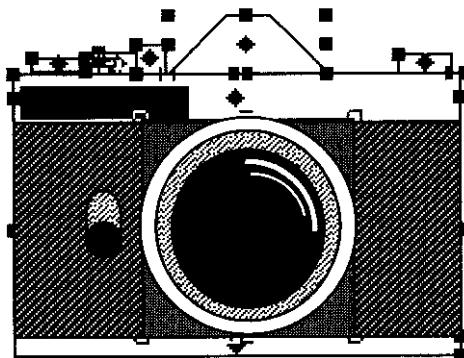


- Choose **Group** from the **Edit** menu.
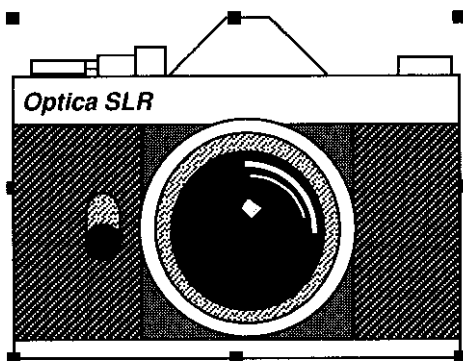


If the graphics are of more than one type or have more than one record between them, **Group** will be unselectable.

- Click elsewhere to deselect the group.

Now, anytime any of the objects in the group are selected, a single set of handles will appear around the whole group:

If only one of the graphics has a record containing data, that record becomes the group's record. If there is more than one record containing data among those selected, you will not be able to group the objects.

# Ungroup

Any grouped graphic can be ungrouped.
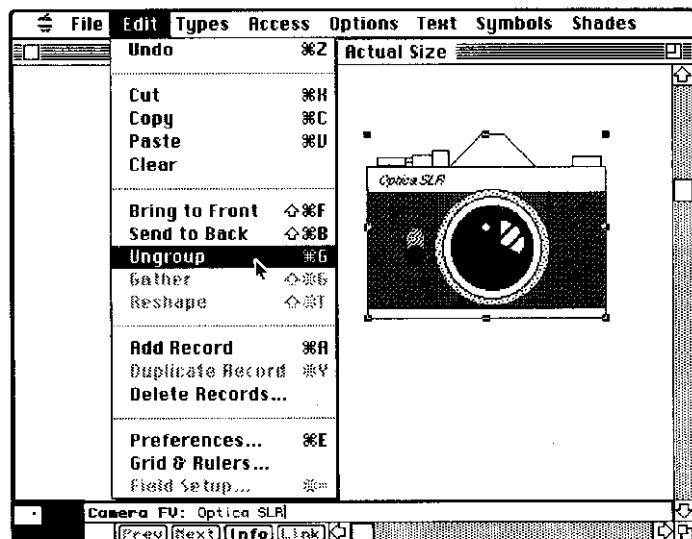


- Select the grouped graphic.

- Choose **Ungroup** from the **Edit** menu. (Group and Ungroup toggle the same position on the Edit menu.)

If you group a graphicless record to one or more graphics, it will become disassociated from any of the graphics when the ungrouping takes place, and a dialog box will warn you:
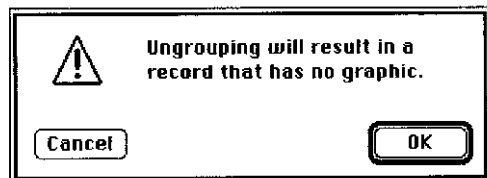


# Ways to select objects

You've already been introduced to the ways you can select objects with the pointer tool. There are several other ways to select objects.

- The **Prev** and **Next** buttons select one object of the currently selected Type at a time.

- **Find...** or **Find same** (see page 225 for more details) selects one object at a time.

- Adding an **Info** page record selects that record.

- **Drawing** an object selects that object.

# Moving objects

Any selectable object can be moved.

Note: Selection is shown differently on symbols and text. Symbols are shown within a black box, and text is shown in reverse.

- If it's text, press and hold down the mouse button on the text block, and drag the text. Release the mouse button when you've put the text where you want it.
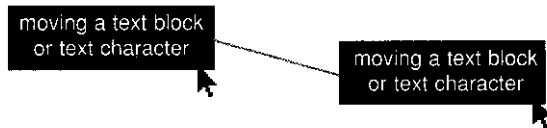
• If it's a symbol, press and hold down the mouse button on the symbol, and drag the symbol. Release the mouse button when you've put the symbol where you want it.
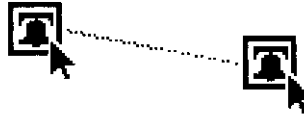


• If it's a shaded graphic, press and hold down the mouse button anywhere on the object except one of the outside handles. Hold down the mouse button, and drag the object to its new location
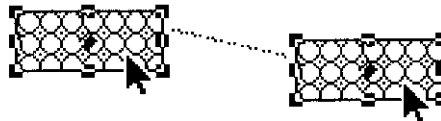


## moving multiple objects of one Type

To move several objects at one time, first select the objects to be moved using the marquee drag or shift click methods. If you wish to move objects of one **Type** only, select the **Type** from the **Types** menu and **Show Only These** from the **Access** menu.

After you have the "group" of objects all selected, gather them temporarily by selecting **Gather** from the **Edit** menu or by using ⇧⌘T (Shift Command T). **Gather** can (must) also be used to temporarily "group" objects from different Types for moving. Once the objects have been gathered, the combined group will show one set of "handles".

Press and hold the mouse button down anywhere within the gathered group except the outside handles. Drag to the new location and release the mouse button. As soon as the mouse button has been released, the gathered objects will ungather.

Notice that the objects disappear as soon as you press down on the mouse button. The only remaining object is a rectangle about the size of the original group of objects. This is known as the "bounding rectangle" and is provided to give you a reference for positioning.
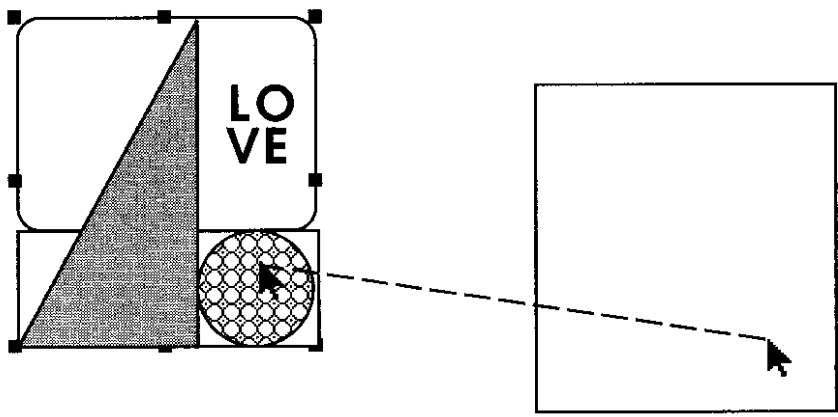
The bounding rectangle is used any time there are more than five objects to be moved at one time. If every object were to show during the move, each object would have to be "re-painted" with each increment of the move. Obviously, this could require a great deal of time if there were many complex objects to move.

If you must have the objects showing during the move, there is a way to accomplish this:

- Press the **Caps Lock** key down before the move.
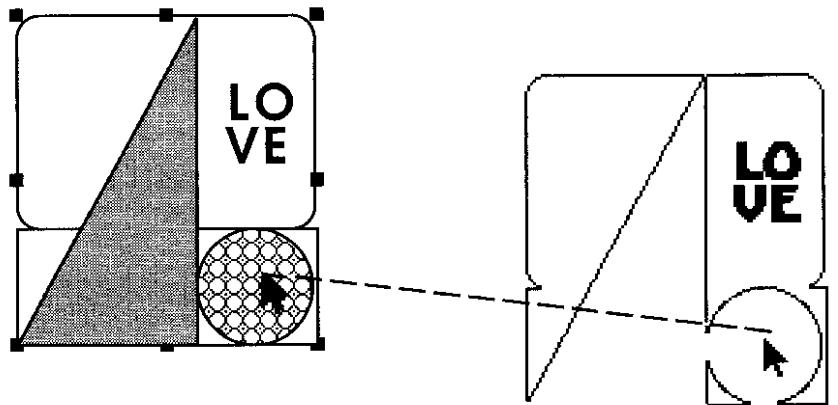


This will show all of the objects as outlines which does allow for precise placement over other existing objects. Be prepared for the move to take some time as the outlines will be redrawing at each increment of the move.

## Trouble shooting object selection and moves

**Trouble shooting:** Remember that **Ignore/Activate** on the **Access** menu and **Show selected graphic using:** in the **Preferences...** dialog affect how selection is shown.

If you select an object and nothing happens, you may have chosen to Ignore objects that type; if so, choose **Activate** on the **Access** menu to activate the objects. Or you may have chosen that something besides the handles show selection for all objects in the file; choose **Preferences...** from the **Edit** menu and select **Handles** under **Show selected graphic using**.

One of the most common problems in moving graphics belonging to several different types is to forget that one of the Types has been set to **Ignore** from the **Access** menu. Another is to forget to **Show All Types** from the **Access** menu only to realize after the move that the objects in one or more Types is now out of alignment with the moved objects.

## Stretching graphics

You can stretch and shrink graphics other than symbols and text.

- To stretch a graphic, select it so that handles appear on it.

- Now move the pointer to any handle but the center one, hold down the mouse button, and pull or push the handle. The object will stretch or shrink accordingly:
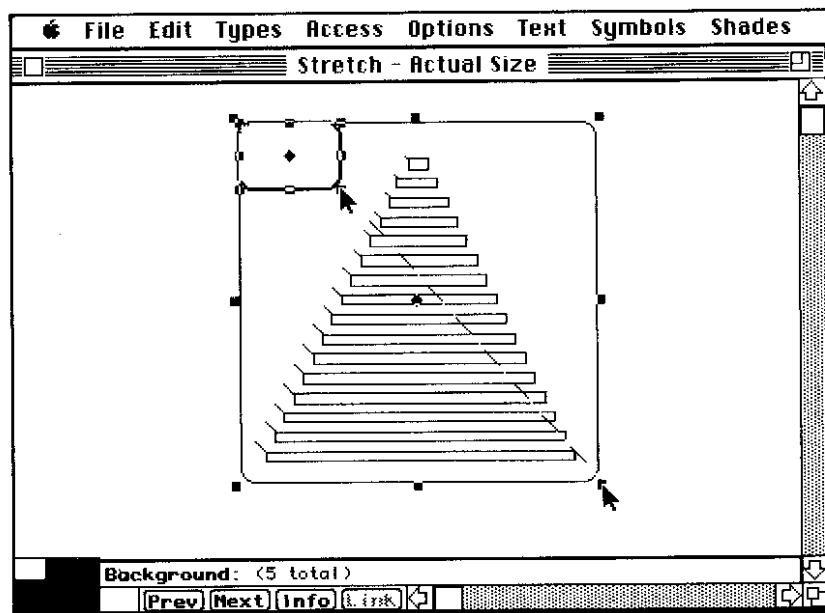
While it was mentioned above that graphics are the only objects that can be stretched, there is a method to stretch symbols and text. This is accomplished by first **Exporting** the text or symbol as a **PICT** and then **Importing** it back to the drawing page. Once back, it can be handled as with any graphic object. The stretched text will print on a LaserWriter correctly; however, the symbol will appear as a magnified group of square blocks. (See Importing and Exporting Graphics, page 151.)
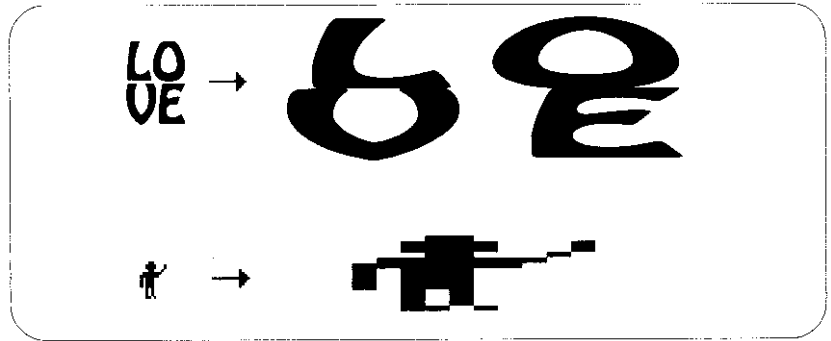


Unfortunately, your Macintosh monitor can't reproduce the high resolution PostScript image and both the letters and the symbol will appear as a series of squares (magnified pixels).
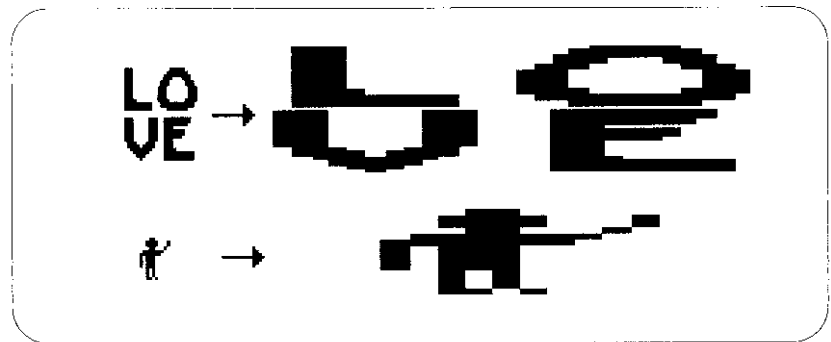


## proportional and square stretch

Objects are usually stretched without regard to the proportion between horizontal and vertical stretching (and shrinking).

- You can change that by holding down **Shift** and the **Option** keys while stretching. The ratio of horizontal to vertical stretch remains proportional.

- You can also hold down the **Option** key by its self while stretching. The object is stretched and shrunk on a square plane.

## Gather-- moving and stretching graphics of mixed types

**Gather** is used to hold several graphics together briefly for moving or stretching. To group graphics of different types, or graphics with more than one record among them, use **Gather** to unite them temporarily to be moved or stretched together.

- To gather graphics, select them using Shift-click or by holding down the mouse button and drawing a dotted rectangle (marquee) around them.

(For more information on selecting several objects at once, read the sections beginning with "selecting several neighboring objects with the pointer", page 110.)
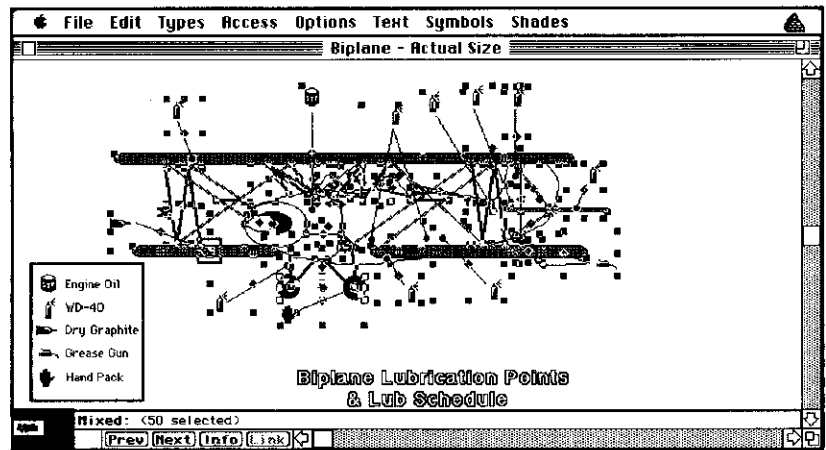


- Choose **Gather** from the **Edit** menu.

Eight handles appear around the objects (plus one in the center) as if they were one large object.

In this example, we're going to move the gathered biplane graphics as a single unit so that we can center the Legend.
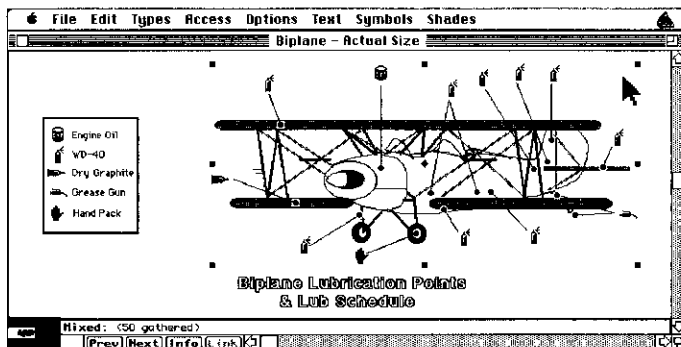


- Move them by dragging anywhere except by one of the outside handles.

- Click the pointer tool to deselect the objects.

Each of the objects now has its own set of handles; the gathered objects have regained their individual identities.

While you have a series of mixed Type graphics gathered, you can also do proportional or distorted stretches. The following illustration shows the same biplane stretched to fill the top part of the screen.
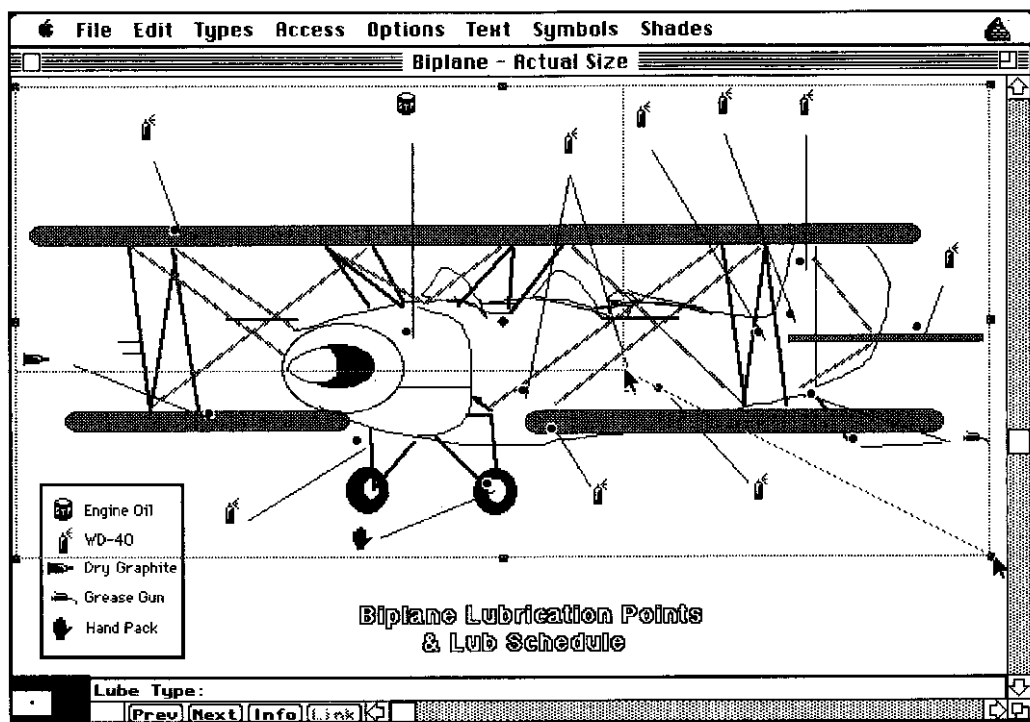


This stretch was done proportionally by first moving the gathered objects to the upper left corner of the screen and while holding the Shift and Option keys, dragging the lower right corner handle to its new position.

## Ungather

Any gathered graphics can be easily ungathered.

- **Choose Ungather from the Edit menu.**

Deselecting also ungathers them.

# 5. Pop-ups

Pop-ups are grouped graphics having only a single part of the group normally visible. When that part of the graphic (called a button) is clicked, the rest of the group appears. When the pop-up is deselected, everything but the button disappears. Pop-ups provide a way to show greater detail about any object without leaving the drawing page.

Pop-ups can be a graphic, text, symbol or combinations of all. Consider the pop-up as another layer of the drawing page which is normally hidden from view. You can have as many pop-ups as you require and they can be associated with any object (button) in any Type. (The Type must be set to **Active** from the **Access** menu.)
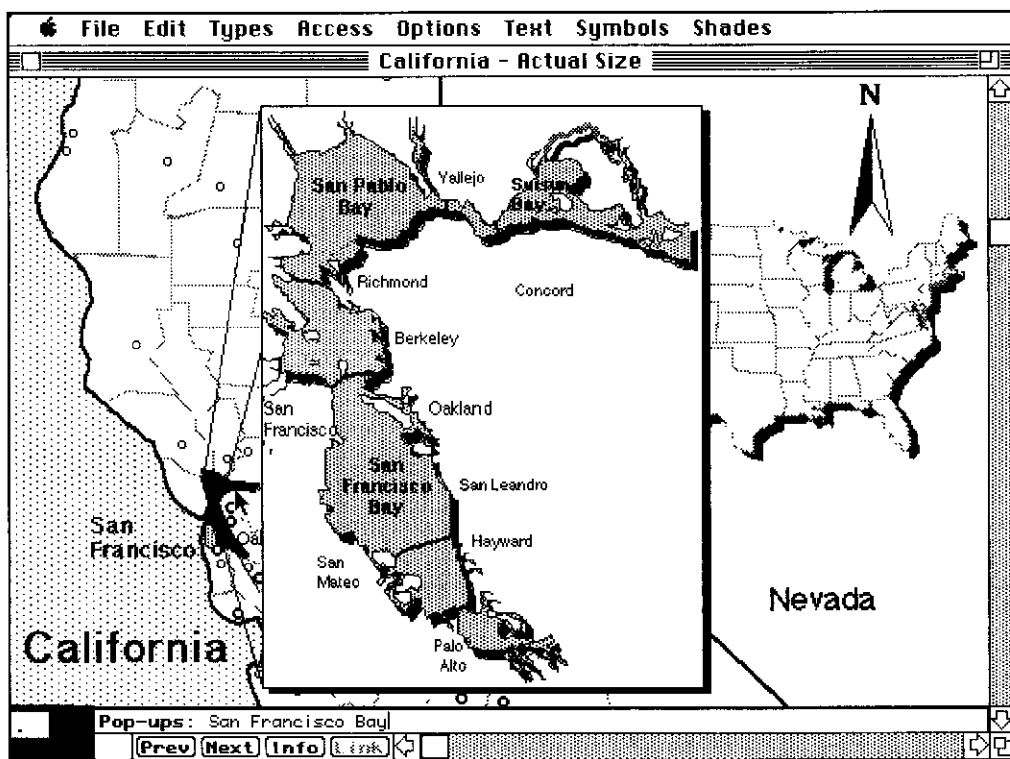


Under normal circumstances, your drawing page will have many different objects that will make it difficult to work on the pop-up. The easiest way to create a pop-up is to select the object that will become the **button** and clear the rest of the drawing page by selecting **Show Only These** from the **Access** menu. (See Hiding and Showing objects, page 149.)

Now that you have a clean drawing page with only the pop-up button showing, you can create your pop-up object or group of objects.

The following example is a pop-up of a detailed view of San Francisco bay. It could contain highways, points of interest, camp grounds or anything required to enhance your file.
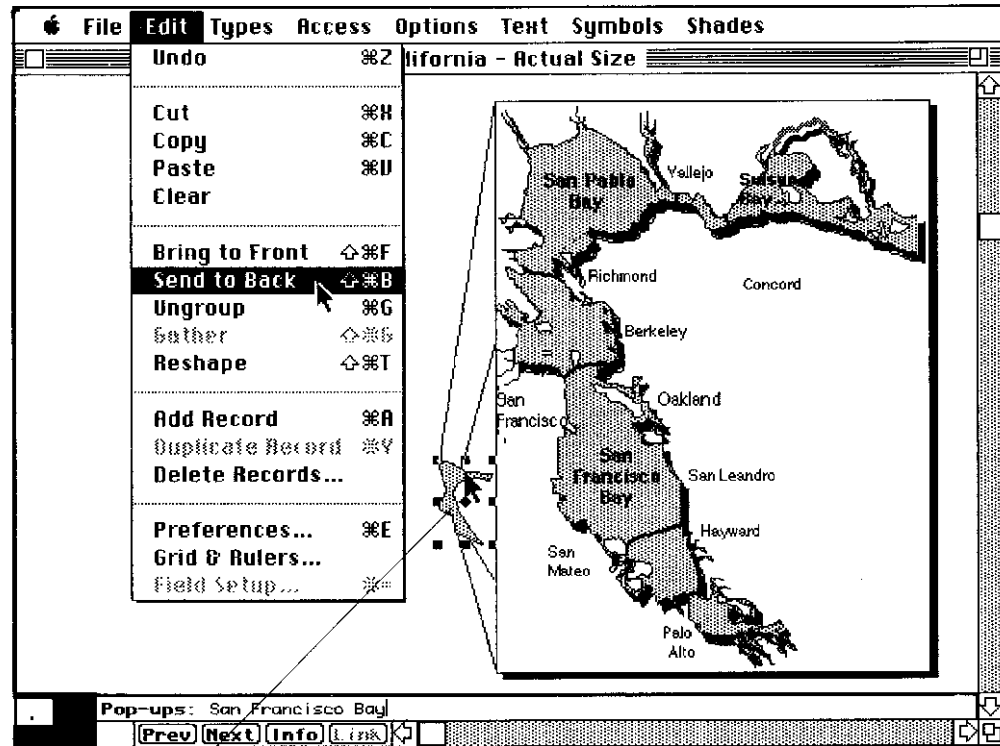


button

- To create a pop-up, select the graphic or group to act as the button and choose **Send to Back** from the **Edit** menu.

- After you finish the pop-up illustration, with all objects selected other than the button, choose **Bring to Front** from the **Edit** menu.
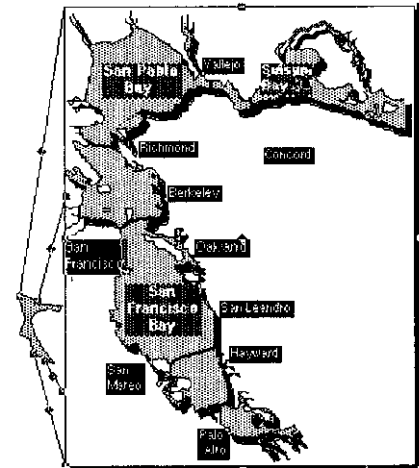
- Now select the button along with the object(s) that will make up the body using Shift-click or by holding down the mouse button and drawing a dotted rectangle (marquee) around all of them.
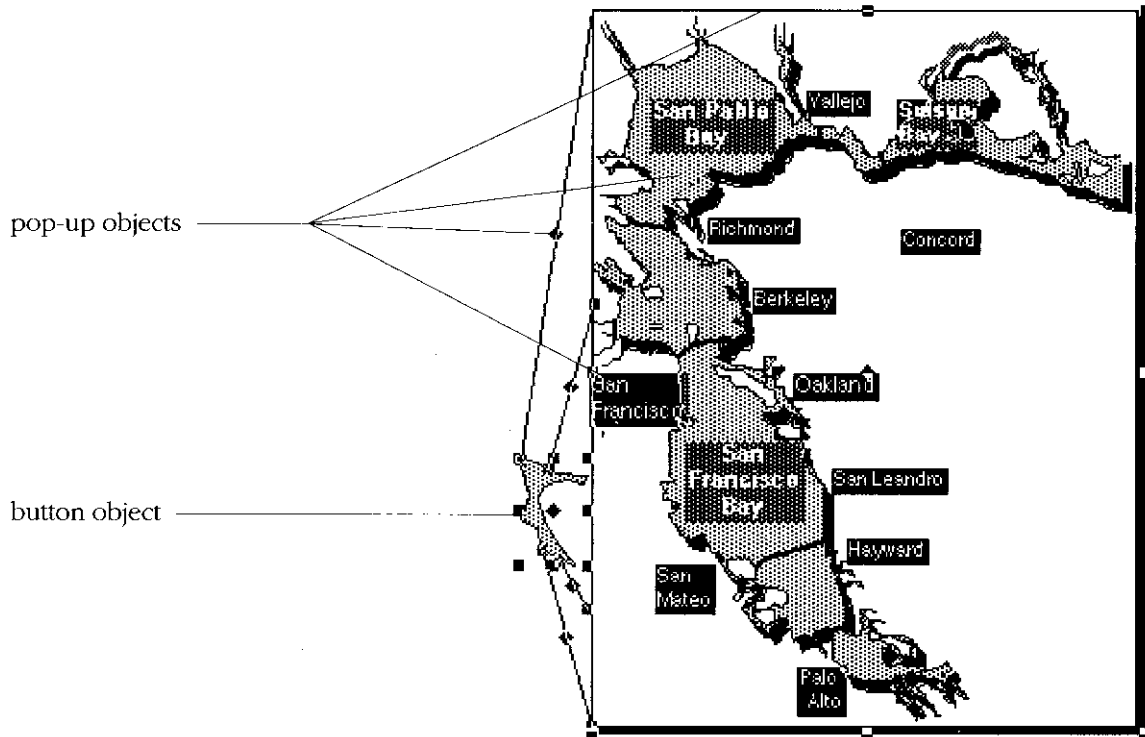


pop-up objects

button object

(For more information on selecting several objects at once, read the sections beginning with "selecting several neighboring objects with the pointer", page 109.)

- While holding down the **Command** (⌘) and **Shift** keys, choose **Group** from the **Edit** menu.

It won't work if you hold down the Command and Shift keys after you choose Group from the Edit menu.

- While the grouped pop-up is still selected, choose **Bring to Front** from the **Edit** menu.

This will make sure that you are able to select the pop-up button and that some other glass object is not resting over it.

- Click the pointer tool to deselect the pop-up, and everything but the button will disappear.

Part 5. Pop-ups    145

If only one of the graphics has a record, that record becomes the pop-up's record. If there is more than one record among those selected, you will not be able to group the objects into a pop-up.

The body of a pop-up is unselectable, and you can't make it into the button for another pop-up. Also, none of the objects within a pop-up are selectable which prevents their use as buttons for other pop-ups.

## restoring a pop-up

Any pop-up can be restored to its individual parts quite easily.

• Select the pop-up by clicking its button.

• Choose **Ungroup** from the **Edit** menu,

## moving a pop-up

When you move the button of a pop-up, the body stays behind.

• To move the button and the body of a pop-up at the same time, click the button.

The body of the pop-up appears.

• Choose **Ungroup** from the **Edit** menu.

• Choose **Gather** from the **Edit** menu.

A single set of handles appears around the objects.

• With the mouse down in any area of the gathered graphics except the outside handles, drag the graphics where you want them.

• While holding down the Command (⌘) and Shift keys, choose **Group** from the **Edit** menu to restore the pop-up.

# 6. Hiding and Showing Objects

**Hiding** and **Showing** objects on the drawing page is closely associated with the database portion of Filevision. All of the Hide/Show functions are selected from the **Access** menu, which is tied closely to the **Types** menu. In fact, the first item on the **Access** menu is the Type that is currently selected.

In the following example, the Jet Aircraft was drawn with its fuselage parts "stacked" which allows us to "peel" away elements of the aircraft and display only those that we want to view.
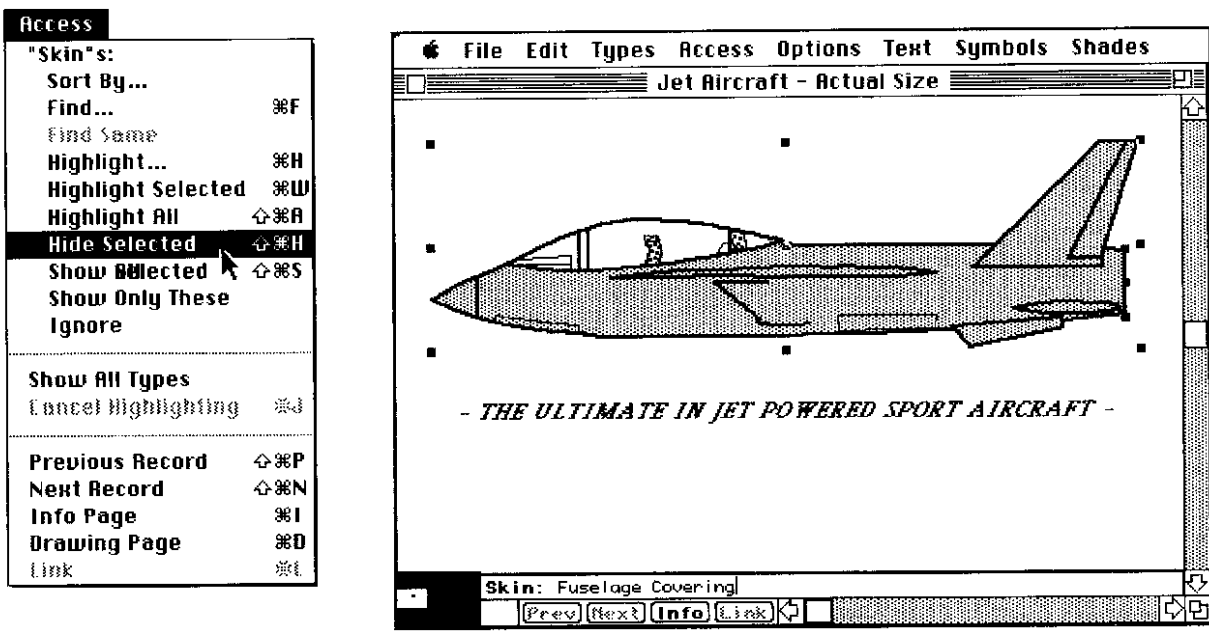


Notice that the fuselage covering is selected and the information area identifies the object and the Type. If the **Types** menu were opened, the Type **Skin** would be checked. This, in turn, controls what the **Access** menu will operate on.

- Open the **Access** menu. The first name in the menu surrounded by quotes is the current **Type** selected.

- With the object to be hidden selected, choose **Hide Selected** from the **Access** menu.

As soon as you release the mouse button, the following change has occurred to the drawing:
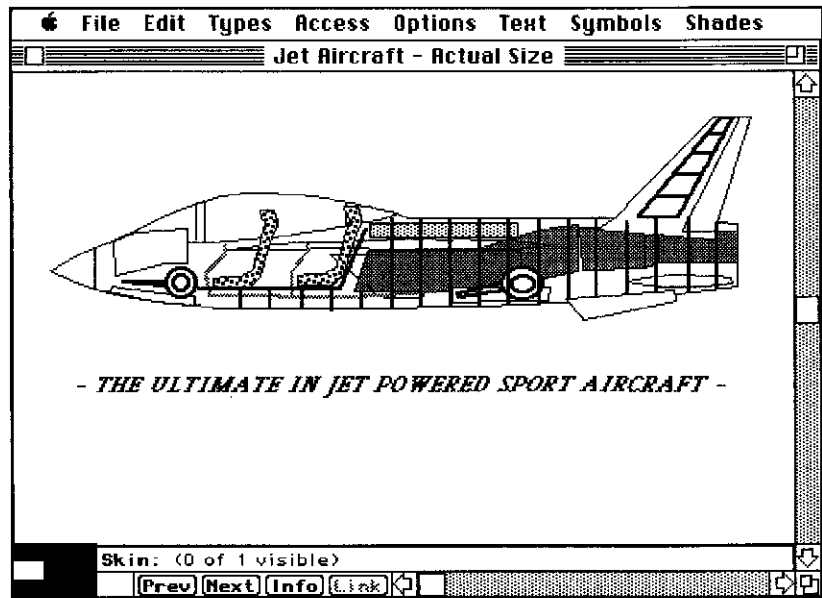


The skin has been "peeled" from the fuselage.

By using the various options from the Access menu along with the selection of specific objects and/or Types, a view of any one or group of objects is possible. The **Access** menu **Hide/Show** selections have the following basic functions:

If an object or objects are selected -

- **Hide Selected** will hide the currently selected object(s).
- **Show Selected** will show a selected object that was previously hidden. (Clicking the Prev/Next buttons or Find… can also show a hidden object.)
- **Show Only These** will show only the selected object(s) and will hide all other objects.

If no objects are selected -

- **Hide All** will hide all objects of the currently selected Type.
- **Show All** will show all objects of the currently selected Type.
- **Show Only These** will show all objects of the currently selected Type and will hide all objects of all other Types.

**Show All Types** will always show every object that has been created.

If you wanted to show the aircraft frame and fuselage without showing any other objects:

- Select **Frame** from the **Types** menu.

- Select **Show Only These** from the **Access** menu.

- Select **Fuselage** from the **Types** menu.

- Select **Show All** from the **Access** menu.

The result would be the following:
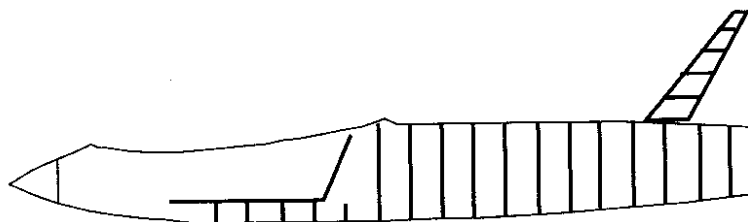


## creating a blank drawing page

It is easy to erase (hide) all objects from the drawing page in two steps.

- Select any object and then **Show Only These** from the **Access** menu.

Only the object selected is showing.

- Return immediately to the **Access** menu and choose **Hide Selected.**

The result is a blank page.

## Hiding and Showing some or all objects of a Type

You can hide some or all objects of the current Type. Hiding causes the objects of that type to disappear from the drawing page, but they remain in the file and you'll still see their records on the Info page.

You can also select hidden objects by using the **Next**, and **Prev** buttons, or by using **Find...** or **Highlight....**

- Choose the Type of objects you want to hide from the **Types** menu.

- Choose **Hide All** from the **Access** menu.

The objects disappear. You can make them reappear anytime.

- To reveal any hidden objects, choose the Type you want shown from the **Types** menu, then choose **Show All** from the **Access** menu.

**Hide All** will become **Hide Selected** if any objects are selected and will work accordingly. Hiding and Showing are overridden by Highlighting.

## showing only one Type

You can hide all of the objects in the file except those of one Type with **Show Only These**.

- Choose the Type you want shown from the **Types** menu.

- Choose **Show Only These** from the **Access** menu.

All the objects except those of the selected Type disappear.

# 7. Importing and Exporting Graphics

The ability to import and export graphics created either by Filevision or another drawing program provides considerable flexibility in creating a Filevision file. Graphics can be imported directly from a separate graphic file into the drawing page, an Info page field or a Print Layout field.

## Importing graphics

To import a graphic:

- First decide if the graphic is to be imported to the drawing page, the Info page or Print Layout and select that page.

Importing to the drawing page requires no special considerations.

- In the Info page or Print Layout, provide a field for the graphic to be imported to. (See Creating A Type in the next section, page 163 or Printing Reports, Forms & Labels, page 240.)

```
┌─────────────────────────┐
│ File                    │
├─────────────────────────┤
│ New...              ⌘N  │
│ Open...             ⌘O  │
│ Close  Import/Export    │
│ Save                ⌘S  │
│ Save As...              │
│ Return to...        ⌘;  │
│·························│
│ Import Graphics...  ▶   │
│ Export Graphics...      │
│ Import/Export Text...   │
│·························│
│ Page Setup...           │
│ Page Size...            │
│ Print Page          ⌘U  │
│ Print Records...    ⌘P  │
│·························│
│ Quit                ⌘Q  │
└─────────────────────────┘
```

The following applies to importing either to the drawing page or the Info page:

- From the **File** menu, select **Import Graphics...**.

# 7. Importing and Exporting Graphics

The ability to import and export graphics created either by Filevision or another drawing program provides considerable flexibility in creating a Filevision file. Graphics can be imported directly from a separate graphic file into the drawing page, an Info page field or a Print Layout field.

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Importing to the drawing page requires no special considerations.

- In the Info page or Print Layout, provide a field for the graphic to be imported to. (See Creating A Type in the next section, page 163 or Printing Reports, Forms & Labels, page 240.)

```
┌─────────────────────────┐
│ File                    │
├─────────────────────────┤
│ New...             ⌘N   │
│ Open...            ⌘O   │
│ Close Import/Export     │
│ Save               ⌘S   │
│ Save As...              │
│ Return to...       ⌘;   │
├─────────────────────────┤
│ Import Graphics...  ▓   │
│ Export Graphics...      │
│ Import/Export Text...   │
├─────────────────────────┤
│ Page Setup...           │
│ Page Size...            │
│ Print Page         ⌘U   │
│ Print Records...   ⌘P   │
├─────────────────────────┤
│ Quit               ⌘Q   │
└─────────────────────────┘
```

The following applies to importing either to the drawing page or the Info page:

- From the **File** menu, select **Import Graphics...**.

The Import dialog will be displayed.

```
┌─────────────────────────────────────────────┐
│  ┌───────────────────┐                        │
│  │  🖾 Map PICTs   │                        │
│  ├───────────────────┐  ⇧    ▭ HD80         │
│  │ 🗋 Change Type PICT │                      │
│  │ 🗋 Combo Map PICT   │      ┌──────────┐     │
│  │ 🗋 Highlight PICT   │      │  Eject   │     │
│  │ 🗋 Income Info PICT │      └──────────┘     │
│  │ 🗋 Report PICT      │      ┌──────────┐     │
│  │                    │      │  Drive   │     │
│  │                    │      └──────────┘     │
│  │                    │      ┌──────────┐     │
│  │                    │      │  Import  │     │
│  │                    │ ⇩    └──────────┘     │
│  │                    │      ┌──────────┐     │
│  │                    │      │  Cancel  │     │
│  └───────────────────┘      └──────────┘     │
│  ◉ PICT   ○ MacPaint   Import as:             │
│  ○ EPSF                ◉ Single PICT          │
│                        ○ Discrete Objects     │
└─────────────────────────────────────────────┘
```
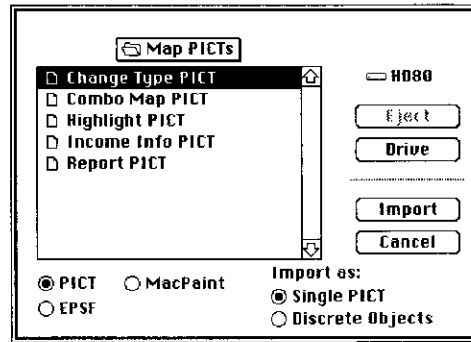
Notice at the bottom of the dialog box that there are several radio button options. The currently selected buttons are **PICT** and **Import as: Single PICT.**

- Select the type of graphic to be imported by clicking on the appropriate radio button at the bottom of the dialog box.

If you select the PICT format, you will also have the option to Import it as a single PICT or as discrete objects.

- Select the file to be imported and click the **Import** button.

As soon as the file has been read from disk and is ready to be placed, the pointer cursor will change to a right angle cursor with an arrow:

- Move the right angle cursor to the upper left corner of where you want the graphic placed and click the mouse button.

The graphic flows onto the screen from where you positioned the right angle cursor down and to the right. The graphic remains selected so that you can adjust its position.

If you have imported a **PICT** and selected **Import as: Discrete objects**, each of the objects contained in the PICT will be separated (ungathered) from the original gathered image as soon as you deselect the image.

## Exporting graphics

To export a Filevision graphic to a separate file:

- Select the graphic or group of graphics to be exported by clicking on it or selecting all objects to be exported.

- Choose **Export Graphics...** from the **File** menu.

The following Export dialog will be displayed:

```
┌─────────────────────────────────────────────┐
│   ┌─ FreeHand Folder ─┐                      │
│   │ □ Filevision3    ⇧│      ▭ HD80          │
│   │ □ Filevision4     │   ┌─────────┐        │
│   │ ☆ FreeHand        │   │  Eject  │        │
│   │ □ MacSE&Map.FreeH │   ├─────────┤        │
│   │ □ SE & 1.5BouFreehand│ │  Drive  │        │
│   │ □ SE & 1.5BouFreeha...⇩│ └─────────┘      │
│   Save As:                ┌═════════┐        │
│   ┌───────────────────┐   ║ Export  ║        │
│   │Untitled           │   └═════════┘        │
│   └───────────────────┘   ┌─────────┐        │
│                           │ Cancel  │        │
│   ○ PICT                  └─────────┘        │
│   ● EPSF                                      │
└─────────────────────────────────────────────┘
```
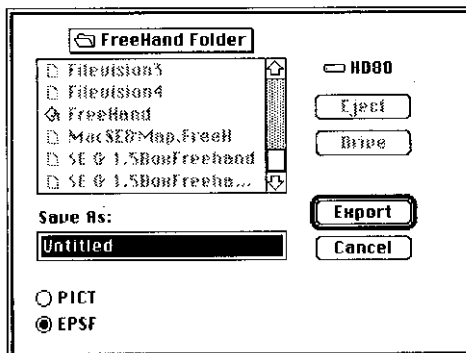
If you have an EPSF graphic selected to export, the option of exporting it either as a **PICT** or as an **EPSF** is provided. Non EPSF graphics can only be exported as PICTs.

- Enter a file name to export the graphic object(s) to and click the **Export** button.

You can export graphics either from the drawing page, from an Info record or Print Layout field. As soon as the graphic export has finished, you will be returned to either the drawing page or the Info page depending on where you selected the graphic to be exported from.

## Graphic formats

Filevision imports three basic graphic formats:

**PICT** which is a MacDraw or object oriented type graphic,

**MacPaint** which is a bit mapped or pixel mapped graphic

and

**EPSF** which is an encapsulated PostScript format graphic.

## PICTs

PICTs are the most common graphic format that you will be using in Filevision . These graphics are interpreted by the Macintosh QuickDraw routines as a series of individual objects (circles, squares, symbols, lines, text, etc.) that lend themselves to the basic operation of Filevision. Each individual object in a PICT can be attached to an Info page record. This supports the basic Filevision function.

## QuickDraw PICTs vs PostScript (EPSF)

This discussion of QuickDraw PICTs versus PostScript EPSF only "scratches the surface" but should be enough for a better understanding of the **Import** and **Export** features and using these graphics in Filevision.

There are two basic methods that an object (text or graphic) is processed by the Macintosh, with QuickDraw which is a function of the Macintosh operating system or with PostScript which is used by high resolution devices such as the LaserWriter for reproducing these same objects. Any object that is printed on a Macintosh screen is created by QuickDraw. The ImageWriter and other dot matrix type printers also rely on QuickDraw.

The best resolution that QuickDraw is capable of is 72 pixels (dots) per linear inch (5,184 per square inch) and regardless of the device that QuickDraw is sending to, the output will not exceed 72 dpi (dots per inch). On the other hand, PostScript is considered to be device independent and the resolution of PostScript output is determined by the device that is doing the printing. This also assumes that the printing device has a PostScript interpreter (as does the LaserWriter).

When sending object (squares, circles, shapes, etc as opposed to bit mapped) information to a PostScript type of printer or other device, PostScript interprets QuickDraw commands and creates high resolution output. When sending PostScript data to a QuickDraw device such as your monitor, QuickDraw relies on a PICT that should have been created when the PostScript image was first drawn. If that PICT was not created, QuickDraw would have nothing to display except the text code that makes up the PostScript instructions.

The most common PostScript output will be seen with the LaserWriter which yields a 300 dpi resolution. That same PostScript object can be output by other higher resolution devices that are capable of greater than 2,500 dpi.

The PostScript graphics used by Filevision are of the Encapsulated PostScript Format (EPSF) type which is a method of storing these PostScript generated graphics as separate "reusable" images. Most PostScript illustration programs and scanners use EPSF in saving the information generated.

## TIFF graphics

TIFF (Tag Indexed File Format) is another method for saving the same image. Filevision does not support TIFF graphics.

## QuickDraw and Postscript print comparison

The following swallowtail butterflies illustrate the basic difference between QuickDraw and PostScript output:



ImageWriter & Screen output at 72 dpi
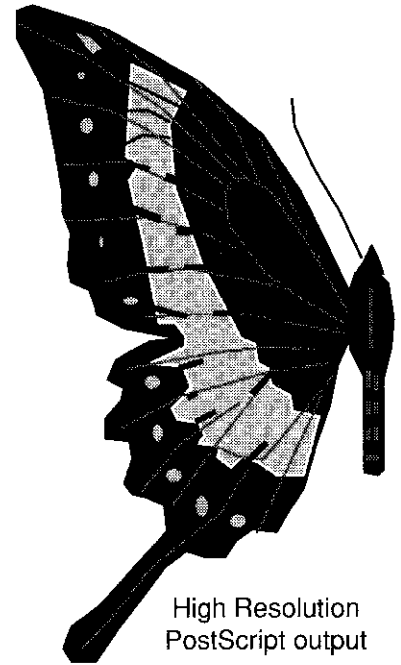
High Resolution PostScript output

## MacPaint or bit mapped graphics

The third type of graphic image that can be imported directly from a separate file is a MacPaint format. MacPaint type graphics are bit mapped (aka pixel mapped) which can't be interpreted as discrete objects and are essentially produced by turning pixels on and off, one pixel at a time and one row at a time over the entire 8 x 10 drawing page. Reproduction of MacPaint type graphics is by printing each pixel as it appears on your screen.

## Version 1 vs Version 2 color pictures

In general, graphics created in Filevision will be similar to object oriented QuickDraw version 1 PICTs. Version 1 pictures support a palette of eight basic colors in Filevision. Objects created in Filevision will actually be created in Filevision's PicB format which can be converted to the version 1 PICT when exported for use with other Draw type programs. The PicB format includes other information to accommodate the object to record association of Filevision.

The Macintosh II (and subsequent models) will support an enhanced type of color and gray scale video display know as Color QuickDraw or version 2 color. Version 2 PICTs support a palette of 256 colors or gray shades as of this writing. This will increase as hardware devices are developed to use the added colors and gray shades.

The main difference between version 1 (QuickDraw) and version 2 (Color QuickDraw) graphics is in the way they are represented by the Macintosh II's video boards and monitors. While the screen display of version 1 graphics is in the form of bit mapped images (72 dpi), version 2 provides what is known as pixel mapped images. Pixel mapped images are in the same 72 dpi resolution with the exception that each pixel is provided with much more information.

Whereas version 1 supplies information to each pixel for the display of eight basic colors, version 2 is designed to supply information for up to 256 colors and gray shades ($2^8$) per pixel. This could change in the future as hardware is enhanced. QuickDraw is designed to handle a potential of $2^{48}$ colors and gray shades per pixel.

Most scanners available for use with the Macintosh are able to scan in various degrees of "gray scale". These images, when imported in Filevision (while being used with a Macintosh II), will be displayed in gray scales that result in a photographic quality image. The LaserWriter printer is also capable of printing a fairly accurate representation of these gray scale images.

While Filevision cannot create version 2 pictures, it can import these images and will usually display them in their original colors or gray scale on a Macintosh II. This depends on how the version 2 pictures were stored by the program that was used to create them. Unfortunately, as of this writing there has been no accepted standard developed to store all version 2 pictures in the same way.

Even though Filevision will display version 2 pictures created by another program in the full palette of 256 colors, any version 2 picture imported into Filevision will be converted to the version 1 format as a single PICT object. Importing a version 2 picture will evoke the following alert dialog:



**This Picture is a version 2 PICT.**

**Only version 1 PICTs can be decoded by Filevision IV. This PICT will be imported as a single object, not as Filevision IV discrete objects.**

OK
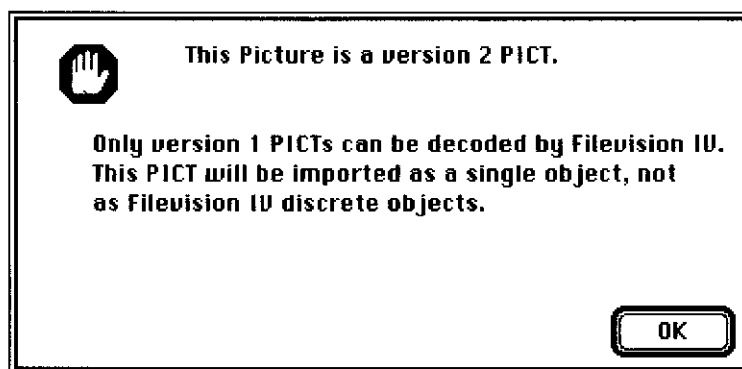
## Filevision's graphic object format

All graphic objects used in Filevision are created in, or must be converted to the Filevision format which is known as PicB. This is necessary due to the nature of Filevision as an object oriented database. In Filevision, all objects entered on the drawing page must carry additional information which provides the linking information to the Info page record.

An explanation of the way that graphics are imported into, are treated while being used by, and can be exported from Filevision follows:

## imported MacPaint

Imported MacPaint graphics become single object Filevision PICTs and can only be exported as single object PICTs. Their bit mapped identity is lost unless converted back to a bit map by another program. When these graphics are exported from Filevision, they are exported in PICT format and can only be recognized by programs that accept PICT format.

MacPaint graphics that are exported via the Clipboard will retain their bit mapped identity if pasted directly into a Paint type program. The printout of these graphics is only supported in 72 dpi (bit mapped) regardless of the printer resolution.

## imported version 1 PICTs

Version 1 PICTs can be imported either as one single PICT or as discrete objects. Discrete objects allows the use of any object making up the PICT to be used to link to its own record in the Info page. A single PICT object, which brings all of the individual objects in as one object will have only one record in the Info page. This can reduce the size of a file considerably if the individual elements of the PICT serve no purpose in the file.
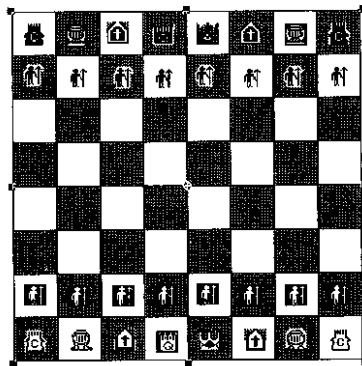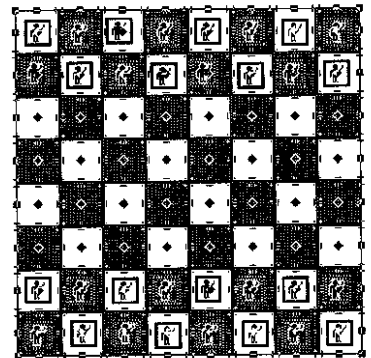


Single PICT                                        Discrete Objects

Version 1 PICTs either generated by or imported into Filevision can be exported as discrete objects (if originally imported as discrete) and can be used in or modified by any program that recognizes the version 1 PICT format.

When importing a PICT as a single PICT, all lines and shading will be as origi-
nally created. If the PICT is imported as discrete objects, Filevision will try to
match the lines and shading of each object from the current palettes. If a
matching shade can't be found, the object will be shaded in Glass which can be
changed later as required.

Version 1 PICTs can be interpreted by a PostScript output device and will yield
the highest resolution provided by that device.

## imported
## version 2 PICTs

Version 2 PICTs can be imported as a single object version 1 PICT. The version
2 extended color and gray scale may or may not be displayed by Filevision.
Once imported into Filevision, version 2 PICTs become version 1 single object
PICTs and can only be exported as such.

## imported
## EPSF graphics

EPSF graphics can be imported only as a single objects and can have only one
linked record per graphic. As the Macintosh monitor will not display an EPSF
image, a PICT is created to represent the EPSF graphic when the graphic is first
created. This PICT is also imported along with an EPSF text file that describes
the image. Unfortunately, if a PICT was not created by the original source of the
EPSF (which is sometimes the case), Filevision will not be able to import the
EPSF.

PostScript is a programming language that was developed expressly for the
enhanced creation and reproduction of printed images. This can be either
graphics or text. The advantage of using PostScript is the ability to manipulate
images with much greater flexibility and with much finer detail. High resolution
EPSF scanner files can also be used by, stored in and printed with Filevision.
This provides much higher quality output when these scanned images are used
by Filevision.

## converting an
## EPSF to a PICT

The EPSF image is made possible by a PostScript text code file that is used to
define the image. As a PICT image was created for the PostScript file to create a
displayable image for the screen, Filevision offers the option to export the EPSF
in its full PostScript form or as a single object PICT.

If a high resolution printout of the image is not required, the file can be reduced
in size by eliminating the PostScript code from the file. Converting an EPSF to a
PICT can reduce the file size by several kilobytes.

To convert an EPSF to a PICT:

- Either import the EPSF to Filevision or select an existing EPSF in
Filevision to be converted.

- Choose **Export Graphics...** from the **File** menu.

- Click the **PICT** radio button (if not already selected).

- Click on the **Export** button.

After the graphic has been saved, delete the EPSF graphic from Filevision and;

- Choose **Import Graphics...** from the **File** menu.

- Click the **PICT** radio button.

- Select the graphic that was just exported as a PICT.

- Click the **Import** button.

Place the graphic as before and the conversion is done.

## Integrated Imaging

The ability to import high resolution scanned images onto the drawing page or into an Info page field provides the essence of integrated imaging. This means that any detailed photograph, a hand written or other document requiring a confirming signature, charts, graphs and other graphic materials necessary to provide a particular solution for most any application, is now possible.

For instance, setting up a security system that requires a high quality photograph and personal information, sample signatures and other identification for authorized personnel is possible with Filevision, a Macintosh II and access to a high quality gray scale (or color) scanner.

Maintaining an auto insurance claims adjustment application would be a simple matter to set up and operate with Filevision. Damage photos, handwritten adjuster's reports, accident location maps and any other visual information necessary to the claim is accepted by Filevision's integrated imaging capabilities.

## the use of imported standard company forms

One of the many uses of Filevision is the ability to import scanned standard forms in common use by a company. The form can be pasted into an annotation field (see Adding Annotation fields, page 167) and data entry fields can then be placed over the active entry areas of the form.

This creates an easy transition from manually processed standard forms to computer processed forms without the necessity to change documents that have been in use for years. Personnel using these forms require little to no training to convert to the computer.

scanned company standard form

hidden field names and hidden field borders

The process for importing and using standard forms is covered in Part 8: Creating A Type.

## Import and export via the Clipboard

The import or export of Filevision information through the Macintosh Clipboard is not obvious and requires some explanation. Unlike the standard method that other Macintosh programs use to "copy and paste", any object that is copied from the Filevision drawing page carries the information in its record with it. This has its advantage and disadvantage.

The advantage is the ability to copy not only the objects of a Type but to also copy all of the information entered into the records for those objects. This allows a simple way to transfer information from one Filevision file to another or from one Type to another. If you were to select four graphic objects, with each of the four records containing five fields of data, all twenty separate fields of information along with the graphics would be copied to the Clipboard.



drawing page

objects selected for copying

records included for copying with the objects

Info page

If you then paste the contents of the Clipboard into a new Filevision file having the same Type and record layout, all four objects, four records and twenty fields of information would be transferred. The new file would have exactly the same records and information as the original file. This is also true if you copy from one Type to another in the same file.

The disadvantage arises when attempting to copy a large number of objects and their records. This depends on the amount of information that has to be handled by the Clipboard. Copying 500 objects, each with 500 records having 100 fields could take a fair amount of time. Filevision does not keep all of the records of a file in memory at one time. When copying to the Clipboard as described here, every record must be read into the Clipboard from your disk which takes considerably more time than reading from memory.

## using the Scrapbook to store Filevision IV Types

While copying to the Clipboard may require more time than expected, pasting the contents of the Clipboard to the Scrapbook will take considerably longer. Unfortunately, if you attempt to paste a large file to the standard Macintosh Scrapbook, the program may hang as the Scrapbook works with a limited amount of storage. There are third party Scrapbooks available for the Macintosh that will provide much more space for storage than the Macintosh's Scrapbook.

These problems in working with the system Clipboard and Scrapbook are problems that can't be resolved from within Filevision. Once the Macintosh system takes over the copy and paste functions, no software provision is offered to break out of them. A hardware reset (turning off the computer or pressing the reset button) is the only alternative.

The time required may lead you to believe that the computer is "hung" (not performing the copy function and not releasing the computer back to you). This means that you would have to press the hardware reset button or turn off the computer to regain control as there is no other way to stop a copy or paste in progress. If you break out of the program in this manner, you always risk damaging your file.

It would be advantageous to be able to provide some guidelines as to what constitutes too large a file to attempt this copy and paste procedure. Unfortunately, there are far too many variables involved to be able to do this. The best way to determine how your file and hardware will perform under these conditions is to give it a try with a limited number of objects and records. However much time it takes for any given number of records will be about doubled if twice the number were to be attempted.

## transferring large groups of objects and records

Where a large amount of information is contained in the records of objects to be copied and transferred to another file, use the following procedure:

- First select the objects to be transferred.

- Using the **Export Graphics...** option from the **File** menu, export all objects to a PICT file.

- Using the **Import/Export Text...** option from the **File** menu, create an intermediate Export file.

This will separate the record's text information from the object's graphic information.

- Import the graphic **PICT** file using **Discrete Objects** and the text intermediate file into the new Filevision file using the standard procedure described in Part 10: Importing and Exporting Text, page 188.

- After the graphic objects and records have been imported, re-attach each object to its record by first selecting the record and while holding the Shift key, select the record's object and **Group** the two.

## using the Clipboard with graphic objects

Importing discrete object PICTs through the Clipboard, created by programs other than Filevision, will bring those images in as one object.

In other words, if you have access to a map with all 50 states drawn as individual objects in a Draw type program, copying the map graphic and pasting it through the Clipboard into Filevision will yield a single graphic object. Each of the discrete objects will have been combined into one large object.

To insure that any multiple object PICTs created in other Macintosh programs retain their separate object identities, always import the PICT using the **Import Graphics...** option from the **File** menu.

## copying or exporting more than one EPSF combined graphic at a time

Filevision does not provide the ability to combine more than one EPSF graphic and to copy the combination to an Info page or Print Layout field. Also, EPSFs cannot be combined with other PICT objects. This is also true when attempting to export more than one EPSF or an EPSF and any other object to a single EPSF file.

# 8. Creating a Type

This section explains how to add a new Type to your file. When you add a new Type you design the layout of its records; it's like designing a new form for use in your office.

You can always change the layout of Filevision records even after you've entered data into some of them. It's like being able to change the forms for your employee records after you've added information to them, without having to reenter the data from records that were used before the format was changed. Filevision "reenters" the data automatically when you change Type layouts.

You enter information into the records (for instance, employee names and numbers) only after you've created or edited the Type layout; see page 177, "Adding Information", for details.

## Adding a type

NOTE: You can change the background shade of any layout screen from the Shades menu.
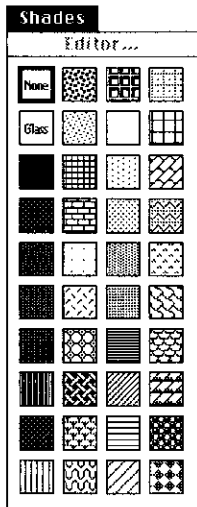
When you add a Type, you first create a Type layout by adding and placing fields, which act as placeholders for individual pieces of information. Every record for a Type uses the same Type layout; only the information in the fields differs.

- Choose **Add Type...** from the **Types** menu. The **Add Type** display will appear.
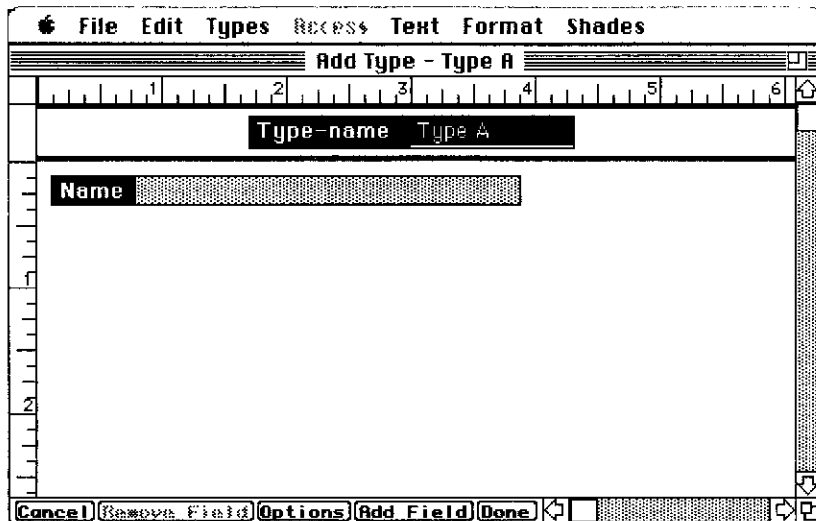
Note: Because every object in a file must be of some Type, when you begin work on a new file the Type Background is already supplied. It's no different from any other Type, so you can change its Type layout, rename it, or remove it completely . However, if Background is the only Type, it can't be removed. One Type must always remain.

## naming a type

Filevision automatically supplies a name for each new Type, but you're encouraged to change it to a more meaningful one.

- On the **Add Type** display, enter the new name in the **Type-name** box. The name can't be more than 15 characters long (a character is any letter, number, a space, or punctuation mark).

| Type-name | Patient |
|-----------|---------|

## adding a data field

- At the bottom of the **Add Type** window, click the **Add Field** button.

A dialog box appears:

| Cancel | Annotation Field | Data Field |
|--------|------------------|------------|

- Click **Data Field**.

A field appears in the middle of the display.

- Point at the move handle on the top of the field and, holding the mouse button down, move the field where you want it. Click anywhere outside the field to deselect it when you're happy with its location.
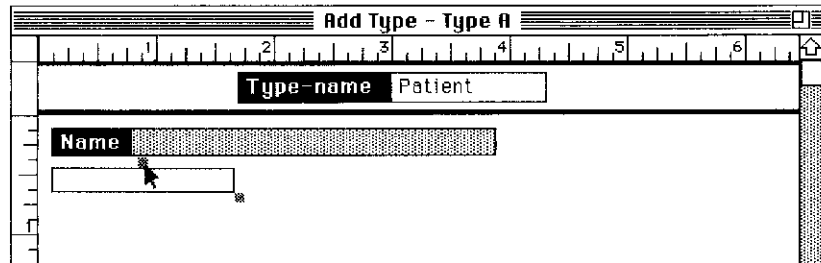
You can have up to 255 fields in each Type layout.

The Type layout is much bigger than the part you see on the display. It's 30" wide and 30" high. You can open the window to the full size of your monitor by clicking on the zoom box or by dragging the resize box.



zoom box
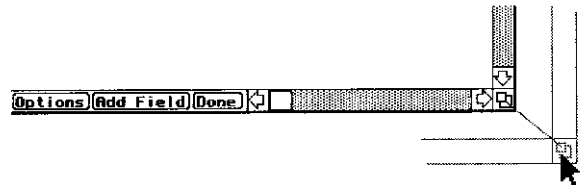
resize box

- Use the scroll bars at the bottom and right of the window to bring its other portions into view:



scroll arrow

## naming a field

- On the **Add Type** display, select the field you want to name by clicking anywhere on the field.

- Type in the field's name, then deselect the field by pressing enter or tab, or by clicking somewhere else on the layout.



First name

Field names can't be longer than 31 characters. You can change the size of the field name by holding down the Option key and typing "hard" spaces after it. Also, it is not necessary to name a field if you have a particular reason not to.

## changing the size of a field

When you add a field, it is given a standard size. You can change the size of the field anytime using the following method:

- Select the field.

Two handles appear on it, a move handle at the top and a stretch handle at the lower right:

First name

- Point at the stretch handle and, holding the mouse button down, stretch the field to the size you want it to be.

First name

You can also pull the field downward to make it several lines deeper.

First name

Fields can be increased in size up to 10" wide by 30" high.

- Click anywhere on the background to deselect the field.

Fields can be stacked or overlapped.

First name

Middle Initial
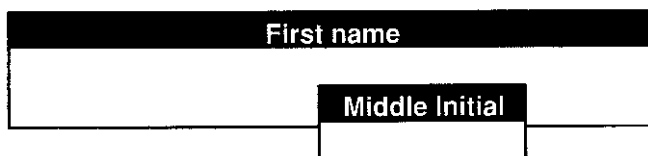
## moving a field

- To move a field, first select it.

- Point at the move handle and, holding down the mouse button, drag the field where you want it.

- Release the mouse button when you're satisfied with your placement of the field.

## moving several fields together

Several fields can be moved at one time by first selecting them with a marquee. After all fields to be moved are selected, mouse down on any of the move handles and drag to the new position.

first select fields by dragging a marquee around all fields

| Name |
| First Name |
| Social Security Number |

| Name |
| First Name |
| Social Security Number |

grab any move handle and drag to the new position

| Name |
| First Name |
| Social Security Number |
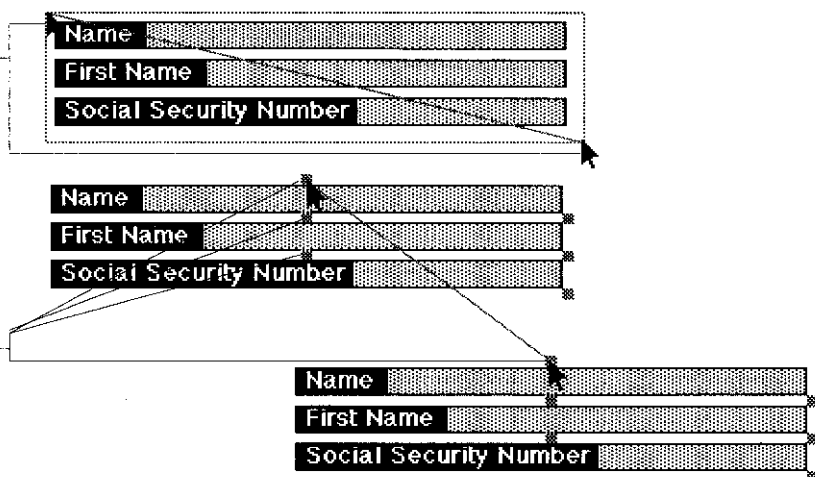
## removing a field

- On the **Add Type** display, select the field you want to remove.

- Click the **Remove Field** button.

The sort (Name field in these examples) and **Link** fields can't be removed. You can hide the **Link** field using the **Options** dialog on the **Add Type** or **Change Layout** displays. **Link** fields will be covered in this section under Options.

Keep in mind that if a field's name is used in a formula, removing the field will make the related formula field useless. A dialog box will warn you if that happens.

## adding an annotation field

You can add "annotation fields" to the Type layout; fields that display the same thing in every record. They're handy for directions to the person entering information into records or to show the same picture or text in each record.

- To add an annotation field, click the **Add Field** button.

The Add Field dialog box appears:

| Cancel | **Annotation Field** | Data Field |

- Click **Annotation** field.

A field appears, but the option to assign the field a name is not available as annotation fields can't be named.



- Type in the information you want to appear in each record,

or

- Paste in a picture from the Clipboard,

or

- Import a graphic from any PICT, EPSF or bit mapped file.

Annotation fields, unlike data fields, remain the same for every record and can only be changed when first adding a new Type or when in Change Layout. The annotation field is used to add repeating information, logos, standard forms or other information common to all records.
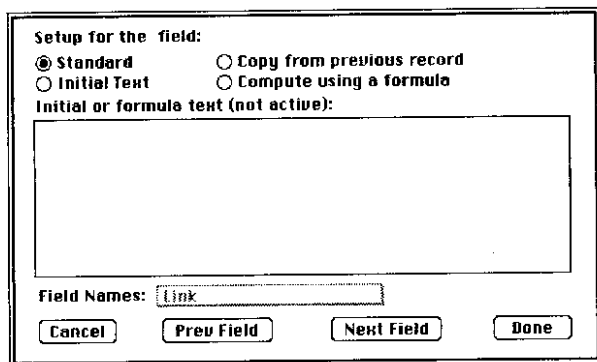
The following example is of a standard form pasted into the annotation field with hidden name active data fields overlapping for data entry.

## Field setup

Fields are where you enter data in a record. Normally you enter data using the keyboard and editing tools—Cut, Copy, Paste, and Clear. The standard field setup requires no special preparation and accepts text, numbers, and pictures.

Filevision also provides three methods of automatic data entry: initial text fields, copying the field contents from the previous record, and formula fields. You give fields these attributes with the field setup dialog, as explained below.

```
Setup for the  field:
● Standard          ○ Copy from previous record
○ Initial Text      ○ Compute using a formula
Initial or formula text (not active):

┌──────────────────────────────────────┐
│                                        │
│                                        │
│                                        │
│                                        │
│                                        │
│                                        │
└──────────────────────────────────────┘

Field Names: [ Link                    ]
[ Cancel ]   [ Prev Field ]   [ Next Field ]   [ Done ]
```

- Select a field while on the **Add Type**, **Change Layout** or the **Info** display, then choose **Field setup...** from the **Edit** menu, or double-click a field name from the **Info** display.

You'll see the field setup dialog box:
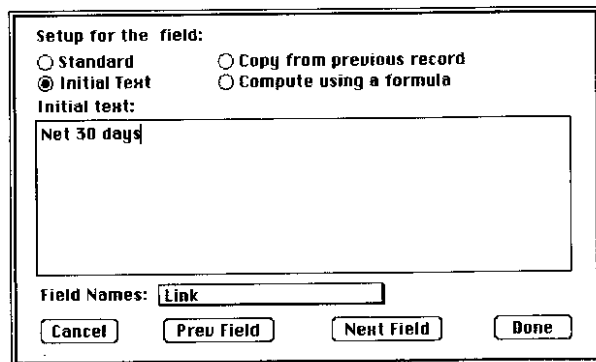
## standard fields

- Click **Standard** for unrestricted data or graphic entry.

- Click **Done**.

## initial text fields

- Click **Initial Text** to create a field that will automatically fill in the information you specify when a record is added.

An initial text field always starts with the same text each time a record is added using Add record. For example, if you want all records to have Net 30 days in the Terms field, you can use an initial text field.

```
Setup for the  field:
○ Standard          ○ Copy from previous record
● Initial Text      ○ Compute using a formula
Initial text:
┌──────────────────────────────────────┐
│Net 30 days│                            │
│                                        │
│                                        │
│                                        │
│                                        │
└──────────────────────────────────────┘

Field Names: [ Link                    ]
[ Cancel ]   [ Prev Field ]   [ Next Field ]   [ Done ]
```

Initial text fields can also display the system date and time in two different formats.

- Type in the information you want used as initial text.

You can also have the system date or time inserted automatically if you Type in these special characters:

## auto entering the date and time in fields

- Type **&D** to display the system date in long form (for example, **Tuesday, March 11, 1989**).

- Type **&d** to display the system date in short form (for example, **89/03/11**). The order is year/month/date.

This format for displaying dates allows you to use the date for comparisons in **Find...** and **Highlight....** conditions.

- Type **&T** to display the system time with seconds (for example, **10:32:14** or **14:00:03**

- Type **&t** to display the system time without seconds (for example, **10:32** or **14:00**

- Click **Done**.

Any time a record is added using **Add Record** from the **File** menu, the information you just typed in will appear automatically in that field.

Initial text can be edited like any other text.

If you change the initial text in the field setup after adding records, only records added after the change will be affected.

## copying the field contents from the previous record

- Click **Copy from previous record** if you want each new record to "inherit" the value that was in the same field of the last record.

- Click **Done**.

For example, if the **Batch number** field is given the **Copy from previous record** attribute, and you enter a batch number of 242, each time you click **Add Record** from the Info display, the new record will contain 242 in the **Batch number** field.

If you change the batch number in a record to 243, then each time thereafter that you click **Add Record** from the Info display, 243 will be entered into the **Batch number** field. Previously added records are not updated with the new value; it applies only to records added after the change.

## formula fields

- Click **Compute using a formula** to create a field that automatically enters a computed value based on the contents of one or more other fields.

Filevision does all the work—it calculates the value according to a formula you give it and enters the result into the computed field; you cannot enter information into a formula field directly.

- Type in the formula.

```
Setup for the Extended price field:
○ Standard              ○ Copy from previous record
○ Initial Text          ◉ Compute using a formula
Formula:
[Quantity]*[Unit price]




Field Names: [Unit price          ]
[ Cancel ]   [ Prev Field ]   [ Next Field ]   [ Done ]
```

A simple example of a computed field is shown to the left. It's the extended price on a purchase order. The extended price is the quantity purchased times the unit price. We're assuming that your Type layout already has fields named **Extended price**, **Quantity**, and **Unit price**.

- Click **Done**.

Note: There's an alternative to typing in field names used as part of a formula.

- Using the **Field names:** pop-up menu, select the field name to be entered into the formula. The name will be entered automatically with square brackets.

```
Setup for the Extended price field:
○ Standard              ○ Copy from previous record
○ Initial Text          ◉ Compute using a formula
Formula:
[Quantity]




                    ┌─────────────────┐
                    │ Extended price  │
                    │ Link            │
Field Names:        │ Quantity      ▶ │
                    │ Unit price      │
[ Cancel ]   [ Prev Field ]   [ Next Field ]   [ Done ]
```

Notice that square brackets appear around the field name when it becomes part of the formula. Any data field may be used as part of the formula regardless of the information that may be contained in that field. It would be up to the user to enter numeric information in fields that are part of a formula field.

The formula can contain up to 300 characters. If additional space is required, an intermediate field would have to be used to contain the additional information.

The Table 2-1 on the next page provides examples of the information that can be contained in a formula field.

**Table 3-1**     This table shows what you can use in a formula.

| Symbols | Examples |
|---|---|
| Arithmetic operators | + - / * |
| Numbers (up to 10 before the decimal point and 4 after) | 9,999,999,999.999 |
| Unary signs (in front of numbers) | -1453.54     +994.999 |
| Commas every 1,000 | 25,600.497 |
| [Field name] in brackets | [Order quantity] |
| Square root (Option-v) | √[Score average] |
| Parentheses (can be nested) | ([Retail]-[Wholesale]) |
| \|Absolute value\| of an expression | \|[Income]-[Delta]\| |
| Currency symbol | $25,000     33¢<br>¥250     £99 |
| Percent sign (multiplies the number in front of it by .01) | 40% |

Here are some examples of formulas:

[No. shipped] + [No. left in warehouse]

[Wholesale] * 140%

([Spoilage] + [Defective]) * [Unit price]

Notice that the slash (/) is used for division, and the asterisk (*) is used for multiplication.

**Options**     You're given a choice regarding the way the Link field and double-clicking an object from the Drawing display are used for all the objects of each Type.  The Add Type  display has an Options button that lets you make those choices:

## hiding and showing the link field

**Hide link field** conceals the link field on the Info display, but doesn't erase the field or its contents. **Show link field** restores the link field's visibility.

- To hide link fields of all of a Type's objects, click **Options** from the **Add Type** or **Change Layout** displays.

Options for this type:

- ◉ Hide link field
- ◯ Show link field
- ◉ Double-click goes to Info display
- ◯ Double-click goes to Link file

[ Cancel ]  [ Done ]

- Select **Hide link field** from the **Options for this Type** dialog.

- You can reverse it anytime by clicking **Show link field**.

- Click **Done**.

## double-clicking to the Info display or Link file

When you're creating a Type layout, Filevision assumes that when you double-click on a graphic, you'll want to see the Info (record) for that graphic.

But you can change the meaning of double-click. A double- click can mean instead that Filevision is to link to the file named in the **Link** field for that graphic.

This works on all the objects of a given Type. It can be set differently for objects of each Type.

Options for this type:

- ◉ Hide link field
- ◯ Show link field
- ◯ Double-click goes to Info display
- ◉ Double-click goes to Link file

[ Cancel ]  [ Done ]

- Click the **Options** button on the **Add Type** display.

- Select **Double-click goes to Link file** from **Options for this Type**.

- You can reverse it anytime by clicking **Options** again from the **Add Type** display and selecting **Double-click goes to Info display**.

- Click **Done**.

## Using the Format menu

A number of formatting options are available for fields, both from the Add Type and Change Layout displays, from the Print Layout display and from the Info display.

- Choose **Align Left**, **Align Middle**, or **Align Right** from the **Format** menu to align the field data.

| Format | |
|---|---|
| ✓ **Alphabetic** | ⌘0 |
| **Numeric** | ⌘9 |
| **Dollar Sign** | ⌘M |
| **Commas** | ⌘, |
| **Decimals...** | ⌘. |
| **Statistics...** | ⌘- |
| ✓ **Align Left** | ⌘6 |
| **Align Middle** | ⌘7 |
| **Align Right** | ⌘8 |
| **Hide Border** | |
| **Do Not Invert** | |
| **Hide Field Name** | |
| **Across...** | |
| **Close Lines** | |
| **Show Ruler** | ⌘R |
| **Metric Ruler** | |

- Choose **Show Border** or **Hide Border** from the **Format** menu to show or hide the field border.

- Choose **Invert** to show the field name in white letters on a black background. For annotation fields, the entire text contents of the field will be in white letters on a black background. **Do Not Invert** reverses this.

- Choose **Hide Field Name** to show the field with just the data entered. Useful for creating a spreadsheet appearance or for overlaying fields on a standard form for data entry. Hidden field names will be shown when the **Field Setup** dialog is accessed.



In this example, the row and column numbers are annotation fields, the spreadsheet cells are hidden name fields and the others are standard. Cells **5-B,C,D** and **Total Quarterly Sales** are all formula fields.

- Choose **Hide Ruler** to hide the ruler on the top and left of the layout, and **Show Ruler** to restore it. The ruler is not printed on forms, reports, or labels.

- **Metric Ruler** turns the ruler on the top and left of the layout into a metric ruler; **Inch Ruler** turns it back.

**Using the Text menu**

You can choose different fonts, sizes, colors and styles of text on the Type layout.

- Select the field.

- Choose a style, point size, text color and/or background color and font from the **Text** menu.
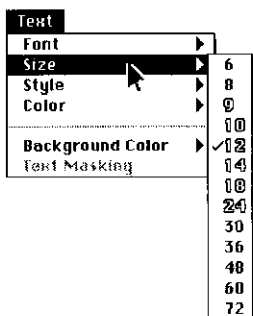
The point sizes that look the best are shown outlined. You can change the font and size of a field name, but not its style; field names are always bold text. But the contents of the field will be displayed according to the style, point size and font chosen for that field.

There's a shortcut you can use if you want to perform a TEXT operation on all of the fields at once.

- Simply hold down the Option key while you make your changes and they'll all be affected the same way.

In the example below, all of the fields will be made a uniform point size (12 point).

Holding down the Option key while choosing **12** from the hierarchical **Size** selection on the **Text** menu changes all the fields to a 12 point size.

## Using the Shades menu on the Type layout

When you're on the **Add Type** display (or the Info display) you can change the shade of the background for that Type.

Choose a new shade from the **Shades** menu while you're on the **Add Type** or Info display.

You can create new shades by altering the ones on the **Shades** menu; see page 126, "The Shades Editor", for more details.

## Saving the Type layout

- On the **Add Type** display, click **Done** to save the changes you made to the Type layout.

When you change the Type layout, all existing records reflect any changes that you made.

## copying and pasting the Type layout

You can save a lot of time by making effective use of the Clipboard and Scrapbook when you design Type layouts. The Clipboard and Scrapbook give you the ability to reuse layouts instead of redesigning them every time you create a new file or add a new Type.

The example below shows how to replace an old Type's layout with one from the Clipboard. From the Add Type display, hold down the Option key and choose **Copy** from the **Edit** menu.

The Type layout is now copied onto the Clipboard.

**Caution:** Remember that the contents of the Clipboard will be replaced by the next thing you cut or copy.

- \* Choose the Type you want to change from the **Types** menu.

- Transfer the layout on the Clipboard to the layout you're working on by choosing **Paste** from the **Edit** menu.

A dialog box will remind you that you're replacing the entire old Type.

You can save a layout permanently by pasting it into the Scrapbook.

> ⚠ **Pasting will replace the entire layout with the one on the Clipboard.**
>
> **You will not be able to undo this action.**
>
> [ Cancel ]                                      [ Paste ]
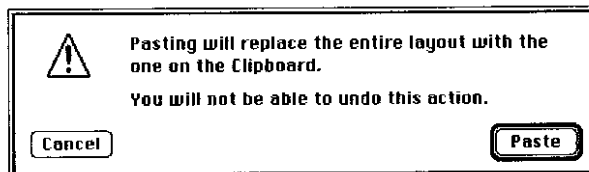
- Choose Scrapbook from the **Apple** ( ) menu.

- Choose **Paste** from the **Edit** menu. The information is saved as:

Pictures in annotation fields aren't saved when a Type layout is copied.

> Filevision® IV TYPE LAYOUT
>
> Type-name: Monthly
> From file: Master

## changing the Type layout later

You can always change the layout—rename fields, move them, change their sizes, add new or remove existing ones—even if you've already added objects and entered data in records. Use **Change Layout...** from the **Types** menu.

# 9. Adding Information

Once you've created a Type layout and clicked **Done**, you can add records.

## Adding a record

- Choose **Add Record** from the **Edit** menu.

These fields will automatically fill in information when you use Add record:

- • Initial text fields
- • Copy from previous record fields

## Duplicating a record from the Info display

- Choose **Duplicate Record** from the **Edit** menu.

A new record is created, and all its information is exactly the same as the current record's.

If the record has a graphic associated with it, select the graphic from the Drawing display and choose **Copy** and **Paste** from the **Edit** menu to duplicate both the graphic and its record.

## Entering information into fields

This section tells you how to add a record by filling in information into its fields, not how to change its layout. To change its layout, see "Changing the Type layout later", page 176.

Don't forget that when you're entering information, you can use the **Edit** menu: **Cut**, **Copy**, **Paste**, **Clear**, and of course **Undo**. The Scrapbook, Clipboard, and the Notepad are also available. See page 310, "Editing Tools and Other Features", for more on those.

- From the Info display, select the field you want to fill in with the mouse or the Tab key, described below.

You can use the scroll bars at the right and bottom of the display to reach the fields of a record that's larger than the display.

- Type in the information.

A field can hold a maximum of 8,000 characters and a record can hold a maximum of 16,000 characters.

```
┌──────────────────────────────────────────────────────────┐
│ ▒□▒▒▒▒▒ Info for this Floor Plan:  (1 records) ▒▒▒▒▒ 凹▒ │
├──────────────────────────────────────────────────────┬─┤
│ ┌──────────────┐         ┌────────────────┐          │⇧│
│ │Total area    │  35,600 │Electrical service│ 200 amp│ │▒│
│ ├──────────────┤   5,500 ├────────────────┤          │▒│
│ │Office area   │         │Phone system│ AT&T          │▒│
│ ├──────────────┴───┤     ├────────────────┤          │▒│
│ │     Offices      │     │Sprinkler service│ Yost Co. │▒│
│ │Reception         │     ├────────────────┤          │▒│
│ │General Manager   │     │Alarm service │ Mason Alarm │▒│
│ │Factory Manager   │     ├────────────────┤          │▒│
│ │V.P. Sales        │     │Electric Co. │ Edison Company│▒│
│ │Accounting        │     ├────────────────┤          │▒│
│ │Shipping          │     │Gas Co. │ Urban Gas Company │▒│
│ ├──────────────────┤     ├────────────────┤          │▒│
│ │Overhead doors│  3 │     │Water Co. │ So Counties Water│▒│
│ ├──────────────┼───┤     ├────────────────┤          │▒│
│ │Exits         │  6 │     │ Fire extinguisher service │▒│
│ └──────────────┴───┘     │ Trax Extinguisher Service  │▒│
│                          └────────────────┘          │▒│
└──────────────────────────────────────────────────────┴─┘
```

- When you're finished, deselect the field by pressing Enter,

or

- Press Tab to move to the next field,

or

- Hold down Shift and press Tab to move back a field,

or

- Press Option-Tab to move to the first field,

or

- Click another field with the mouse.

## Fields with pictures

Fields can hold pictures as easily as they hold text.  No special preparation is required.  Any application that uses the Clipboard or creates a PICT, EPSF or MacPaint format graphic can be used to create graphics for Filevision.  Graphics created using the Filevision drawing page can also be copied to a field.  Ready made clip-art graphic libraries would be a good source for artwork.

Pictures can be copied to a field by using the Clipboard or by using **Import Graphics...** from the **File** menu.

## Copying graphics to a field from the Clipboard

Any graphic stored in the Scrapbook or copied to memory from the Filevision-drawing page or another program, can be pasted in a field using the following procedure:

- Copy the picture onto the Clipboard.
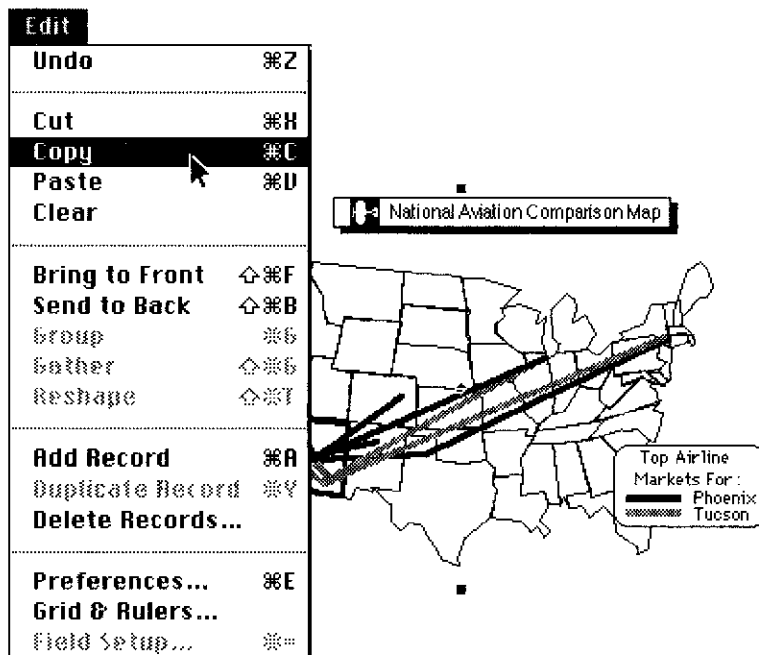


The graphic is now in the Clipboard.

To paste the Clipboard image to a field:

- Click **Info** to go to the Info display.

- Select the record in which you want the picture to appear.

* Select the field in which you want the picture to appear.

- Choose **Paste** from the **Edit** menu.

The picture is scaled to match the size of the field, stretching and shrinking as the field is stretched or shrunk. However, you can choose to keep the picture's original size.
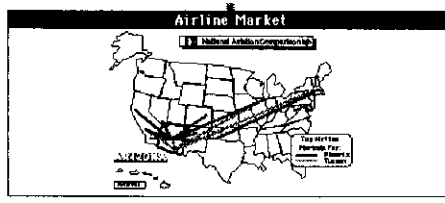
- Hold down the Option key and click either of the field's handles.
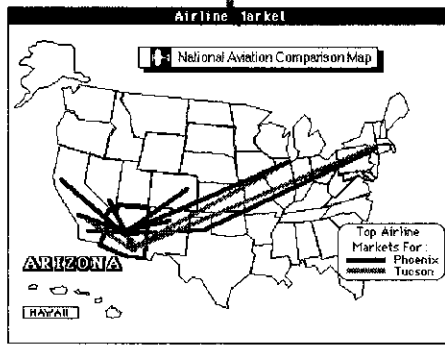


The size of the picture reverts to its original size. Open the field so that all of the picture can be displayed in the field at one time.

- To return to the scaled size, hold down the Option key and click one of the field's handles again.

Because fields can be overlapped, you can put a field holding a picture behind another field. For example, you might want to print mailing labels and have an annotation field containing a border pattern surrounding the printed text.

```
James W. Turner
TURNER CONSULTING
123 30th Street, Suite 1-A
Irvine, CA 92714
```

## Importing from graphic files

Graphics from separate PICT, Paint or EPSF files can be imported to and exported from an Info page record. This provides both a way to use graphics from most any source to illustrate your file and can be used to store and catalog your library of graphics or customer's jobs.

Both version 1 and version 2 color and gray scale illustrations may be stored and displayed in their original colors and gray scale. See Importing and Exporting Graphics, page 151, for a description of the various graphic formats.
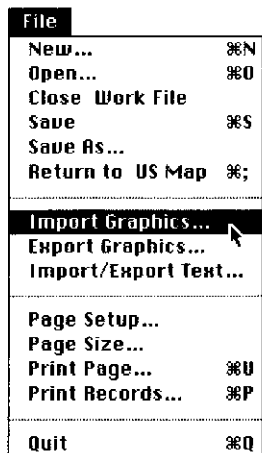
To import a graphic into an Info page data field:

- Select the Info page record with the field to import into.

- Select **Import Graphics...** from the **File** menu.
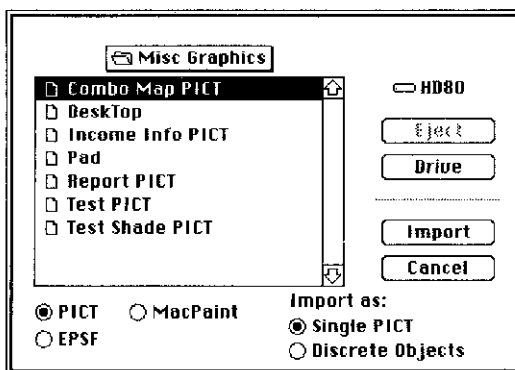
The import dialog will be displayed.

When the PICT button is selected, only graphics of the PICT type will be displayed in the menu.

If you select MacPaint or EPSF by clicking on their buttons, only files of their type will be displayed:

- Select the graphic that you wish to import.

- Click the **Import** button.

The import dialog will disappear and the Info page will reappear.

- Move the pointer anywhere over the field to be imported to and the pointer will change to a right angle cursor.
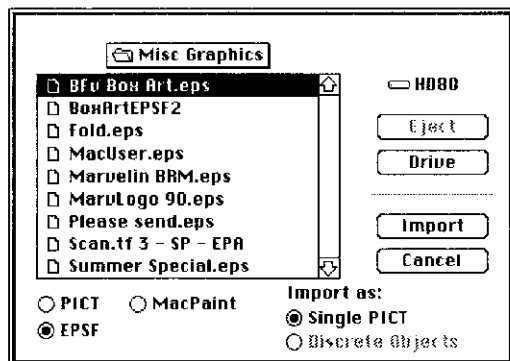
- Click the mouse button once if the field is already selected or twice if the field requires selection and the graphic will be deposited into the selected field.

As with graphics pasted from the Clipboard, the imported graphic will center in the field and will scale itself to the field size.

Once the graphic has been imported, it behaves the same as any graphic except that it will retain its type identity if imported as a PICT or EPSF. MacPaint types will become PICTs once imported.

If a PICT is imported as discrete objects, it can be copied to the drawing page whenever needed and can be used as discrete objects. It can also be exported to a PICT file and will retain its discrete object form. If the same PICT is imported as a single object picture, it looses its identity of discrete objects.

## Exporting to graphic files

Exporting graphics from an Info page field is essentially the reverse of the above.
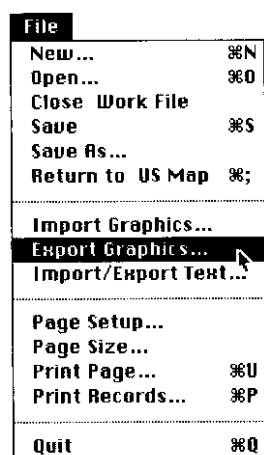
- Select the record and field containing the graphic to be exported.

- Select **Export Graphics...** from the **File** menu.

The export dialog will be displayed:

- Enter a file name and click the **Export** button.

The new graphic file can be used by any other Macintosh program.

| File | |
|---|---|
| New... | ⌘N |
| Open... | ⌘O |
| Close Work File | |
| Save | ⌘S |
| Save As... | |
| Return to US Map | ⌘; |
| Import Graphics... | |
| Export Graphics... | |
| Import/Export Text... | |
| Page Setup... | |
| Page Size... | |
| Print Page... | ⌘U |
| Print Records... | ⌘P |
| Quit | ⌘Q |

Misc Graphics
- 1.5 Please send
- BFu Box Art
- BFu Box Art.eps
- BFu Logo
- BFu Logo Label
- BFu Logo.template

⊟ HD80
Eject
Drive

Save As:
Untitled

Export
Cancel

⦿ PICT
○ EPSF
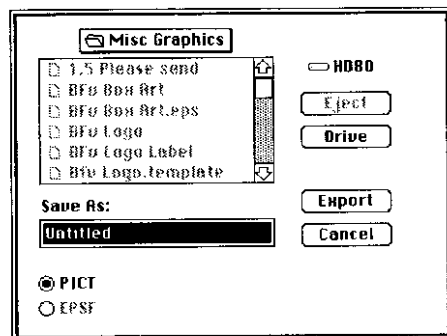
## Going to the next or previous record

Records added in Filevision are dynamically entered in the sort order of the sort field. Unless you change the sort field by selecting **Sort...** from the **Access** menu, the sort field is the automatic field entered when you first set up a new Type. The field name assigned to it is **Name**. Unlike most file managers, there is no need to resort every time that you add a new record in Filevision.

In using the **Next** and **Prev** buttons, the record accessed will not necessarily be the last record entered as the last record entered was placed in the Type's sort order (ascending).

Info page window ———— **[Prev] [Next]** [Revert] **[Drawing]** [Link] ◁ □

- Click **Next** to see the next record of the selected Type, **Prev** to see the previous record.

When you're on the drawing page, the page miniature always shows each currently selected record's object as a dot:

each selected
record's object
shows as a dot
on the mini page

| Townhouse: (4 selected) |
| [Prev] [Next] [Info] [Link] |

- **When you hold down the Shift key while clicking Next or Prev, if the selected object is off screen, the drawing page viewing area will reposition itself automatically to display the selected object.**

If the record doesn't have a graphic object, the record icon will appear to the right of the page miniature on the drawing page. Think of the record icon ( ▤ ) as the graphic for a record that has no other graphic object.

| Salesperson: Allen |
| ▤ [Prev] [Next] [Info] [Link] |

record with no
object icon

Double-clicking on the record's no object icon will show the Info page for that record the same as double-clicking a normal object connected to a record.

## Entering a record

- To enter (save) a record from the Info display, click **Next** or **Prev**,

or,

- Click the **Drawing** button,

or,

- Click the Info page window **Close Box**,

or,

- Click anywhere on the drawing page window if it is exposed.

or,

- Select **Add Record** from the **Edit** menu.

## Canceling changes made to a record

Any change or series of changes you've made to the record you're currently working on can be undone as long as you haven't entered the record by using any of the methods listed above.

- Click **Revert**.

You'll be warned that this action can't be undone.

## Deleting records

- Choose **Delete Records...** from the **Edit** menu.

- You're given these options:

> **Delete records using these options:**
>
> ⦿ **Selected "Golf Hole"s only**
> ○ **Highlighted "Golf Hole"s only**
> ○ **All "Golf Hole"s**
>
> ⦿ **Records and their graphics**
> ○ **Records only**
> ○ **Graphics only**
>
> **You will not be able to undo this action.**
>
> [ Cancel ]          [ **Delete** ]
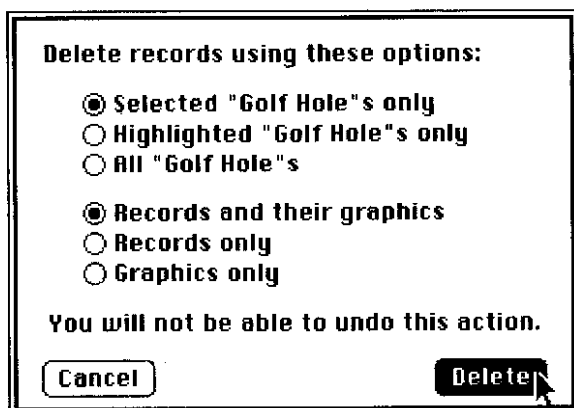
To delete highlighted records you must first have some highlighted; for more details, see page 228, "Highlighting".

Likewise, you can't delete selected records unless one or more objects or records are selected. See page 109, "selecting a single object", and pages 109 to 110 on "selecting several objects at once".

- Click the options you want.

- Click **Delete**.

## Separating a record from its graphic object

- When you're on the drawing page you can select an object and, if it has a record, separate the graphic from its record using **Ungroup** from the **Edit** menu.

You'll get a dialog box warning you that you're about to create a graphicless record:

> ⚠  **Ungrouping will result in a record that has no graphic.**
>
> [ Cancel ]          [ OK ]
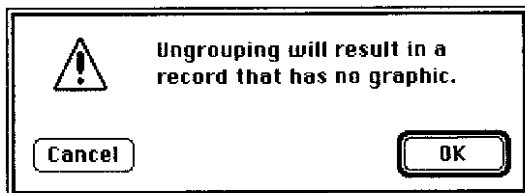
The record and the record's graphic object are now separated.

## Attaching a graphic object to a record

If you create a record without a graphic, and later want to add a graphic object to that record, follow this procedure:

- With the objectless record selected, click **Drawing** to get to the drawing page.

You'll see the tiny record icon (⊞) next to the mini page, indicating that the currently selected record is a record without an associated graphic object.

You can easily merge the record and the graphic object together.

- Hold down the Shift key while selecting the graphic(s). Both the record and the graphic(s) will be selected under the standard rule for multiple object Shift key selection.
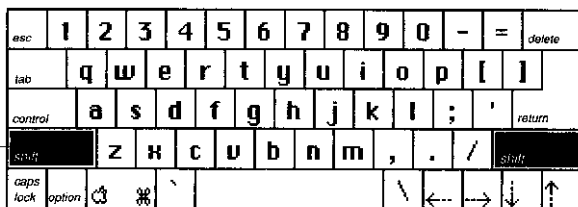
Shift Key down -

drawing page objects and Info page record selected -

select **Group** from the **Edit** menu

- Choose **Group** from the **Edit** menu to merge the objects into a single object and the record with that object.

If **Group** is unselectable, it means that one of the graphic objects already has a record.
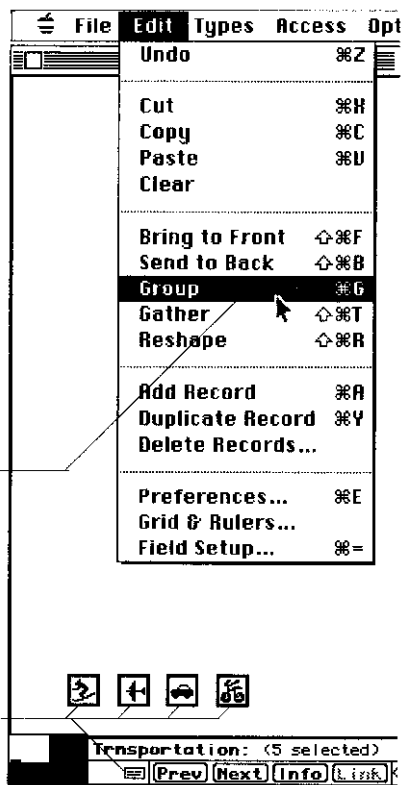
## Adding information to a graphic

It's easy to fill in the record for a graphic object.
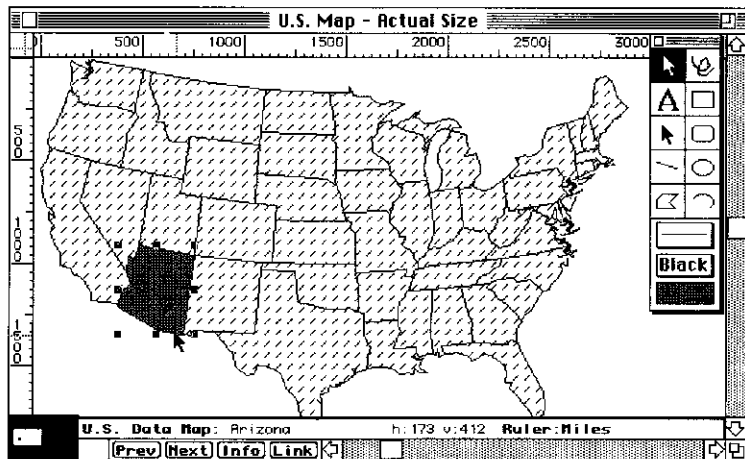
- Click the graphic object on the drawing page:

The object's Type appears in the selection information area.

- Click the **Info** button.

An empty record for the selected object of that Type is waiting to be filled in:



Initial text fields will already be filled in.

What if the object isn't the right Type? You can easily change its Type by holding down the Shift key and choosing a new one from the Types menu. For more details, see "Changing an object's Type", on the next page.

## Changing an object's Type

Every object has a Type—whatever Type is selected on the **Types** menu when that object is added. Keep that in mind when you add objects, but don't worry if you make a mistake. You can easily change an object's Type anytime, whether the object is a record or a graphic.

- Select the object or record whose Type you want to change.

You can also select several objects and change all their Types at once. See "selecting several neighboring objects", page 109, for more details on selecting several objects at once.

- Hold down the **Shift** key and choose the new Type from the **Types** menu.

You'll be given this warning:

> ⚠ **You are about to change selected records into type "Background".**
>
> **If the layout for type "Background" is not a copy of the layout for type "U.S. Data Map", "U.S. Data Map" fields may be lost or inappropriately assigned.**
>
> **You will not be able to undo this action.**
>
> [ Cancel ]                    [[ Change type ]]
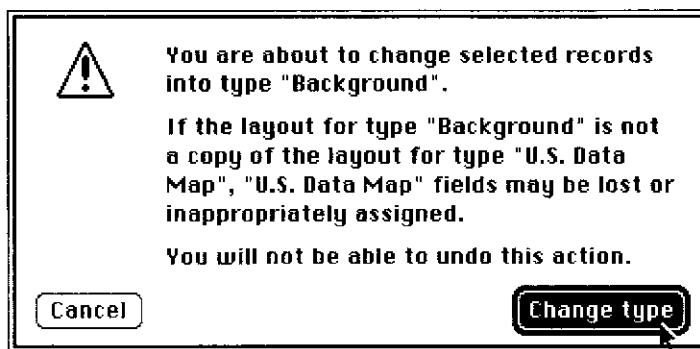
- If the old and new Type layouts are identical, you can transfer the information by clicking **Change Type**.

This will also work properly if the new Type layout is the same as the old one but with any fields that are different located below (after) the common fields of both Types.

- If the new and current Type layouts aren't similar or if the new one isn't a superset of the old, and you don't wish to loose the information in the current record, click **Cancel**.

You would then have to add those fields to the new Type before changing the record over to the new Type.

# 10. Importing and Exporting Text

**Import/Export Text...** is accessed from the **File** menu and was designed to enhance the features already present in Filevision by letting you move data into and out of Filevision files easily and flexibly.

| File |
| --- |
| New ...      ⌘N |
| Open ...      ⌘O |
| **Close  Text Exchange** |
| **Save**      ⌘S |
| **Save As...** |
| Return to ...      ⌘; |
| **Import Graphics...** |
| **Export Graphics...** |
| **Import/Export Text.** |
| **Page Setup...** |
| **Page Size...** |
| **Print Page**      ⌘U |
| **Print Records...**      ⌘P |
| **Quit**      ⌘Q |

## What is Import/Export Text...?

Filevision gives you tools for representing information in pictures, numbers, and words. It lets you analyze extensive data and get insight into what the data really means in a way that no other software lets you. But there are other tools you can use with your data. Or you may want to get new data from other places. Or you may want to provide your data to other programs or people. That's where **Import/Export Text** can help you.
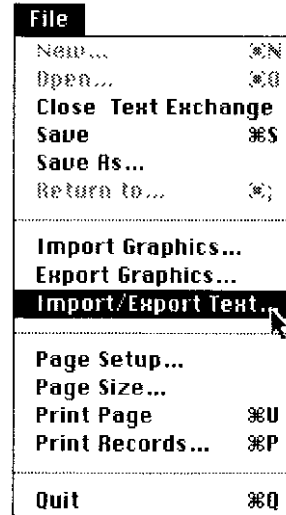
**Import/Export Text** can take data in a variety of forms and enter it automatically into your Filevision file. Or it can take data that is already in a Filevision file and convert it into forms that many other programs can use.

## What you can do

You can use **Import/Export Text** to help Filevision solve your business problems. Some examples are:

- Build a Mail-Merge file of "hot prospects" for use with your word-processing program. (Single page mailers can be produced in Filevision without the need to use Import/Export)

- Automatically enter the customer list from another data base program.

- Update your production costs as calculated by your spreadsheet or by a special program you wrote yourself.

- Prepare sales data for your corporate computer.

- Keep stock prices current with data you get from on-line retrieval services.

- Extract columnar data for inclusion in a report

• Exchange data with other Filevision files.

## What Import/Export Text... can do

**Import/Export Text...** can help you "import" new data into a Filevision file or "export" data you already have in the file. It can:

• Import and export data in industry standard formats:

  • ASCII—used by many word-processing and data-base programs.

  • DIF—Data Interchange Format, used by VisiCalc and some other spreadsheet programs.

  • SDF—System Data Format, used by dBase-II and dBase-III.

  • SYLK—Symbolic Link format, used by Multiplan, Excel and some other programs.

• Select from one to 255 fields in a Filevision type layout to import or export data.

• Add new records to your file or change selected information in existing records.

• Highlight those records with information that changed so you can focus on new data.

• Highlight the new records you add to your file.

• Export data for all records of a type or just those you have previously highlighted.

• Convert data using several options:

  • Convert all characters to upper case.
  • Translate several special characters to other characters.
  • Ignore characters you select.
  • Convert numbers in scientific format to normal format.

• Build a standard "setup" file to automate the import or export process.

• Indicate which data was missing in your exchange file.

• Use the "Field setup" capabilities of Filevision when you add new data.

• Switch among different Filevision files and types.

## back up your file before you Import or Export any text

Importing data makes changes to your Filevision file. In fact, it may make many changes automatically, based on the data and commands you give it. So it's a good idea to make a backup copy of important files before you use them to protect against bad data or errors in commands.

## exchanging data with other programs

Exchanging data between two programs usually involves three files:

- the file that has the original data,
- the file that is supposed to receive the data, and
- the file that carries the data between these two. We'll call this file the exchange file:



ORIGINAL DATA FILE          EXCHANGE FILE          RECEIVING FILE
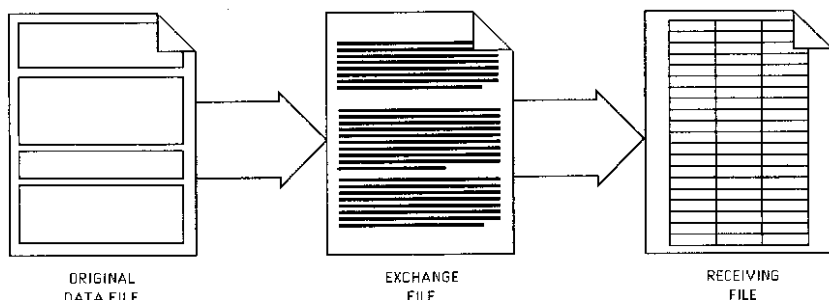
The reason for the third file is simple. The file that has the original idea is usually in a special format that can be used only by the program that made the file. For instance, if the original data came from a spreadsheet, that file may include equations, protection codes, window placement, and other things in addition to the data itself.

And the file that is supposed to receive the data is built in a special format that can be used only by its program. For instance, if the target file is a Filevision file, it may include graphics, type layouts, highlighting rules and report layouts.

To facilitate exchange of data between different programs, many programs allow standard alternatives to their own formats. They can read or write data in these formats too. Import/Export Text is specifically designed to convert Filevision data files to and from these standard alternatives.

To use Import/Export Text you must know which one of the standard formats your other program uses. You can use Appendix F (pages 351 to 360) to help you choose. It lists several other programs, standard formats they use, and instructions on how to make them process data in that format.

If your other program doesn't run on a Macintosh, you will have to communicate the exchange file between the Macintosh and the computer the other program runs on. There are several programs, like MacTerminal or Microphone, that you can use to do this, but describing their use is beyond the scope of this manual.

## which way does the data go?

Importing data means bringing data created by another program into a Filevision file. In order to import data you must first use the other program to create the exchange file and use Filevision to prepare a file to receive the data.

Exporting data means copying data already in a Filevision data file into an exchange file. Naturally the data must already be in the Filevision file. And after you use Import/Export Text to copy it into the exchange file, you will need to use the receiving program to process it.

You can use Import/Export Text to export data from one Filevision file and to import it back into the same or another file. But before you do that, you may want to reread "Editing Tools and Other Features" , page 310. You may be able to transfer the data directly using Filevision without using Import/Export Text.

## which data goes where?

One of the reasons that each program has its own special data is that it helps the program to know where to get or put your data. For instance, a spreadsheet program needs to know that you want $7.35 in cell D21 and a data-base program needs to know that "1234 Fifth St." is the "Address" of customer "Jones".

Since different programs may refer to data differently, Import/Export Text lets you specify how to associate data in a Filevision file with data in the exchange file. You do this by choosing from the list of fields in a Filevision Type layout and matching them with the fields in the exchange file.

## what if the data shouldn't look the same?

Sometimes you find that the data in Filevision and the data in the other program need to be different. For instance, some programs handle only upper case letters, some require only numeric data in certain fields, some require the data to have a fixed number of characters in each field, or a specified decimal placement and some programs don't allow certain characters, like tab, carriage return, or new line.

Import/Export Text allows you to specify rules to format the data when importing or exporting it.

**the second time you do it**

It is normally easy to set up the rules to import or export data. But if you do the same process regularly, you can save time by saving the rules in a setup file. At any time in Import/Export Text you can save the rules you have entered and return to that condition again.

**Exporting data**

Exporting data means sending data that you have in a Filevision file to an exchange file. Then you can use the exchange file to import data into a second program. There are several choices you make to control how this happens:

- In what standard format should the exchange file be built? If that format has options, what values should be used for them?

- Which Filevision file, type, and fields correspond to fields in the exchange file?

- Should any special processing be done for each field?

- Which Filevision records should be exported?

We'll use the sample file called **Personnel** provided on your **Tour Disk** (Import/Export Folder) to explain the process. The **Personnel** file lists the current employees of the XYZ Company. The file has two types: **Background** and **Employee**. The type layout for **Employee** is shown below:

```
┌──────────── Info for this Employee:  (5 highlighted) ────────────┐
│ Name  Green, Curt H.                    Employee no.    126       │
│ Address   678 S. Hampton Blvd.                                   │
│ City Central City          State KS   Zipcode 60001             │
│ Phone no.  (555) 555-1269                                        │
│                                                                  │
│ Hourly salary  $7.06            Status S   M=Married             │
│                                            S=Single              │
│                                                                  │
│ Weekly pay 217                  Federal exemptions    1          │
│ As of  01/02/86                 State exemptions      1          │
│ Prev  Next  Revert  Drawing  Link                                │
└──────────────────────────────────────────────────────────────────┘
```

The type layout for **Employee** includes, among other fields, the employee's **Name**, address, and some payroll data. The **Weekly pay** reflects the actual take-home pay the employee receives each week. Computing **Weekly pay** is a complex process that changes year to year and you have developed a model for doing it in your spreadsheet program. However, that model involves the payroll data you have in the **Personnel** file. This sample will show you how to export the data for your spreadsheet model to use to compute **Weekly Pay**. In the next chapter, you will see how to import the new **Weekly pay** back into your Filevision file.

## exporting the file

First, you must launch the file Personnel and then get into Import/Export Text.

- From the **File** menu, click **Import/Export Text....**

The Import/Export Text menu bar switches with the Filevision menu bar.



| 🍎 | **File** | Edit | Types | Export | Options |
|---|---|---|---|---|---|
| | **Import** | ⌘I | | | |
| | ✓**Export** | ⌘E | | | |
| | **New Setup** | ⌘N | | | |
| | **Load Setup...** | ⌘L | | | |
| | **Save Setup...** | ⌘S | | | |
| | **Return to Filevision** | | | | |
| | **Quit** | ⌘Q | | | |

Many spreadsheet programs accept data in the standard exchange formats of either ASCII (American Standard Codes for Information Interchange), DIF (Data Interchange Format) of SYLK (Symbolic Link). For this example we'll use the SYLK format.

| **Export** | |
|---|---|
| **Select Fields...** | ⌘- |
| **Select Records...** | ⌘R |
| **ASCII...** | ⌘1 |
| **DIF** | ⌘2 |
| **SDF...** | ⌘3 |
| ✓**SYLK** | ⌘4 |
| **Start...** | ⌘G |

- Choose **Export** from the **File** menu.

- Choose **SYLK** from the **Export** menu.

There are no options to choose for formatting **SYLK** files, so that's all you need to do.

- Choose **Select Fields...** from the **Export** menu.

A dialog appears showing the list of fields available for the **Employee** type and a list to let you specify where those fields go in the exchange file. You can scroll through either list using the scroll bar for that list. If you scroll the **Employee** fields down, you will see a bullet next to **Name** indicating the field currently used by Filevision for sorting **Employees**.

```
╔══════════════════════════════════════════════════════════╗
║              File-name: Personnel                        ║
║     Type-name: Employee      Order of imported fields    ║
║   ┌──────────────────────┬┐  ┌──────────────────────────┬┐║
║   │ City                 │⇧│  │ 1                        │⇧│║
║   │ Employee no.         │▓│  │ 2                        │ │║
║   │ Federal exemptions   │□│  │ 3                        │▓│║
║   │ Hourly salary        │ │  │ 4                        │ │║
║   │ Link                 │ │  │ 5                        │ │║
║ • │ Name                 │ │  │ 6                        │ │║
║   │ Phone no.            │⇩│  │ 7                        │⇩│║
║   └──────────────────────┴┘  └──────────────────────────┴┘║
║   ┌──────────────────────┐   ┌──────────────────────────┐ ║
║   │     Select all       │   │      Select all          │ ║
║   └──────────────────────┘   └──────────────────────────┘ ║
║                                                          ║
║   □ File begins with a list of field names.              ║
║   ┌──────────────┐                ┌──────────────┐       ║
║   │   Cancel     │                │    Done      │       ║
║   └──────────────┘                └──────────────┘       ║
╚══════════════════════════════════════════════════════════╝
```

The fields your spreadsheet model requires in order to compute **Weekly pay** are: **Hourly salary**, **Status** (Married or Single), **Federal Exemptions**, and **State Exemptions**. In order to know which employee you are computing take-home pay for, you also need the **Name**. Here's how to specify which fields go in the exchange file and their order (You will need to scroll the **Employee** field list to find some of the fields mentioned below):

- Click **Name** to select it. Choose **Append field** from the **Edit** menu.

- Select **Hourly Salary** and choose **Append field** from the **Edit** menu.

- Select **Status** and choose **Append field** from the **Edit** menu.

- Select **Federal exemptions** and choose **Append field**.

- Select **State exemptions** and choose **Append field**.

The five fields that you selected are now listed as fields 1 to 5 in the exchange file. The section starting on page 208, a reference about the **Select Fields** dialog, explains several other commands you can use to build this list.

## how to treat data in each field

The data in salary and exemptions fields is numeric; that is, it contains only numbers. If you have entered the data in a form that includes only digits, an optional sign, and an optional decimal point, then Import/Export Text will send it to your spreadsheet as numeric data. However, if you have included comments, commas, dollar signs or other characters along with the numeric data, it will be sent as textual data. You can instruct Import/Export Text to remove all non-numeric data from a field. Although the **Personnel** file has only numeric data for these fields, we'll show you how that's done.

- Click field "**2 Hourly salary**" on the exchange file list and choose **Field Setup...** from the **Edit** menu.

The **Field Setup** dialog appears. Several options are grayed in the dialog. These options are for use with other data formats.

```
Field setup for 2: "Hourly salary":

Field width (in characters):
    ○ Left align data in field.
    ○ Center data in field.
    ○ Right align data in field.
    Pad character:

☐ Format data numerically.
    Number of digits to right of decimal point: [0]
    ☐ Suppress leading zeroes.
    ☐ Display sign trailing.

Indicate missing data with: [          ]

[ Cancel ]  [ Prev field ]  [ Next field ]  [ Done ]
```

- Click **Format data numerically** and enter 2 for **Number of digits to the right of the decimal point**.

- Click **Next field** for **Field setup for 3: "Status"**. It needs no special processing.

- Click **Next field** for **Field setup for 4: "Federal exemptions"**. Click **Format data numerically** and enter **0** for **Number of digits to the right of decimal point**.

- Click **Next field** and do the same for **Field setup for 5: "State exemptions"**.

- Click **Done** on the **Field Setup** dialog.

- Click **Done** on the **Select Fields** dialog.

Three of the five fields in the exchange file are set up to be exported in the numeric format. The normal setup for Fields **"1 Name"** and **"3 Status"** was not changed and their data will be exported as regular text.

## selecting which records to export

- Choose **Select Records...** from the **Export** menu.

A dialog appears allowing you to choose which **Employee** records to export. The sample **Personnel** file has been prepared with several, but not all, **Employee** records highlighted. You can choose either option.

```
Select records to export based on the following:

⦿ Export all Employee records.
○ Export only highlighted Employee records.

☐ Don't export null records.

[ Cancel ]                         [ Done ]
```
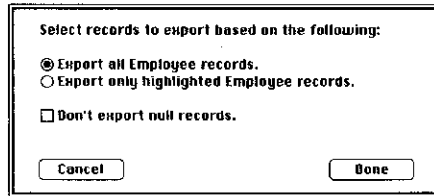
- Click **Done**.

## exporting the data

You are now ready to start the process of exporting data to your exchange file. The rest of the work will be done by Import/Export Text. Here's how to start it:

- Choose **Start...** from the **Export** menu.

A dialog appears for you to enter the name of the exchange file.

```
┌─[ 🖰 Program ]─┐
│ ▯ California        ⇧ │      ⊂⊃ HD40
│ ▯ Date Calculator    │
│ ▯ Dinosaurs          │      [  Eject  ]
│ ⬦ Filevision⊕        │
│ ▯ Periodic Chart     │      [  Drive  ]
│ ▯ Personnel        ⇩ │
│                      │
│ Export records to:   │      [  Save   ]
│ ┌──────────────────┐ │
│ │Employee Data     │ │      [ Cancel  ]
│ └──────────────────┘ │
```
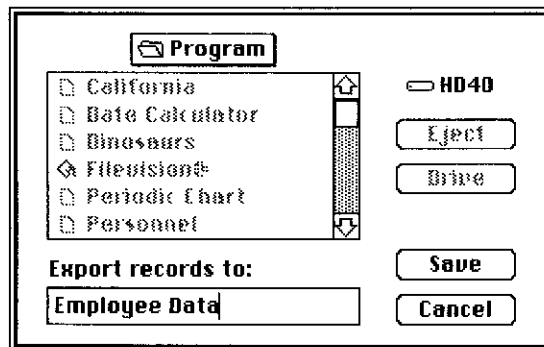
- Type "**Employee data**" and click **Save**. If a file called Employee data already exists on that disk, confirm that you want to **replace existing "Employee data"?** by clicking **Yes**.

Import/Export Text displays a dialog showing its progress as it exports data. You can cancel the process at any time by clicking **Cancel**.

```
┌─────────────────────────────────────────────────────────────┐
│  ┌───────────────────────────────────────────────────────┐  │
│  │                                                         │  │
│  │   Exporting record  │ 3      │  of  │ 5     │           │  │
│  │                                                         │  │
│  │   Name:   │ Jones, Allan Jr.                      │     │  │
│  │                                                         │  │
│  │                                           ┌──────────┐  │  │
│  │                                           │  Cancel  │  │  │
│  │                                           └──────────┘  │  │
│  └───────────────────────────────────────────────────────┘  │
└─────────────────────────────────────────────────────────────┘
```

- When the process is complete, choose **Return to Filevision...** form the **File** menu.

You could now use your spreadsheet model to operate on your **Employee data** to compute **Weekly Pay**. On your **Set-up Disk**, the file "**New Weekly pay**" has been prepared as if you had done that. You'll see how to import that data into your **Personnel** file next.

## Importing data

Importing data means adding data created by another program into an existing Filevision file. There are several choices you make to control how this happens:

- In what standard format is the exchange file? If that format has options, what values should be used for them?

- Which Filevision file, type, and fields correspond to the fields in the exchange file?

- Should any special processing be done for each field?

- How should Filevision records and their highlighting be affected?

We'll use the sample file called **Personnel** on your **Set-up Disk** to explain the process. The **Personnel** file lists the current employees of the XYZ Company. The file has two types: **Background** and **Employee**. The Type layout for **Employee** is shown on the next page. It includes, among other fields, the employee's **Name**, address and payroll information. On page 193 you saw how to export the data needed by your spreadsheet program to compute the current (take-home) **Weekly Pay**. In this section you will see how to import the newly computed **Weekly pay** back into the Personnel file. The file **New Payroll data** on your **Set-up disk** contains the result of the spreadsheet computation.

## importing a file

With the **Personnel** file loaded and running:

- From the **File** menu, click **Import/Export Text....**

The Import/Export Text menu switches with the Filevision menu.

```
 🍎  File  Edit  Types  Import  Options
     ✓Import        ⌘I
     Export         ⌘E

     New Setup      ⌘N
     Load Setup...  ⌘L
     Save Setup...  ⌘S

     Return to Filevision
     Quit           ⌘Q
```

```
 Import
 Select Fields...    ⌘-
 Select Records...   ⌘R

 ✓ASCII...           ⌘1
  DIF                ⌘2
  SDF...             ⌘3
  SYLK               ⌘4

 Start...            ⌘G
```
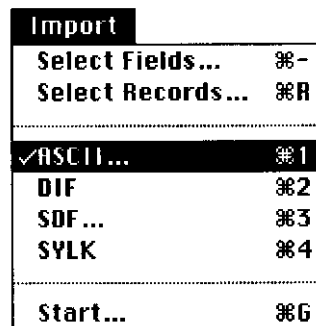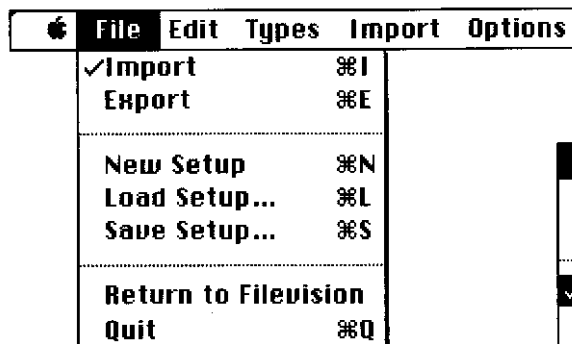
## choosing the format to import data

- Choose **ASCII** from the **Import** menu.

The dialog box below appears:

```
 Process ASCII files for the following programs:

 ○ Filevision® IV         ○ Excel
 ○ DB Master (Import only) ○ Jazz
 ○ FileMaker
 ○ Helix                  ○ MacWrite, etc.
 ○ Microsoft File
 ○ Omnis 3
 ○ OverVUE 2.0
 ○ PFS:File (Import only)


  [ Cancel ]      [ Other ]      [ Done ]
```
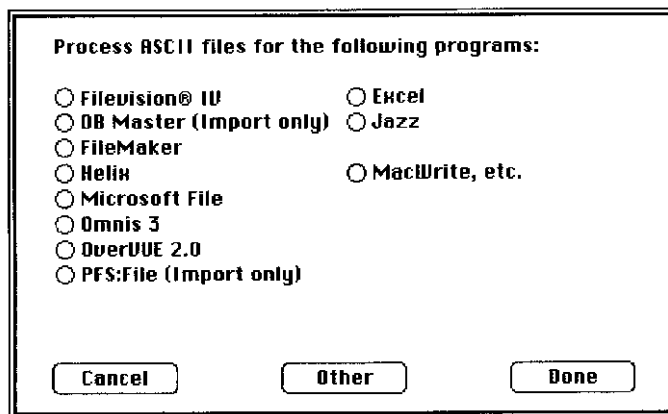
In the export text section, you provided the data to the spreadsheet program in SYLK format. However, many database programs don't support the SYLK standard. So we have decided to show you an alternative: importing data using the ASCII format for files. In the **New Payroll data** file, each **Employee** record consists of three fields: **Name, Weekly pay** and **As of**— a field indicating the date the **Weekly pay** was last updated. Fields are separated by tab characters, and records are separated by carriage return characters. You need to specify these parameters to Import/Export Text.

- Click **Other** to set up the parameters for the **New Payroll data** file.

The dialog box below appears.

```
Process ASCII files as follows:

⦿ Delimit null fields and fields with special characters.
○ Delimit all fields.
○ Delimit alphabetic fields.
○ Do not delimit any fields.

Record separator:        [ ^m ]
Field separator:       . [ ^i ]
Field delimiter:         [ " ]
Ignore these characters: [ 0-^i,^n-31 ]

      ( Cancel )                    ( Done )
```

- Click the **Do not delimit any fields** button.

To Delimit means to surround the data in the field with a special character. That character is called the **Field delimiter**. In our case, the data values for **Name, Weekly pay** and **As of** are all characters you can type on the keyboard and they do not include either tab or a carriage return. That way, Import/Export Text can tell when the data in each field and each record end. However, if the data did include a tab or carriage return, the program could not tell the difference between a carriage return in the data and a carriage return indicating end of a record. In that case you would need to tell Import/Export Text that fields were delimited and choose the field delimiter character.

- Enter the value: **13** (carriage return) for **Record separator, 9** (tab) for **Field separator**, and **0-31** for **Ignore these characters**. The **Field delimiter** is not used.

When you need to enter a character code in an Import/Export Text dialog, you can do it in one of several ways. Appendix G explains them all. Briefly, you can always enter the decimal value of the character code you want and that's what we are doing here.

- Click **Done** on the format parameter dialog.

- Click **Done** on the **ASCII** dialog.

**choosing the Type and fields**

Choose **Employee** from the **Types** menu.

- Choose **Select Fields...** from the **Import** menu.

A dialog appears showing the list of fields available for the **Employee** type and a list you use to specify which fields occur in the exchange file. If you scroll the **Employee** fields down, you will see a circle next to **Name** indicating the field currently used by Filevision for sorting **Employees**. When you import data you can have Import/Export Text match new data against existing records by comparing their sort field values. In fact, we'll use that feature next.

```
╔════════════════════════════════════════════════════════╗
║ ┌──────────────────────────────────────────────────┐   ║
║ │           File-name: Personnel                   │   ║
║ │  Type-name: Employee     Order of imported fields│   ║
║ │  ┌───────────────────┬─┐ ┌──────────────────┬─┐  │   ║
║ │  │ Employee no.      │⇧│ │ 1  Name          │⇧│  │   ║
║ │  │ Federal exemptions│ │ │ 2  Weekly pay    │ │  │   ║
║ │  │ Hourly salary     │ │ │ 3  As of         │ │  │   ║
║ │  │ Link              │ │ │ 4               │ │  │   ║
║ │  │ • Name            │ │ │ 5               │ │  │   ║
║ │  │ Phone no.         │ │ │ 6               │ │  │   ║
║ │  │ State             │⇩│ │ 7               │⇩│  │   ║
║ │  └───────────────────┴─┘ └──────────────────┴─┘  │   ║
║ │    ┌─────────────────┐     ┌─────────────────┐   │   ║
║ │    │   Select all    │     │   Select all    │   │   ║
║ │    └─────────────────┘     └─────────────────┘   │   ║
║ │  ☐ File begins with a list of field names.        │   ║
║ │  ┌──────────────┐          ┌──────────────┐       │   ║
║ │  │   Cancel     │          │    Done      │       │   ║
║ │  └──────────────┘          └──────────────┘       │   ║
║ └──────────────────────────────────────────────────┘   ║
╚════════════════════════════════════════════════════════╝
```

- Click **Name** to select it. (You will need to scroll the **Employee** field list down to see **Name**.) Choose **Append Fields** from the **Edit** menu.

- Select **Weekly pay** and choose **Append Fields** from the **Edit** menu.

- Select **As of** and choose **Append Fields** from the **Edit** menu.

This instructs Import/Export Text that Filevision's field **Name** corresponds to the first field of the **New Payroll data** file, **Weekly pay** corresponds to the second field, and **As of** to the third.

**how to treat data in each field**

- Click field **2 Weekly Pay** and choose **Field Setup...** from the **Edit** menu.

The dialog box appears (next page).

```
┌─────────────────────────────────────────────────┐
│  Field setup for 2:  "Weekly pay":              │
│                                                  │
│  Field width (in characters):                    │
│       ○ Left align data in field.               │
│       ○ Center data in field.                   │
│       ○ Right align data in field.              │
│       Pad character:                             │
│                                                  │
│  ☐ Format data numerically.                     │
│    Number of digits to right of decimal point: [0]│
│       ☐ Suppress leading zeroes.                │
│       ☐ Display sign trailing.                  │
│                                                  │
│  Indicate missing data with: [            ]     │
│                                                  │
│  ( Cancel )  ( Prev field )  ( Next field )  ( Done )│
└─────────────────────────────────────────────────┘
```

This dialog allows you to establish special processing for each field. For this example, the program that made the **New Payroll data** file shows the **Weekly pay** accurately to $0.01. However, you want **Weekly pay** values in the Filevision file to reflect only whole dollar amounts. To convert the data correctly, do the following:

- Click **Format data numerically** and enter **0** for **Number of digits to the right of decimal point**.

- Click **Done** on the **Field Setup** dialog.

- Click **Done** on the **Select Fields** dialog.

## Selecting the method to modify records and their highlighting

- Choose **Select Records...** from the **Import** menu.

A dialog appears allowing you to specify how you want new data to affect Filevision records and what you want to happen to highlighting. In our example, **Employees** listed in the **New Payroll data** file should correspond to records in the **Personnel** file. However, there are more fields in the Filevision **Employee** record than merely **Name, Weekly pay** and **As of**. Therefore, you should instruct the program to change only those. But, if a **Name** in the exchange file does not match any existing record, add it anyway.

```
┌─────────────────────────────────────────────────────┐
│  Process imported data records based on the following:│
│                                                       │
│  ◉ Add all imported data as new records.              │
│  ○ Update matching records; otherwise add new records.│
│  ○ Update matching records; otherwise disregard.      │
│  ○ Replace matching records; otherwise add new records.│
│  ○ Replace matching records; otherwise disregard.     │
│                                                       │
│  ◉ Do not change highlighting.                        │
│  ○ Make all new or changed records highlighted.       │
│  ○ Make only new records highlighted.                 │
│  ○ Make only changed records highlighted.             │
│  ○ Make all new or changed records NOT highlighted.   │
│                                                       │
│  ┌──────────────┐              ┌──────────────┐       │
│  │    Cancel    │              │     Done     │       │
│  └──────────────┘              └──────────────┘       │
└─────────────────────────────────────────────────────┘
```

- Click **Update matching records, otherwise add new records**.

After the data has been updated, you will probably want to browse through the **Personnel** file in Filevision and look at the new information. To help you do this:

- Click **Make all new or changed records highlighted**.

- Click **Done**.

## importing the new data

You are now ready to start the process of importing new data. The rest of the work will be done by Import/Export Text. Here's how to start it:

- Choose **Start...** from the **Import** menu.

A dialog appears listing the files available to import data from.

- Select the **New Payroll** data file and click **Open**.

Import/Export Text displays a dialog showing its progress as data is imported from the file. You can cancel the process at any time by clicking Cancel, but data already imported will have been added to the file. Remember, if you are going to make changes to your files, it's a good idea to back them up first.

```
┌─────────────────────────────────────────────────────┐
│                                                       │
│   Importing record   ┌───────────────┐                │
│                      │ 3             │                │
│                      └───────────────┘                │
│   Name:   ┌───────────────────────────────────────┐   │
│           │ Pole, Anne B.                         │   │
│           └───────────────────────────────────────┘   │
│                              ┌──────────────┐         │
│                              │    Cancel    │         │
│                              └──────────────┘         │
└─────────────────────────────────────────────────────┘
```

- Choose **Return to Filevision** from the **File** menu. You can now use Filevision to browse through the **Personnel** file and look at the new data.

## Details of Importing and Exporting

This section contains two parts. The first part tells you haw to use each of the functions in Import/Export Text. You should use the samples with **Exporting data** and **Importing data** as a guide to what steps you need to do to import or export data. Then, if you have questions about the details of those steps, refer to the explanation here.

The second part contains several reference tables. In particular, if you have a question about how to use Import/Export Text with another program, check the list of programs and suggestions in Appendix F, **How to use Import/Export with other programs**.

## File menu

Use this to select between **Import** and **Export**. This also allows you to save and load Import and Export Setups. After finishing with Import/Export Text, return to Filevision from the **File** menu.

## Import

- Choose **Import** to tell the program that you want to import data into the current Filevision file.

To import data, you must first have prepared an exchange file with the data you want to import. When you choose Import, the **Export** menu disappears from the menu bar and the **Import** menu replaces it.

## Export

- Choose **Export** to tell the program that you want to export data from the current Filevision file.,

Import/Export Text will produce an exchange file for use with another program. When you choose **Export**, the **Import** menu disappears from the menu bar and the **Export** menu replaces it.

## New Setup

When you first enter Import/Export Text, all of the choices you can make are set to standard values.

- Choose **New Setup** when you want to restore these standard values. If you have made some important choices of parameters, you may be asked to confirm this command before it is actually done.

## Load Setup...

After you have set up Import/Export Text to work, you may want to save the values of your choices as a "setup" (See: **Save Setup...** below).

- Choose **Load Setup...** when you want to restore the choices of an earlier setup that you have saved.

When you choose **Load Setup...** you are shown a list of setup documents.
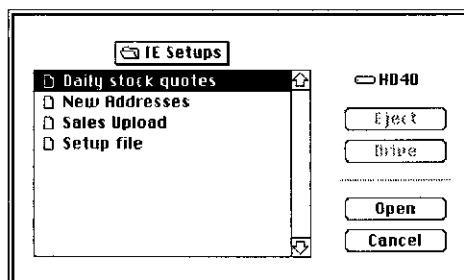


- Select the setup document you want and click **Open**.

## Save Setup...

- Choose **Save Setup...** to save your current Import/Export Text choices in a document that you can later use (See the discussion above under **Load Setup...**).
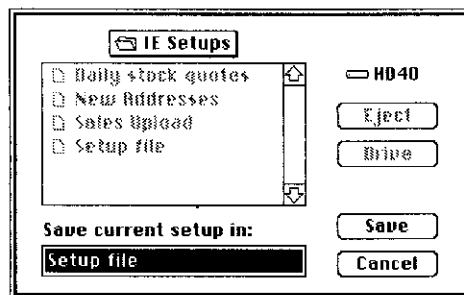


- Type in a name for your setup document and click **Save**.

## Return to Filevision

- Choose **Return to Filevision** to return to exit **Import/Export Text**.

## Edit menu

- Choose **Undo** when you want to reverse the last command you gave to **Import/Export Text**.

In most cases, commands you give can be "undone". When they cannot, the program asks you to confirm your command before proceeding.

## Cut, Copy, Paste and Clear

**Cut, copy, Paste** and **Clear** are only available for the **Select Fields** dialog. You can use them along with "**Append Field(s)**" to help build the list of fields in the exchange file.

**Cut** is available when you have selected one or more fields from the list in the exchange file. **Cut**ting removes the field assignments for the selected fields and clears their field setup parameters to standard values. A copy of the information replaced the current contents of the Clipboard. You can **Paste** the contents of the Clipboard into your Scrapbook for later use.

**Copy** is available when you have selected one or more fields from either list. **Copy**ing replaces the current contents of the Clipboard with values from the fields selected.

**Paste** appends fields to the list of fields in the exchange file. You must first **Cut** or **Copy** field selection and setup data to the Clipboard.

**Clear** acts the same as **Cut**, except that it does not affect the Clipboard.

## Append Fields

**Append Fields** lets you add one or more Filevision fields to the list of fields in the exchange file.

- Select one or more fields from the list of Filevision fields.

- Choose **Append fields** from the **Edit** menu.

A shortcut for **Append fields** is to double-click a single Filevision field. This means select the field and then append it to the exchange file list.

## Field Setup...

**Field Setup...** allows you to set special processing parameters for a field on the list for the exchange file. It is available whenever you have selected one field from that list.

- Select one field from the list of fields in the exchange value.

- Choose **Field Setup...** from the **Edit** menu.

A shortcut for **Field Setup...** is to double-click a single field in the exchange file list, This means select the field and then proceed as if **Field Setup...** were chosen.

When you choose **Field Setup...** the following dialog appears: (Not all parameters are available for all data formats. Check the explanation for each parameter to see when it is available and what it is used for.)

```
Field setup for 2:  "Hourly salary":

Field width (in characters):
      O Left align data in field.
      O Center data in field.
      O Right align data in field.

      Pad character:

□ Format data numerically.
   Number of digits to right of decimal point:  [0]
      □ Suppress leading zeroes.
      □ Display sign trailing.

Indicate missing data with: [            ]

( Cancel )  ( Preu field )  ( Next field )  ( Done )
```

- Enter the **Field width (in characters)** for this field.

This item is available only if you have previously chosen **SDF** from the **Import** or **Export** menu and not chosen the **Delimit fields** option. You can specify a value between 1 and 2000 characters. A value of 0 indicates that you don't want to use this field.

- Choose **Left align data in field**, **Center data in field**, or **Right align data in field** for this field.

These choices are available only if you have chosen **Export** and **SDF**, and have not chosen the **Delimit fields** option. They instruct Import/Export Text how to align data shorter than the **Field width** you have entered for the field.

- Enter a character code for the **Pad character** for this field.

This choice is available only if you have chosen **Export** and **SDF**, and have not chosen the **Delimit fields** option. The **Pad character** is used to fill fields that have data that is shorter than the **Field width**, according to the **alignment** you choose.

- Choose **Format data numerically** whenever you want data for this field treated only as numbers.

Filevision fields can contain numbers, text, pictures or a combination of numbers and text. Some other programs require fields containing numbers to have no additional text and may not allow other characters, such as commas (as thousands separators) or currency symbols in the number. **Format data numerically** uses the decimal positioning you specify below to re-format the data numerically. It can be used while importing or exporting data.

As a convenience, when data is exported in DIF or SYLK format, numeric data is identified as such even if you don't choose **Format data numerically**. However, if you have Filevision data that includes commas, currency symbols, or other textual comments and you want it treated by another program as a number, you <u>must</u> choose **Format data numerically** for those fields.

- Enter **0,1,2,3,** or **4** for the **Number of digits to right of decimal point** whenever you choose **Format data numerically**. If you enter **0**, no decimal point is output.

- Click **Suppress leading zeroes** to affect formatting numeric data on export.

This choice is available only if you have chosen **Export** and **SDF**, and have not chosen the **Delimit fields** option. It is used only if you have also chosen **Format data numerically**.

- Click **Display sign trailing** if you want a "+" or "-" sign output as the <u>rightmost</u> character of the field.

Normally, the minus sign is displayed to the left of the digits of a number and no plus sign is displayed; however, some programs expect the sign on the right,. This choice is available only if you have chosen **Export** and **SDF**, and have not chosen the **Delimit fields** option. It is used only if you have also chosen **Format data numerically**.

- Click **Next field, Prev field, Cancel**, or **Done** as appropriate.

**Types menu**

The **Types** menu lists the Types for the current Filevision file. The currently selected Type is shown with a check mark.

- Choose a Type from the **Types** menu to change the current Type to that Type.

Note:  When you change types, all **Select Fields** and **Field Setup** parameters are cleared to their standard values.  If you want to save some of these values for use with the new type, first use **Copy** to put those values on the Clipboard.

## Select fields...

**Select Fields...** is available whenever you have selected a Filevision file and have chosen a type.  When you choose **Select Fields...** the following dialog appears:

```
┌─────────────────────────────────────────────────────────┐
│                    File-name: Tour                        │
│      Type-name: Townhouse      Order of imported fields   │
│    • Address              ⬆    1                      ⬆   │
│      Available?                2                          │
│      Comments                  3                          │
│      Link                      4                          │
│      Model                     5                          │
│      No. of bathrooms          6                          │
│      No. of bedrooms      ⬇    7                      ⬇   │
│                                                           │
│      (     Select all     )    (     Select all     )    │
│                                                           │
│      ☐ File begins with a list of field names.           │
│      (   Cancel   )                   (    Done    )      │
└─────────────────────────────────────────────────────────┘
```
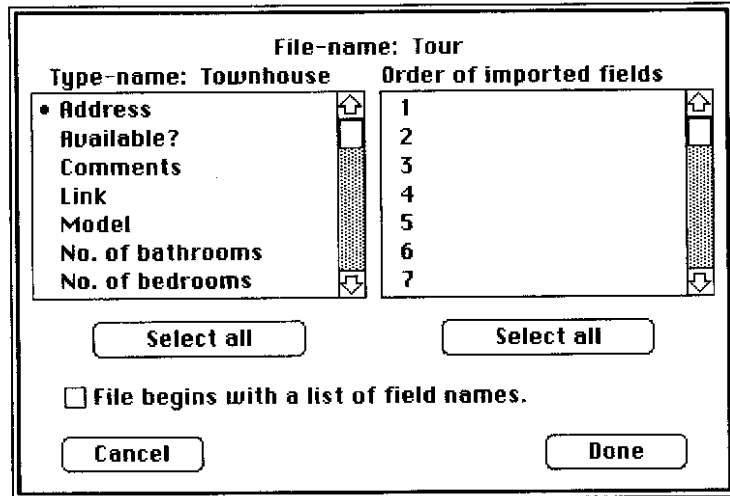
The left list shows the Filevision fields that you can select to import or export data.  They are listed alphabetically.  Only data fields are listed (not annotation fields).  And only fields with a name are included.  If you have two fields with the same name, they will both appear, but you will not know which is which.  The circle to the left of one field shows the field that is currently being used by Filevision to sort records of this type (the sort field).

The right list shows the fields in the exchange file.  There can be up to 255 of them.  You use this dialog to choose which Filevision fields are associated with the fields in the exchange file.  Here's how:

- Click a field to select it.

- Hold down the **Shift-key** and click more fields to select them too.  If you click a field that is already selected, it is removed from your current selection.  You can select fields from only one list at a time.

- Click and drag the mouse to select multiple fields.

- Click **Select all** under either list to select all fields of that list.

- Hold down the **Option-Key,** click and drag a field in the exchange file list to move it to a different position in the exchange file list.

- Double-click a field in the Filevision list to append it to the exchange file list.

- Choose **Append Fields** from the **Edit** menu to append selected Filevision fields to the exchange file list.

- Choose **Cut, Copy, Paste** or **Clear** from the **Edit** menu to remove or append selected fields from the exchange file list.

- Choose **Field Setup...** from the **Edit** menu to change the special field handling rules for a selected field in the exchange file list.

- Click **Cancel** or **Done** as appropriate.

Notes: the easiest way to build the exchange file list is to double-click the Filevision fields in the order you want them to occur in the exchange file. If you make a mistake, choose **Undo** from the **Edit** menu or click **Cancel** and then **Select Fields...** again.

If you have special field handling rules, first build the full exchange file list; then double-click **field 1** in the list and use **Next field** on the **Field Setup** dialog to specify the rules for each field.

Advanced applications: You may leave fields in the exchange list unused. Hold down the **Option-key** and drag fields to set up unused fields where you want them, or use **Cut** or **Clear**. If data is imported for an unused area, it is ignored. If data should be exported for an unused field, a null data value is provided by Import/Export Text. You can use this feature to ignore spreadsheets when importing using DIF or SYLK format. You can also provide blank columns when exporting data to spreadsheets.

Any Filevision field may appear in the exchange file list only once.

**Select records...
(importing)**

This command allows you to specify what happens to records as they are processed from the exchange file. There are two general choices you may make: what happens to the records themselves and how highlighting is affected. Remember that the Field Setup command in Filevision itself affects field values in new and existing records. **Initial text** and **Copy from previous record** options affect new records and **Compute using a formula** affects field values in all records. The choices for processing imported records are described next:

Process imported data records based on the following:

◉ Add all imported data as new records.
○ Update matching records; otherwise add new records.
○ Update matching records; otherwise disregard.
○ Replace matching records; otherwise add new records.
○ Replace matching records; otherwise disregard.

◉ Do not change highlighting.
○ Make all new or changed records highlighted.
○ Make only new records highlighted.
○ Make only changed records highlighted.
○ Make all new or changed records NOT highlighted.

[ Cancel ]                          [ Done ]

- **Add all imported data as new records:**
  This choice means that all imported data is treated as new data and additional records are added to the file.

| Field | Imported data | Matching data? | Result |
|---|---|---|---|

**Add all imported data as new records:**

| | | | (New record) |
|---|---|---|---|
| Name(Sort) | Box | (Doesn't matter) | Box |
| Height | 13 | 13 | |
| Width | 10 | 10 | |

or

- **Update matching records; otherwise add new records:**
  Each new record received is compared against existing records in the Filevision file. If the sort field of the imported data matches the sort field of any existing record then it is treated as a change to that record. Otherwise, the imported record is added as a new record to the file. Updating a record leaves fields in the "old" records that do not appear in the imported data unaffected. Replacing a record removes all fields from the old record and them adds the imported data. See the table below for examples.

**Update matching records; otherwise add new records:**

| | | | (Existing record) |
|---|---|---|---|
| Name(Sort) | Box | Box | Box |
| Height | 13 | 15 | 13 |
| Width | (Not in data) | 10 | 10 |

|            |                 |                   | (New record) |
|------------|-----------------|-------------------|--------------|
| Name(Sort) | Cannister       | (No match)        | Cannister    |
| Height     | 19              | 19                |              |
| Width      | (Not in data)   | (No data in field)|              |

or

- **Update matching records; otherwise disregard:**
  Each new record received is compared against existing records in the
  Filevision file. If the sort field of the imported data matches the sort
  field of any existing record then it is treated as a change to that record.
  Otherwise, the imported data is disregarded and the file is not changed.
  Updating a record leaves fields in the "old" records that do not appear
  in the imported data unaffected. Replacing a record removes all fields
  from the old record and then adds the imported data. See the table
  below for an example.

### Update matching records; otherwise disregard:

|            |               |           | (Existing record) |
|------------|---------------|-----------|-------------------|
| Name(Sort) | Box           | Box       | Box               |
| Height     | 13            | 15        | 13                |
| Width      | (Not in data) | 10        | 10                |

|            |               |           |                   |
|------------|---------------|-----------|-------------------|
| Name(Sort) | Cannister     | (No match)| (Record not       |
| Height     | 19            |           |  added to file)   |
| Width      | (Not in data) |           |                   |

or

- **Replace matching records; otherwise add new records:**
  Each new record received is compared against existing records in the
  Filevision file. If the sort field of the imported data matches the sort
  field of any existing record then it is treated as a change to that record.
  Otherwise, the imported record is added to the file as a new record.
  Replacing a record removes all fields from the old record and then adds
  the imported data. Updating a record leaves fields in the "old" records
  that do not appear in the imported data unaffected. See the table
  below for an example.

### Replace matching records; otherwise add new records:

|            |               |           | (Existing record) |
|------------|---------------|-----------|-------------------|
| Name(Sort) | Box           | Box       | Box               |
| Height     | 13            | 15        | 13                |
| Width      | (Not in data) | 10        | (No data in field)|

|            |               |           | (New record)      |
|------------|---------------|-----------|-------------------|
| Name(Sort) | Cannister     | (No match)| Cannister         |
| Height     | 19            | 19        |                   |
| Width      | (Not in data) | 10        | (No data in field)|

- **Replace matching records; otherwise disregard:**
  Each new record received is compared against existing records in the
  Filevision file. If the sort field of the imported data matches the sort
  field of any existing record then it is treated as a change to that record.
  Otherwise, the imported data is disregarded and the file is not affected.
  Replacing a record removes all fields from the old record and then adds
  the imported record. Updating a record leaves fields in the "old"
  records that do not appear in the imported data unaffected. See the
  table on the next page for an example.

## Replace matching records; otherwise disregard:

|            |                |            | (Existing rec.)    |
| ---------- | -------------- | ---------- | ------------------ |
| Name(Sort) | Box            | Box        | Box                |
| Height     | 13             | 15         | 13                 |
| Width      | (Not in data)  | 10         | (No data in fld)   |
|            |                |            |                    |
| Name(Sort) | Cannister      | (No match) | (Record not        |
| Height     | 19             |            | added to file)     |
| Width      | (Not in data)  |            |                    |

If two records have the same data for their sort fields, Import/Export Text
matches the first one found. But Import/Export Text matches a particular
record only once per Start... command.

The following choices affect how highlighting is changed by the import process.
You can use highlighting to provide an easy key to later browsing through the
records that are affected by the process. Remember that only one set of high-
lighted records can be in effect at a time. So, if highlighting is changed because
of the import process, any highlighting that was in effect before the process is
lost.

- **Do not change highlighting:** New records are added, not high-
  lighted. Existing records remain in their current highlighted or non-
  highlighted condition.

- **Make all new or changed records highlighted:** Any existing
  highlighting is first cancelled. Then new records are highlighted and
  any existing records that are updated or replaced are also highlighted.

- **Make only new records highlighted:** Any existing highlighting is
  first cancelled. Then, new records are highlighted. However, existing

records that are merely updated or replaced are left without highlighting. You can use this highlighting technique to find imported data which did not match existing records.

or

- **Make only changed records highlighted:** Any existing highlighting is first cancelled. New records are added without highlighting. However, any existing records that are updated or replaced are highlighted.

or

- **Make all new or changed records NOT highlighted:** Any new records are added without highlighting. Existing records that are updated or replaced are also marked NOT highlighted. Otherwise, highlighting for existing records is not affected.

- Click **Done** when you have completed your record processing choices.

**Select records...**
**(exporting)**
This command allows you to specify which records of the current type are included in the exchange file.

```
┌─────────────────────────────────────────────────────┐
│                                                     │
│  Select records to export based on the following:   │
│                                                     │
│  ⦿ Export all Townhouse records.                    │
│  ◯ Export only highlighted Townhouse records.       │
│                                                     │
│  ☐ Don't export null records.                       │
│                                                     │
│   ┌──────────────┐              ┌──────────────┐   │
│   │   Cancel     │              │    Done      │   │
│   └──────────────┘              └──────────────┘   │
│                                                     │
└─────────────────────────────────────────────────────┘
```

- **Export all Townhouse records:** Choose this to include all records of the current type.

or

- **Export only highlighted Townhouse records:** Choose this to include only highlighted records of the current type.
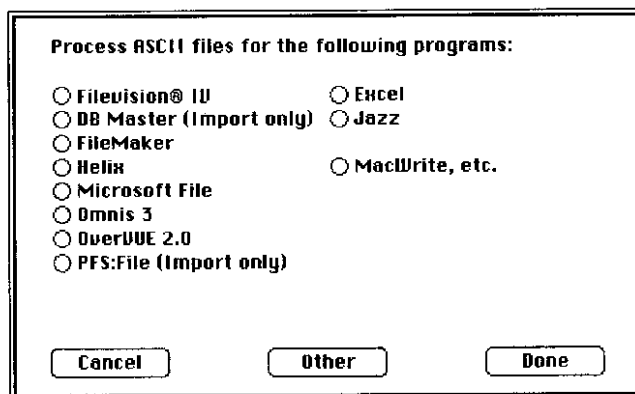
or

- **Don't export null records:** When you use the **Select Fields** dialog to choose which Filevision fields are included the exchange file, you may

decide to include only some fields of the current type. So there is a chance that some records you have included for export may have no data in any of the fields you have chosen. You can click **Don't export null records** to instruct Import/Export to disregard those records and not include them in the exchange file. This option is not used when exporting DIF format files.

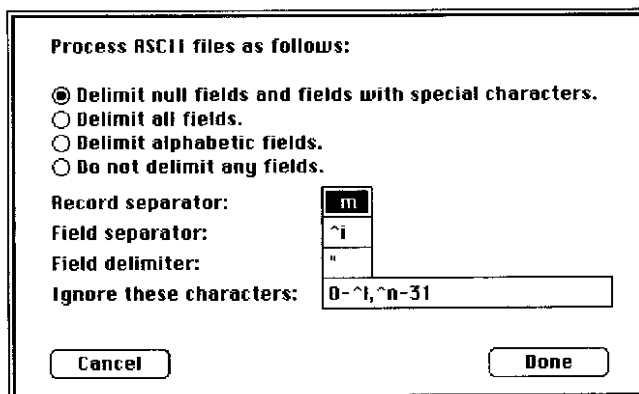- Click **Done** when you have completed your choices for selecting records.

**ASCII...**

This command sets the format of exchanged data to ASCII. Import/Export Text presents you with a list of programs which support the ASCII format.

```
┌──────────────────────────────────────────────────────┐
│ Process ASCII files for the following programs:      │
│                                                      │
│ ○ Filevision® IU        ○ Excel                      │
│ ○ DB Master (Import only)  ○ Jazz                    │
│ ○ FileMaker                                          │
│ ○ Helix                 ○ MacWrite, etc.             │
│ ○ Microsoft File                                     │
│ ○ Omnis 3                                            │
│ ○ OverUUE 2.0                                        │
│ ○ PFS:File (Import only)                             │
│                                                      │
│  ( Cancel )        ( Other )        ( Done )         │
└──────────────────────────────────────────────────────┘
```

- Click the target program of your exchange to set up the correct parameters. Please check Appendix F for further information on exchanging data with these program formats.

or

- If the program you want to exchange data with does not appear in the list or you wish to control the parameters yourself, click **Other** for the secondary **ASCII** dialog.

```
┌──────────────────────────────────────────────────────┐
│ Process ASCII files as follows:                      │
│                                                      │
│ ⦿ Delimit null fields and fields with special characters. │
│ ○ Delimit all fields.                                │
│ ○ Delimit alphabetic fields.                         │
│ ○ Do not delimit any fields.                         │
│                                                      │
│ Record separator:     [ m ]                          │
│ Field separator:      [ ^i ]                         │
│ Field delimiter:      [ " ]                          │
│ Ignore these characters:  [ 0-^I,^n-31 ]             │
│                                                      │
│  ( Cancel )                         ( Done )         │
└──────────────────────────────────────────────────────┘
```

ASCII files do not have a single, universal format like DIF or SYLK files do. You need to specify certain parameters to the Import/Export program so that it can create or interpret ASCII files correctly. These parameters are explained on the next page.

- **Record separator:** This character indicates the end of a record. Typical choices for this parameter are 12 (form-feed) or 13 (carriage return). See the discussion in Appendix B, **Entering character codes**, for help on entering data in this item.

- **Field separator:** This character indicates the end of a field or data. The last field in a record is not followed by a **field separator**; instead it is followed by a **record separator**. Typical choices for this parameter are 9 (tab), 13 (carriage return), 43 (comma).

- **Field delimiter:** For some choices of record and field separators, a single ASCII character can be used either as a record separator or a field separator or normal character of data. In order to interpret the characters correctly, ASCII file specifications may require that data fields be <u>surrounded</u> with delimiting characters. You choose how this feature is used by commands explained below. Typical choices for the field delimiter are 34 (double-quote marks) or 39 (single-quote marks).

- **Ignore these characters:** This feature allows you to disregard certain ASCII characters found in field data. You may want to use this to remove currency symbols, commas, carriage returns, characters with diacritical marks, or other characters you choose from field data. Filevision data fields may include all characters with decimal codes of 32 or greater and the carriage-return character (13). Any other character code (0 to 12 and 14 to 31) is removed automatically from imported data. If you are considering using this feature, you may also want to look at the **Translate...** command on the **Options** menu.

Special rules affect how you enter the list of character codes you want to ignore. You can use most normal rules for entering character codes except for the two characters comma (",") and minus ("-"). Enter them as **44** and **45**, respectively. Use commas to separate character codes you enter. Use a minus to indicate a range of characters. For example, to enter "control codes through 0 through 31 and the dollar, yen, and sterling symbols", you would type "**0-31, $, ¥, £**".

- **Delimit null fields or fields with special characters:** Null fields are fields that have no data in them. Special characters are all characters except the following: space(" "), plus ("+"), minus ("-"), decimal point ("."), the digits, and the letters of the alphabet. Fields with special characters in the data will have the field delimiter character placed around them. Also, if the field delimiter character is found in the data, it will be duplicated. (This is called an "escape sequence").

or

  - **Delimit all fields:** This option surrounds all fields with field delimiters.

or

  - **Delimit alphabetic fields:** Because numeric fields are never null and contain only the digits, decimal point, and sign characters, they seldom need to be delimited. This option delimits all non-numeric fields but does not delimit number fields.

or

  - **Do not delimit any fields:** Choose this option only if the record and field separator characters cannot occur as normal data characters.
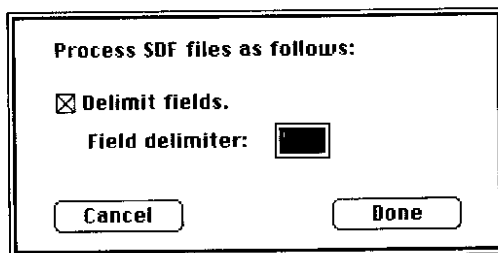
## DIF

**DIF** (Data Interchange Format) is a specification for formatting data that was first used by Software Arts in its program VisiCalc. This format is currently supported by several spreadsheet and data-base programs for exchange of data.

  - Choose **DIF** to specify a Data Interchange Format exchange file.

## SDF

**SDF** (System Data Format) is the specification for exchanging data with dBase-II and dBase-III programs. It is also supported by several Macintosh data-base programs as well. When you choose this format the dialog to the right appears:

```
┌─────────────────────────────────────────────┐
│ ┌─────────────────────────────────────────┐ │
│ │  Process SDF files as follows:          │ │
│ │                                         │ │
│ │  ☒ Delimit fields.                      │ │
│ │     Field delimiter:    �           │ │
│ │                                         │ │
│ │  ( Cancel )           (  Done  )        │ │
│ └─────────────────────────────────────────┘ │
└─────────────────────────────────────────────┘
```

  - Click **Delimit fields** to choose whether fields are separated or not in the data. If you do not choose **Delimit fields**, you <u>must</u> specify the number of characters that each field occupies in the data stream. You do this on the **Field setup** dialog. The **Field setup** dialog is available when you have selected an exchange file field on the **Select fields** dialog. For **SDF** files, the field separator character is always comma (",") and the record separator character is always carriage return (13).

- Enter the code for the **Field Delimiter**. Standard dBase-II and -III allow only single quote ('), double quote ("), and comma (","). Comma is permitted only when dBase exports data. If you select comma, no delimiter is used, since comma is already used as the field separator. Import/Export will automatically remove commas and carriage returns (13) from data.
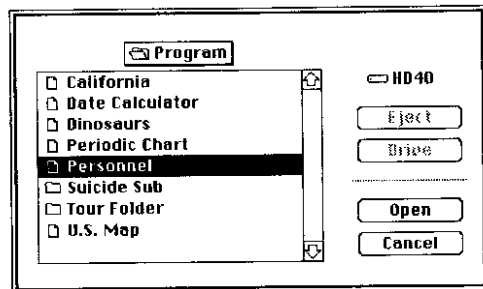
## SYLK

**SYLK** (Symbolic Link) is a specification for formatting data that was first used by Microsoft in its program Multiplan. This format is currently supported by many Macintosh programs.

- Choose **SYLK** to specify a Symbolic Link exchange file.

## Start...

- Choose **Start...** from the **Import** or **Export** menu to begin the process after you have set up all necessary parameters. If you are importing data, the dialog to the right appears, listing the files with data to import:

| 📁 Program | |
|---|---|
| 🗋 California | ⬜ HD40 |
| 🗋 Date Calculator | |
| 🗋 Dinosaurs | Eject |
| 🗋 Periodic Chart | Drive |
| 🗀 Personnel | |
| 🗀 Suicide Sub | Open |
| 🗀 Tour Folder | |
| 🗋 U.S. Map | Cancel |

- Select the file that has the data you want and click **Open**.

Import/Export Text displays a dialog showing its progress as data is imported. You can cancel the process at any time by clicking **Cancel**, but data already imported will have been added to the file.

If you are exporting data, the dialog to the right appears instead.

- Enter a name for the exchange file and click **Save**. If a file with that name already exists, confirm that you want to replace it.

| 📁 Program | |
|---|---|
| 🗋 California | ⬜ HD40 |
| 🗋 Date Calculator | |
| 🗋 Dinosaurs | Eject |
| ◈ Filevision | Drive |
| 🗋 Periodic Chart | |
| 🗋 Personnel | |
| **Export records to:** | Save |
| | Cancel |
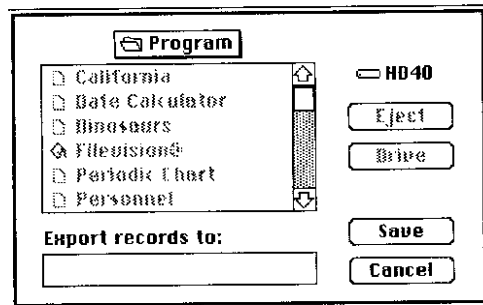
Export displays a dialog showing its progress as data is exported. You can cancel the progress at any time by clicking **Cancel**.

## import or export from the Clipboard

You can also import or export data directly from the Clipboard rather than use a field. To do this:
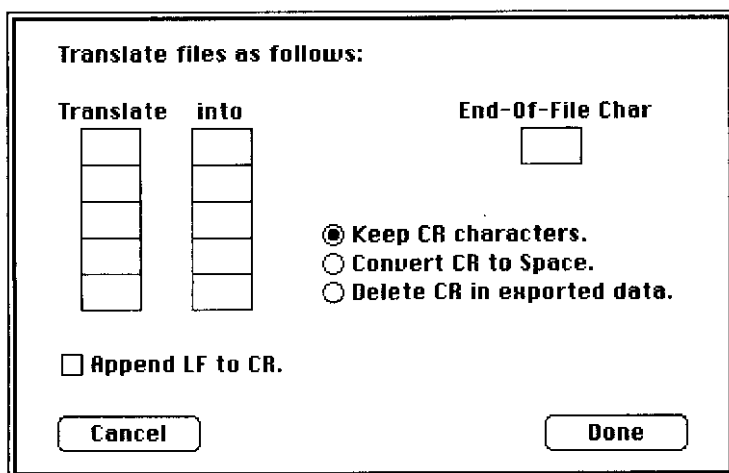
- Hold down the **Option-key** while you choose **Start...** from the **Import** or **Export** menu.

**Import/Export Text** displays a dialog showing its progress as data is imported or exported from the Clipboard

## Options Menu (Import/Export Text)

## Translate...

The **Translate...** dialog allows you to control some special features of the exchange file, These features are not usually required, but are useful in certain areas.

```
┌─────────────────────────────────────────────────────────┐
│  Translate files as follows:                            │
│                                                          │
│  Translate   into              End-Of-File Char         │
│  ┌────┐    ┌────┐                  ┌────┐               │
│  │    │    │    │                  │    │               │
│  ├────┤    ├────┤                  └────┘               │
│  │    │    │    │                                        │
│  ├────┤    ├────┤       ◉ Keep CR characters.           │
│  │    │    │    │       ○ Convert CR to Space.          │
│  ├────┤    ├────┤       ○ Delete CR in exported data.   │
│  │    │    │    │                                        │
│  └────┘    └────┘                                        │
│                                                          │
│  ☐ Append LF to CR.                                     │
│                                                          │
│  ( Cancel )                        ( Done )             │
└─────────────────────────────────────────────────────────┘
```

The two columns of five entries let you choose up to five characters that you want to translate into other characters. This feature allows you to change say, a vowel with a diacritical mark into a normal ASCII character for programs that do not support the Macintosh extended character set.

- Enter the character code that you want translated in one of the five rows under the first column.

- Enter the character code that you want to be translated to in the corresponding row of the second column. If you leave the second column blank, Import/Export will merely delete instances of the first character from the data.

Some operating systems indicate an end-of-file by a special character in the data. Data after that character in the file should be ignored.

- Enter the character code that you want used as **End-Of File Char**.

If you don't use this option, Import/Export Text will use the standard Macintosh end-of-file indication. If you do enter a character code here, all data, after the end-of-file character is found, will be ignored while importing and the character will be put at the end of all regular data while exporting.

The following options are available only when you export data.

- Click **Keep CR characters** if carriage-return characters (13) that you entered in Filevision fields are to remain in exported data. Beware that some data interchange formats automatically remove carriage-returns from the data. Also some programs do not allow carriage-returns in the data. Check your target program specification.

or

- Click **Convert CR to Space** to ensure that no carriage-return characters (13) are included in the field data. They will be replaced by spaces (32).

or
- Click **Delete CR in exported data** to ensure that no carriage-return characters (13) are included in the field data. They will be deleted from the data.

- Click **Append LF to CR** if the target program you are sending   data to expects the sequence carriage return (13), line-feed (10) to indicate a line separator.

Whenever any of the **Translate** options are in effect, you will see a check mark next to the **Translate...** item on the Import/Export Text **Options** menu.

## Convert to upper case

- Choose **Convert to upper case** to have Import/Export convert all lower case letters ("a" through "z") to upper case letters ("A" through "Z"). Choose it again to disable this option.

Whenever **Convert to upper case** is in effect, you will see a check mark next to it on the Import/Export Text **Options** menu.

# 11. Linking Filevision IV Files

Any object can be made to "link" to another Filevision file. A link is a way of quickly and smoothly closing the current file and opening another one, all automatically and without using the **File** menu.

Why are links so important?
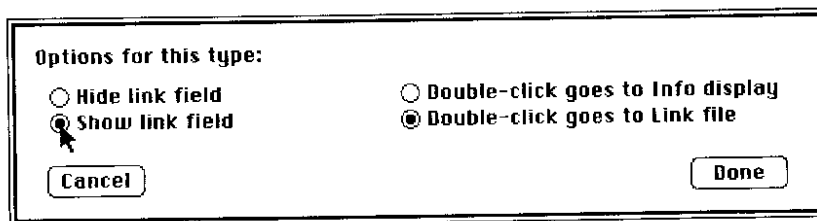
First, linking is a way to connect related files. You can use Link to get an "exploded view" of a part of your file, like the city insets on state maps. You can also use linking to get more detailed data about an object that just won't fit into one record. For example, a large company using a main file showing the company organization and a link for each division, or a link file of vendors for each segment of the firm.

Second, links are convenient. If you have several files that you use often, **Link** offers a way to switch rapidly from one to the other.

**Creating a link**

\* From the **Change Layout** display, click **Options**.

You'll see the Options dialog box:

```
Options for this type:

○ Hide link field              ○ Double-click goes to Info display
◉ Show link field              ◉ Double-click goes to Link file

( Cancel )                                        ( Done )
```

• Click **Show link field** and the desired **Double-click** instructions.

• Click **Done**.

• When you're on the Info display for a record, fill in the **Link** field with the name of the file you want that object to link to:

**Link** So Cal Fwy System

Make sure that you enter the exact name of the file you're linking to. Even spaces preceding file names count, although the Macintosh doesn't distinguish between upper and lowercase letters in a file name.

You can have a different link for each object or record in a file. For instance, if your file contained a total of 1,000 records, you could link to any of 1,000 files each of which could further link to additional files.

All files have link fields, but the link field may be hidden for all objects of a Type. You can make the fields reappear using the "**Show link field**" option on the **Change Layout** display; for more details, see hiding or showing the link field, pages 173 and 220.
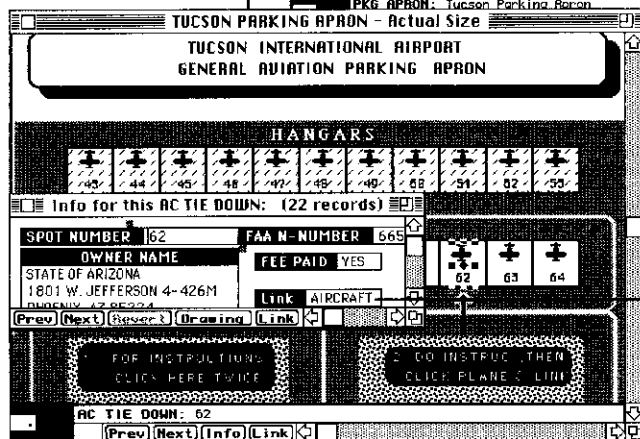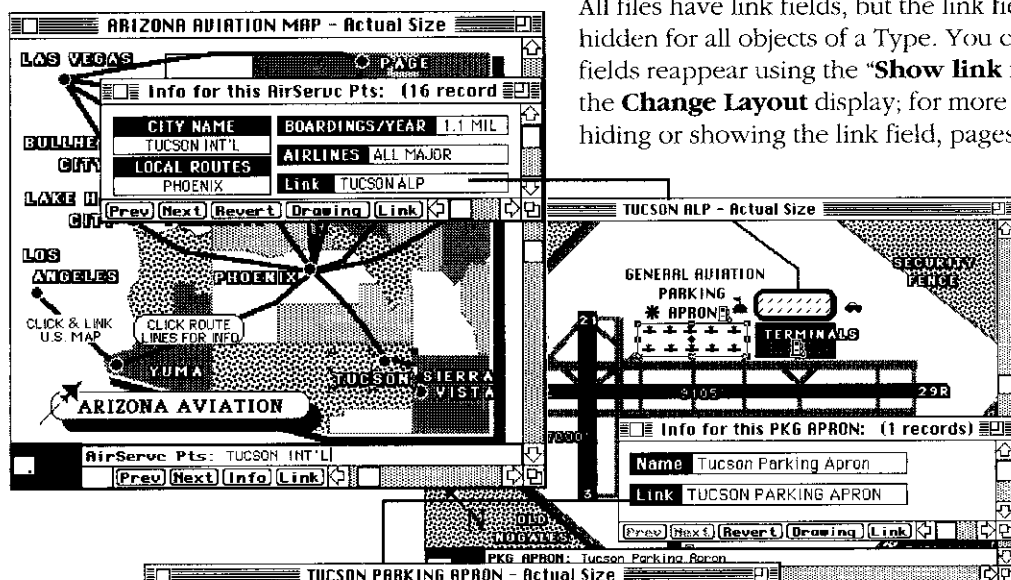
In this example of file linking, the Arizona Aviation Map is linked to the Tucson ALP file through the Tucson record. The Tucson Parking Apron record links to the actual Tucson Parking Apron file.

The aircraft in spot 62's record then links to the file containing an illustration and all pertinent information about the aircraft tied down in spot 62. This could be an actual gray scale scanned photograph of the plane.

## Linking to
## another file

- Select the object.

* Click the **Link** button or double-click the object if the Type's options are set up to link on a double-click.

The file you're currently using will be closed and the file named in the **Link** field will be opened, all in one quick, smooth action.

## Returning from
## a linked file.

- To return to the last file you used, choose **Return to...** from the **File** menu.

```
┌─────────────────────────────┐
│ File                        │
├─────────────────────────────┤
│ New...                  ⌘N  │
│ Open...                 ⌘O  │
│ Close  TUCSON PARKIN...     │
│ Save                    ⌘S  │
│ Save As...                  │
│ Return to TUCSON ALP    ⌘;  │
├─────────────────────────────┤
│ Import Graphics...          │
│ Export Graphics...          │
│ Import/Export Text...       │
├─────────────────────────────┤
│ Page Setup...               │
│ Page Size...                │
│ Print Page...           ⌘U  │
│ Print Records...        ⌘P  │
├─────────────────────────────┤
│ Quit                    ⌘Q  │
└─────────────────────────────┘
```
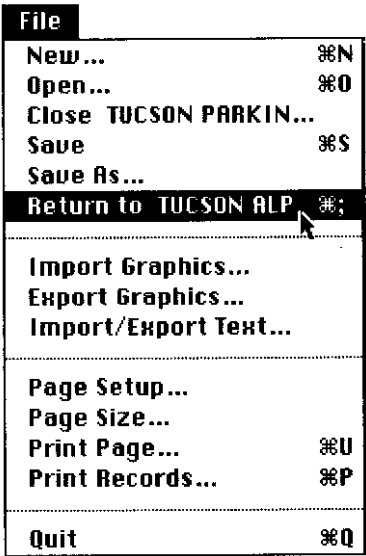
Filevision "remembers" the last five nested files that you linked from.

# 12. Sort and Find

Up to this point, Section Three has dealt with creating the framework of a file and filling in records. This part shows some of the miscellaneous information in working with the Access menu.

Do you want to order objects by a field other than **Name**— say. **Area code** or **Zip code**? No problem—use **Sort by...**.

Do you need to find a particular record fast. Use **Find...** (only on the sort field) for quick access.

Sometimes you'll want objects to be visible but unselectable—background graphics often fall into this category. **Ignore** will take care of that, and you can **Activate** those graphics just as easily.

## The Access menu

Use of the **Access** menu is at the heart of Filevision. It includes sorting, finding, highlighting, hiding objects, showing objects and ignoring objects. Notice the first entry in the **Access** menu. It's the currently selected **Type**'s name.

All operations listed in the **Access** menu refer to the selected **Type** only, except Show All Types. If you select **Sort By...**, you will be sorting the currently selected Type. If you select **Find...**, you will be searching in the currently selected Type. If you select **Highlight...** you will be highlighting the currently selected Type, etc..

| Access |  |
|---|---|
| "Background"s: | |
| Sort By... | |
| Find... | ⌘F |
| Find Same | ⇧⌘S |
| Highlight... | ⌘H |
| Highlight Selected | ⌘W |
| Highlight All | ⇧⌘A |
| Hide Selected | ⇧⌘H |
| Show Selected | |
| Show Only These | |
| Ignore | |
| | |
| Show All Types | |
| Cancel Highlighting | ⌘J |
| | |
| Previous Record | ⇧⌘P |
| Next Record | ⇧⌘N |
| Info Page | ⌘I |
| Drawing Page | ⌘D |
| Link | ⌘L |

## Sort by...

The records of each Type are sorted (ordered) according to the contents of a particular field. The default sort field is **Name**, but you can change it to any field in the Type layout, anytime. The sort order is important for:

• the order in which objects are selected using the **Next** and **Prev** buttons

• the selection information area—the contents of the sort field are shown there when an object is selected.

• **Find...** and **Find Same**

• Rank inquiries for the **Highlight...** display

> • To change the sort field of the selected Type, choose **Sort by...** from the **Access** menu.

A dialog box appears, showing the name of the current Type, the current sort field in that Type and warning you that "You will not be able to undo this action." if you proceed.

```
Sort "Customer"s by:

[ Last name                              ]

You will not be able to undo this action.

( Cancel )                    ( Sort )
```
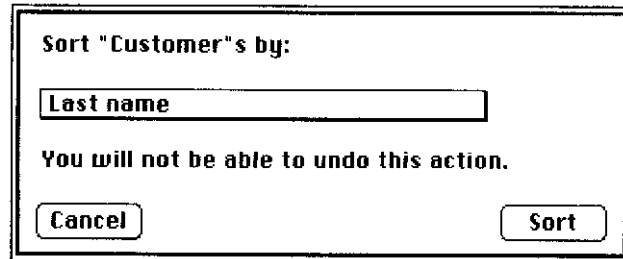
> • To change the sort field, use the pop-up menu where the field name is located to select the new sort field.

```
Credit info:
Current Mailing Address
Down Payment
First name
Have they  already purchased?
Last Contact
Last name
Link
Model
Phone Home
Phone Work
Remarks
Salesperson
Spouse, children's names
```
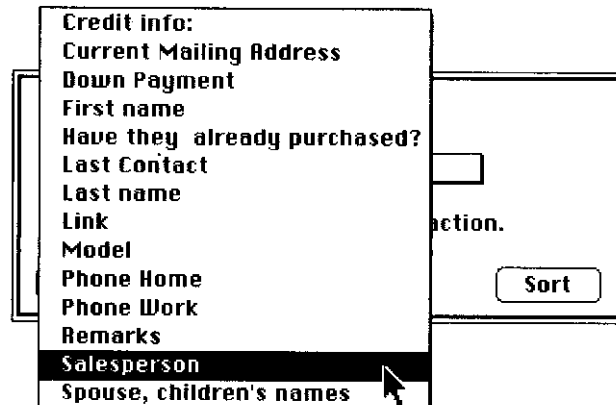
- Click **Sort**.

A progress dialog is displayed that provides the current status for each of the three sort processes (records input, sorting and records output).

```
[ Quit ]   Sort input phase, records: 340
```

```
[ Quit ]   Sort output phase, records: 500
```
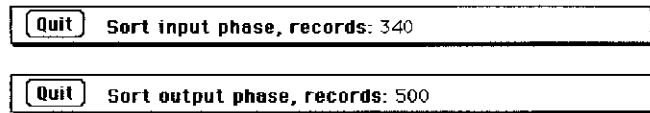
- If you want to cancel the sort at any time prior to its finish, click the **Quit** button.

The sort will be terminated and a dialog box will inform you that your records are unsorted. Filevision reverts back to the original sort if a new sort is cancelled. If you wish to sort by some other field, 'Use "**Sort by...**" to resort them' again.

```
        The records are unsorted.

        Use "Sort by..." to resort them.

                                    [ OK ]
```
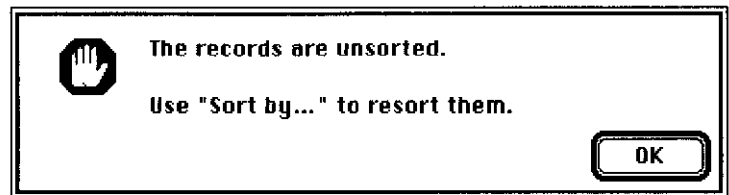
## Find...

You can easily locate any object of the selected Type, or any number of objects with related characteristics, simply by giving Filevision a few clues. All you need is a word or letter(s) contained in the first 22 characters of the sort field that you are searching for.

**Find...** searches the first 22 characters in the sort field (the data contained in the drawing page information area). Use **Highlight...** to search for information in other fields, or to compare text in the sort or any field of up to 8,000 characters. **Highlight...** searches all 8,000.

In this hypothetical example you have a file with records of the Type **Client**, and **Client** records are the companies you're dealing with. You want to look for a company whose name you only partly remember. It's something like "Finance Software", or "Business and Finance", or "Software and Finance"... You know only that the name has something to do with Finance.

- Choose **Find...** from the **Access** menu.

A dialog box appears. In this example, we're going to look for all objects of the Type **Client** whose **Company name** field (the current sort field) contains the word **Finance**.

- Enter **Finance** in the dialog box as you see below:

**Find this Client Company name:**

Finance|

[ Cancel ]    [ Find First ]    [ Find Next ]

- After the name is filled in, click the **Find First** button.

Filevision will now look through the **Company name** sort field of all the records in Type **Client**.
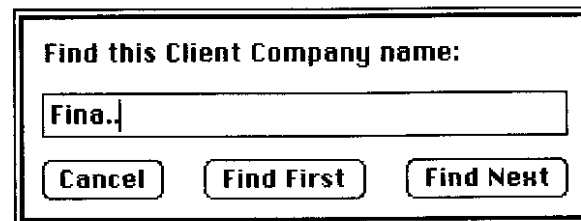
**Find...** selects the first object that matches the conditions you set.

Partial strings (letters within a word), words located only at the beginning of the field or words that you aren't certain of the spelling can also be searched. To constrain the search to a first word in the Company name field, enter an up carat (^) (Shift-6) before the word **Finance**:
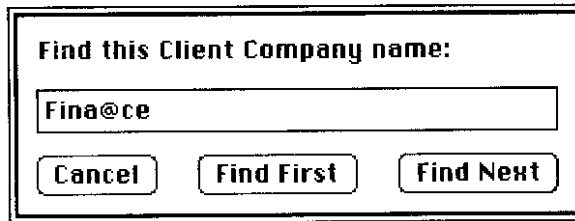
**Find this Client Company name:**

^Finance

[ Cancel ]    [ Find First ]    [ Find Next ]

To find a partial string, use a double period (..) for the unknown or variable portion of the string:  Using **Fina..** would find the first occurrence of the words **Finance**, **Financial** or **Final**.

**Find this Client Company name:**

Fina.|

[ Cancel ]    [ Find First ]    [ Find Next ]

If you weren't certain of how the company spelled their name (some do  use tricky ways), use an **at** (@) character for any letters that you are not certain of: Filevision's **Find...** function is not case sensitive and will find all occurrences in either upper or lower case.

```
╔══════════════════════════════════════════════════╗
║  ┌────────────────────────────────────────────┐  ║
║  │  Find this Client Company name:            │  ║
║  │  ┌──────────────────────────────────────┐  │  ║
║  │  │ Fina@ce                              │  │  ║
║  │  └──────────────────────────────────────┘  │  ║
║  │  ┌─────────┐ ┌────────────┐ ┌────────────┐ │  ║
║  │  │ Cancel  │ │ Find First │ │ Find Next  │ │  ║
║  │  └─────────┘ └────────────┘ └────────────┘ │  ║
║  └────────────────────────────────────────────┘  ║
╚══════════════════════════════════════════════════╝
```

- If you hold down the **Shift** key when you click the **Find First** button, the drawing window will·bring the object into view (if the record has a graphic object that is off screen).

## Find Same

To find succeeding objects that match the conditions you set, choose **Find Same** from the **Access** menu, or **Find Next** from the Find dialog.

- If you hold down the **Shift** key when you choose **Find...** or **Find Same** from the **Access** menu, the drawing page window will relocate to bring the object into view if it has a graphic that is not currently in the viewing area.

## other Access menu selections

**Previous Record. Next Record. Info Page. Drawing Page** and **Link** are provided for **Access** menu and Command key chord access to those functions.

# 13. Highlighting

**Highlighting** lets you find groups of objects based on information contained in their records.

Do you need to locate all patient records with "April" in the **Last checkup** field with length of visit longer than 10 minutes in the **Time** field? Use **Highlight....**

Perhaps your needs are quite a bit more specific. You want to produce a mailing list of all the firms that sent in more than $50,000 worth of orders last year, OR have been customers of yours for the last three years, AND who come from the 52600 through 52999 zip codes. It's a breeze for **Highlight...** and you'll see those firms highlighted on the drawing page as well, where you'll really get some fast insight into your customer base.

## Highlight...

The purpose of any filing system is to help you make the best use of the information in your files. **Highlighting** does that for you by extracting or finding only the particular records and objects you need to work with.

For example, in the Tour we had a file full of townhouses and information about those townhouses. But we only wanted to know about the ones that were available and in a certain price range.

We used highlighting to set those apart from the others visually as well as to collect just those records for inspection. Highlighting can be thought of as giving objects a visible theme on the drawing page so that they stand out from the rest.

In slightly more technical terms, highlighting creates a temporary subset of objects from the selected Type. Once you've isolated the objects by highlighting, functions like **Prev** and **Next** operate only on the highlighted records and objects. You can use **Show Only These** for even more emphasis, you can change just those objects into objects of a different Type, hide just those objects so they don't distract you, and so on. Filevision is designed to make highlighting as instinctive and as flexible as you want.

## highlighting all objects of a Type

- To highlight all objects of the currently selected Type, choose **Highlight All** from the **Access** menu.

Those objects will be emphasized with a drop shadow, while other objects will be faded:

all non-highlighted objects are faded to gray

all highlighted Townhouses are solid color with a drop shadow
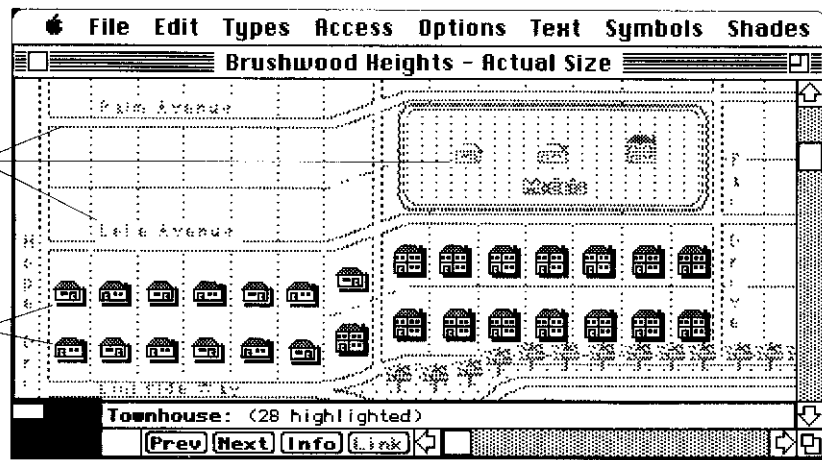
## highlighting selected objects of a Type

If you've selected one or more objects, the **Access** menu will let you highlight them.

- Choose **Highlight Selected** from the **Access** menu.

## highlighting some objects of a Type

- To highlight objects of the selected Type based upon information in their records, choose **Highlight...** from the **Access** menu.

You'll be presented with this display:
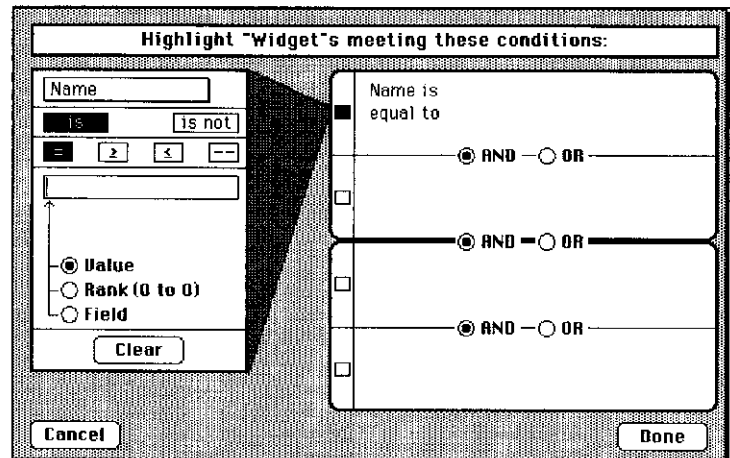
## setting conditions for Highlight...

The following sections explain how to fill in the **Highlight...** conditions.

You're allowed to set up to four conditions at once for highlighting. Each condition has these four comparison operators available to it:

## comparison operators

= (equal to)
≥ (greater than or equal to),
≤ (less than or equal to),
- - (between).

The comparison operators are preceded by

**is** or
**is not**

They work on text as well as numbers.

Each condition in a **Highlight...** can be based on one of three kinds of information: a value you enter, a rank, or the data in another field.

## Value comparison

- Click **Value** to compare the value you enter.

For example, like "100" in **Sales Order is greater than or equal to 100** or Name in **Name is greater than or equal to "Thoreau"**.

## Rank comparison

- Click **Rank** for a positional comparison among all of the objects (only in the sort field).



**Rank** can select the first record, the last record or any record for a specified position(s) in between.

For example, the **10th** to **20th** largest cities of 75 cities tested (total number of records in the Cities Type).

**Rank** works only on the sort field and in this example, the Cities Type would probably have to be resorted to the **Population** field before Rank could be used.

## Field comparison

- Click **Field** to compare the value in the selected field (top entry box) with the value of the field to be compared with placed in the lower entry box.



For example, the number of **State allowances is not equal to** the number of **Federal allowances**.

## example Highlight

- To set a condition for a specific field, use the pop-up menu(s) to select the field(s) used in the conditions.



selected field pop-up menu

secondary field pop-up when the Field button is selected.

- Click **is** or **is not** as appropriate; $\boxed{\text{is}}$ in this example.

- Click the comparison operator; $\boxed{\leq}$ in this example.



- Click **Value** for a value comparison in this case.

- Fill in the value; **$3,500** in this example.



The value appears both at the right of the condition box in the recap box and in the condition box itself.

In "long hand", the above example would read, "**Highlight** all Type **Widgets** whose **Price is less than or equal to $3,500**". This notation is fairly close to the way that the right side recap box reads.

**ANDing and ORing**

If you want to use more than one condition for highlighting, you can connect up to 4 per session with **AND**s and **OR**s.

- Set the first condition.

**Highlight "Airport"s meeting these conditions:**

Direct to London

is    is not

=  ≥  ≤  --

yes

Direct to London is
equal to
yes
◉ AND —○ OR

- Click **AND** or **OR**, whichever is the appropriate choice for the next condition; **AND** in this example.



**Highlight "Airport"s meeting these conditions:**

Name

is    is not

=  ≥  ≤  --

Direct to London is
equal to
yes
◉ AND —○ OR

The next box is selected.

- If you don't need to change the **AND** or **OR**, click the side box to go on to the next condition.



**Highlight "Airport"s meeting these conditions:**

Bonus mileage

is    is not

=  ≥  ≤  --

yes

Direct to London is
equal to
yes
◉ AND —○ OR
Bonus mileage is
equal to

- Set the next condition. Repeat this procedure for up to four conditions, then click **Done** to begin the highlighting process.

Average seats per

| is | | is not |

| = | ≥ | ≤ | ─ |

100

- ● **Value**
- ○ Rank (0 to 0)
- ○ **Field**

[ **Clear** ]

☐ Direct to London is
equal to
yes
────────● **AND** ─○ OR ────────
☐ Bonus mileage is
equal to
yes
────────● **AND** ─○ OR ────────
☐ Security level is
greater than or equal to
5
────────● **AND** ─○ OR ────────
■ Average seats per aircraft is
greater than or equal to
100

[ **Cancel** ]  [ **Done** ]

The brackets enclosing the two pairs of condition boxes are used as if the two pairs of conditions had parentheses around them. If all four conditions are used, they are evaluated like this:

(Condition 1 AND/OR Condition 2)
AND/OR
(Condition 3 AND/OR Condition 4)

Literally, this would be evaluated as: Find and Highlight all Airports who provided direct flights to London, who offered bonus mileage, whose security level was at least 5 and whose average seats per aircraft were at least 100.

## comparison by numeric characters

When Filevision compares two values, it can treat them either as numbers or as text. Filevision has a flexible definition of "number". It includes commas, percent signs, and currency symbols.

You can also type other information after the number, and that field will be treated as if it had only the number in it. If you type **$49.95, but don't bill until Feb. 1** in the **Payment Due** field, the **$49.95** will still be treated as the number 49.95. If there is more text after a number in a field, the data following the number is ignored and the number is still treated as a number.

The table on the next page shows how Filevision views numbers in a **Value** comparison. For example, you don't have to worry about commas in numbers of 1,000 or more and you can use currency symbols. Filevision still treats and evaluates numbers with those characters in them as numbers.

**Table 3-2**

| Characters in field | Numeric value | Comments |
|---|---|---|
| 1234 | 1234 | Positive number |
| -1234 | -1234 | Negative number |
| $1,234<br>¥1,234<br>£1,234<br>1,234¢ | 1234<br>1234<br>1234<br>1234 | Currency symbols are ignored. Notice that cents and dollars evaluate as the same value. |
| 99,999,999,999.99995 | value error | Numbers with more than 10 digits to the left and 4 to the right of the decimal point are not legal. |
| 112% | 1.12 | Percent symbols mean automatic divide by 100. |
| 12/34<br>12+34<br>12 pieces | 12<br>12<br>12 | Text characters following a number are ignored. |

**comparison by text characters**

Information in a field other than numbers (as defined by the table above) and pictures fall into the category of text characters. Filevision offers several ways to compare text characters.

**text values**

The tables on the next page show how Filevision would search through different fields for different kinds of values and how the search characters are used. The double period (..) search character matches any set of characters of any length. It's used most often to find a sequence of characters at the beginning of a word or at the end of a word. The up carat (^) search character will only look for a match at the beginning of a field; it won't continue the search in the middle of the field. Use this table for both **Find...** and **Highlight....**

**Table 3-3**

| Information in the **Name** fields for all records in the file. | | |
|---|---|---|
| Chemical Investments, Inc.    Colorado Chemical Corp. Biochemical Products, Inc.    Chemicals for Agriculture International Petrochemicals | | |
| **Value specified** | **Meaning** | **Records selected** |
| **Name** is = Chemical | Find a **Name** with the whole word "Chemical" anywhere in the field. | Chemical Investments, Inc. Colorado Chemical Corp. |
| **Name** is = ..Chemical | Find a **Name** that contains a word ending with the letters "Chemical". | Chemical Investments, Inc. Colorado Chemical Corp. Biochemical Products, Inc. |
| **Name** is = Chemical.. | Find a **Name** that contains a word beginning with the letters "Chemical". | Chemical Investments, Inc. Colorado Chemical Corp. Chemicals for Agriculture |
| **Name** is = ..Chemical.. | Find a **Name** with the letters "Chemical" anywhere in it. | Chemical Investments, Inc. Colorado Chemical Corp. Biochemical Products, Inc. Chemicals for Agriculture International Petrochemicals |
| **Name** is = ^Chemical | Find a **Name** that begins with "Chemical" as the first word. | Chemical Investments, Inc. |
| **Name** is = ^Chemical.. | Find a **Name** that begins with the letters "Chemical". | Chemical Investments, Inc. Chemicals for Agriculture |

**text with very similar information**

The **at** symbol (**@**) search character takes the place of any single letter.  Keep in mind that the information in the **Part no.** field  below isn't treated as numeric information.  To be  considered a number by Filevision, the contents of  a field must start with a numeric character.

**Table 3-4**

| Information in the **Part no.** field of all the records in the file | | |
| --- | --- | --- |
| R23-001  Q23-001  Q23-123  Q71-001 | | |
| **Value specified** | **Meaning** | **Objects selected** |
| **Part no.** is = @23-001 | Find "23-001 preceded by any character. | R23-001 Q23-001 |
| Part no. is = Q23-@@@ | Find "Q23-" followed by any 3 characters. | Q23-001 Q23-123 |
| Part no. is = Q@@-001 | Find "Q" followed by any two characters, followed by "-001". | Q23-001 Q71-001 |

**Table 3-5**

| Upper/lower case and diacritical marks are ignored | | |
| --- | --- | --- |
| Information in the **Name** field of all the records in the file | | |
| e.e. cummings  Cairns Cooperative  Cairns Coöperative | | |
| **Value specified** | **Explanation** | **Records selected** |
| **Name** is = E.E. Cummings | Case is ignored. | e.e. cummings |
| **Name** is = Cooperative | Diacritical marks (like the umlaut) are ignored. | Cairns Cooperative Cairns Coöperative |

## Summary of Highlight and Find comparisons

Here's a summary of the way comparisons and search characters work:

**Word** searches find the word anywhere in the field. If you ask for "Chemical" you'll get "Chemical Investments" and "Colorado Chemical", but not "Petro-chemical".

**Any sequence of characters** can be found with the double period (..) search method. The most frequent use of .. is to find all words that start or end with some sequence of characters you know. If you ask for "..Chemical" you'll get "Chemical Investments, Inc." and "Petrochemical", but not "Chemicals for Agriculture".

**Values only at the beginning of the field** can be found with the up carat (^) search character. It will find "Chemical Investments" but not "Colorado Chemical".

**Any single character** will match the **at (@)** search character. If you ask for "@BC" you'll find "ABC" and "ZBC" but not "ZABC".

**Case** and **diacritical marks** are ignored, so you'll find "E.E. Cummings" if you ask for "e.e. cummings", and "coöperative" if you ask for "Cooperative".

Use any of these search comparisons for **Find...** and **Highlight....**

## Erasing a condition

- If you want to erase selection conditions, select the appropriate condition box and click **Clear**.

## Compounded highlighting: AND, OR and Replace

If objects are already highlighted when you enter highlighting rules, you can choose to replace their highlighting altogether using **Replace**, or make the currently highlighted objects pass the new conditions in order to remain highlighted using **AND**, or leave highlighted all the currently highlighted objects, while other objects that meet the new rules are highlighted using **OR**.



the Highlighting compound pop-up

- Use the pop-up menu to select the condition you want:

- **AND With Current Highlighting** means that only the objects that are currently highlighted are tested. Those that fail the new conditions lose their highlighting; those that pass retain it.

- **OR With Current Highlighting** means that all the objects that are currently highlighted remain highlighted, and any other objects that meet the new highlighting rules will also become highlighted.

- **Replace Current Highlighting** does just that.

- Click **Done**.

## highlighted to not highlighted toggle

If you are working in the Info page, and want to toggle from highlighted to those records that are not highlighted, issue a Command-W (⌘-W) key chord. All of the non-highlighted records will become active and the window title bar will change from **x** (records) **highlighted** to **x** (records) **not highlighted**.

Notice with the example windows below, the first window shows **1 highlighted**. As only that record is active, the **Next** and **Prev** buttons are inactive. In the second window, after issuing a **Command-W**, **5** records are **not highlighted** and the **Next** and **Prev** buttons are now active allowing you to browse through all of the records.
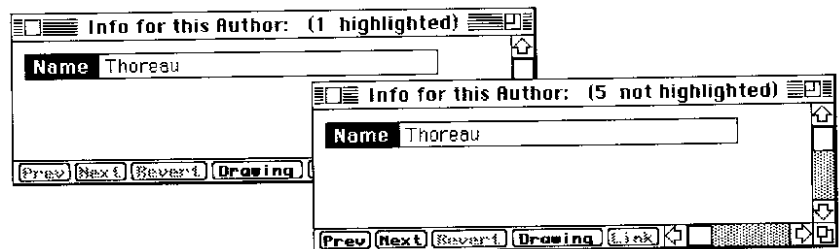


## canceling highlighting

- You can remove all highlighting by choosing **Cancel Highlighting** from the **Access** menu.

## halting the highlighting process

When you click **Done** on the **Highlight...** display, Filevision starts scanning the objects to see which should be highlighted.

- You can stop the highlighting process anytime by clicking the **Quit** button on the highlighting progress dialog while records are being highlighted.
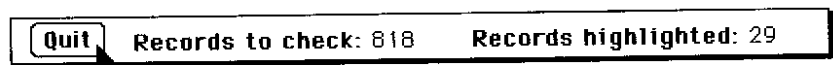
# 14. Printing Reports, Forms & Labels

## How to use this section

This is where you learn how to print forms, reports, and labels. It's a two-step process. In step 1 you design a print format, and in step 2 you print using that format.

You can also print a copy of your current activity; for example, the print format you're designing. See page 309, "Printing what you're working on".

## What are Forms, Reports, and Labels?

With Filevision you can design formats in any of three styles:

**Forms** typically look like the forms you'd create for your office. You can also use forms to create form letters, using Filevision for mail merge.

**Reports** are columnar reports that can contain computed fields and statistical functions—counts, totals, averages, and standard deviations. For example, you can print reports that automatically show total sales for each month, or that print average inventory levels for each warehouse.

**Labels** are usually mailing labels.

How to use this section: To print forms, reports, or labels, you must first design a print format or edit an existing one. Examples for each style (columnar reports, forms, labels, and form letters) are given in the "Preparing..." sections. General design and editing procedures are covered in "Editing print formats", page 292, and "Printing with special information", page 297.

Once you've designed a format it's saved in the Print Library. Then you actually print using that format; see also Part 17 "Special Printing Features", page 296.

## Preparing columnar Reports for printing

There are two steps in printing a **Report**. The first is designing a **Report** format, and the second is printing using that format. This section walks you through the design and printing of an example **Report**.

Once you design the format, it's automatically saved in the Print Library, and you can reuse or edit it anytime. Keep in mind that a **Report** includes records of only one Type.

The example shown here uses only a few of Filevision's printing capabilities. Additional features are discussed in Part 16, "Printing Recap", page 286, and Part 17, "Special Printing Features", page 296.

The picture below shows a simple Type layout, which we'll use to create a **Report**. You may want to create a small file based on this Type layout. Then you can fill in a few records (half a dozen is fine), and if you follow the steps here as you read them, you'll be able to print out a **Report** on those records. For the best results in this particular example, put **CA** in the **State** field of at least 2 records, and **CT** in at least 2.

```
  File   Edit   Types   Access   Text   Format   Shades
========================= Add Type - Type A =========================
  |  |  1  |  |  2  |  |  3  |  |  4  |  |  5  |  |  6

                    Type-name   Customer

        Company                    City              State
        ............              ..........        ........

           CEO                 1989 Sales             ZIP
        ............           ..........          ........

        Address and Street
        ............

Cancel  Remove Field  Options  Add Field  Done
```

One of the filled in records in the Info page might look something like this:

```
==========  Info for this Customer:  (7 records) ==========
        Company                    City              State
  Bob's Audio                Los Angeles              CA

           CEO                 1989 Sales             ZIP
  Robert Blakestone              $89,333            90406

        Address and Street
  4456 Barrington

Prev  Next  Revert  Drawing  Link
```

As an example of the Info page entries, a sample **Report** printout as shown in the View Print window might look something like this:

**Cramer Distributors**

| July Sales by State |

| Company | City | State | 1989 Sales |
|---|---|---|---|
| Bob's Audio | Los Angeles | CA | $89,333 |
| Flex Plastic Products | Newport Beach | | $44,652 |
| Manson Plumbing | Los Angeles | | $12,692 |
| Sampson Plastics | Orange | | $23,540 |
| | | State Total: | $170,217 |
| | | | |
| Bear Bicycle Parts | Cambridge | CT | $34,551 |
| Del Mar Farm Supplies | Del Mar | | $25,632 |
| King, Inc. | Cavannaugh | | $45,223 |
| | | State Total: | $105,406 |
| | Overall Count: | 2 | |
| | Overall Total: | | $275,623 |

[Cancel] [Done]

## going to the Print Library

- Choose the Type for which you want to design a **Report** from the **Types** menu.

In this example it's Type **Customer**.

- Choose **Print Records...** from the **File** menu.

The **Print Library** appears.

If you want to edit an existing format, select it and click Edit. However, we'll design a new one in this example.

- Click the **New** button.

A dialog box appears, asking you what style you want to print.

**Print Library**

| Print format | Type | Style |
|---|---|---|
| | | |

[ Delete ]        [ Edit ]        [ New ]

**Records to print:**
- ● All
- ○ Highlighted
- ○ Selected

**Print to:**
- ● Printer
- ○ Screen
- ○ File

[ Quit ]        [ Page setup ]        [ Print ]

## Print report style: Form, Report or Label

Choose a style for printing Order Form records:

[ Cancel ]   [ Forms ]   **Report**   [ Labels ]
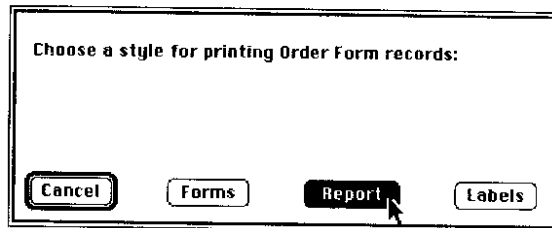
- Click the **Report** button.

## the Print Format window

An initial print format appears. Filevision automatically creates such a format each time you click the **New** button, but you can alter the format any way you wish.

Header ————

Each record ————

Footer ————

**Print**

| | 1 | | 2 | | 3 | | 4 | | 5 | |

**Format-name:** Format A

**Header:**

**Report Title**

**Company**        **City**        **State**    **CE**

**Each record:**

Company        City        State    CE

**Footer:**

Page &p

[Cancel] [Remove Field] [Sort] [Add Field] [Done]
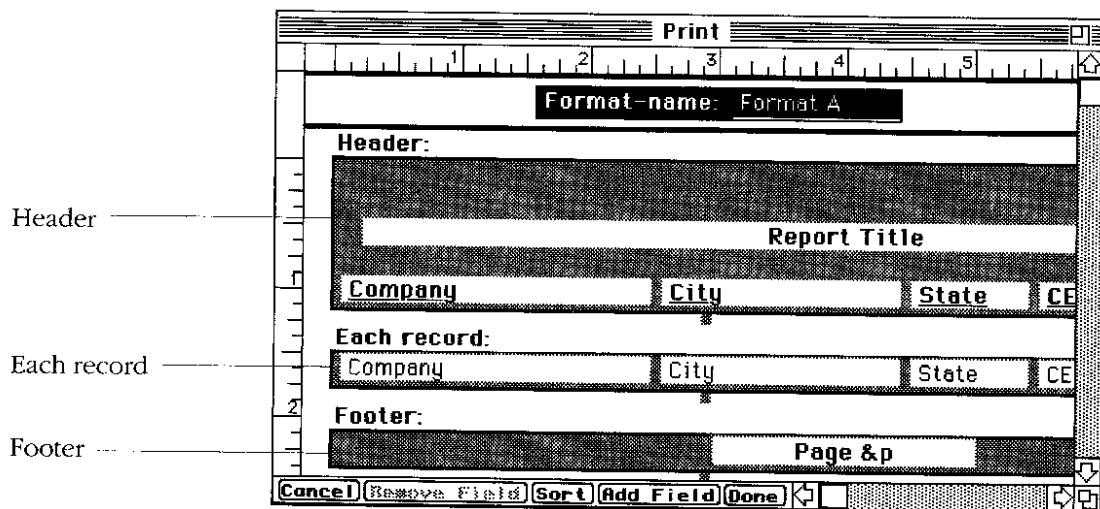
## naming the print format

Its three main sections are labeled **Header**, **Each record** and **Footer**. The size of each section will determine how many records will be printed on a page. The **Each Record:** section will print as many records in columns as it can on one page, then go on to the next page.

The first box, **Format-name**, contains a preset name for the **Report** format like Format A or Format B.

- Replace the name in the **Format-name** box with **Sales report**.

**Format-name:** Sales report

**Sales report** will appear in the **Print Library** as the name of the print format you're now designing.

## setting up the Report title

The **Header** and **Footer** areas contain information that's printed at the top or bottom of each page; they can be edited or removed.

- Replace the words **Report title** in the Header with **July Sales by State**.



**July Sales by State** will be printed at the top of each page.

## adding an annotation field

For some company identification, let's add the company name to print in the Header section on each page of the printout.

- Click the **Add Field** button.

The Add Field dialog will appear:



- Click the **Annotation Field** button.

A blank annotation field will appear.
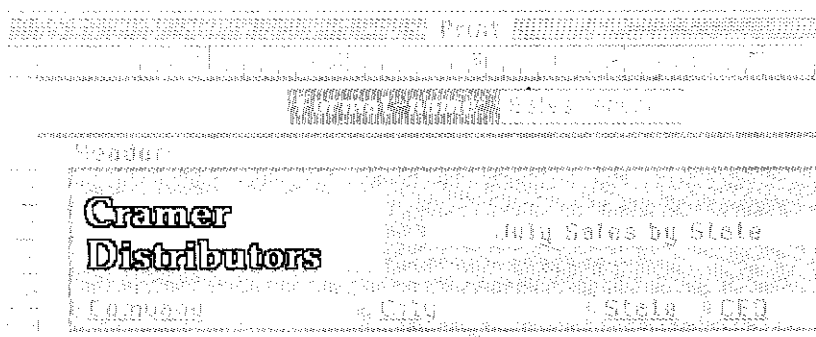


Resize the annotation field by dragging the resize handle down one line. Enter the company name of **Cramer Distributors**. Change the font to any serif style, increase the text size to **18 point** and change the style to **Bold** and **Outline** from the **Text** menu

**removing
unwanted
fields**

• Select the **CEO** data field in the **Each record** area.
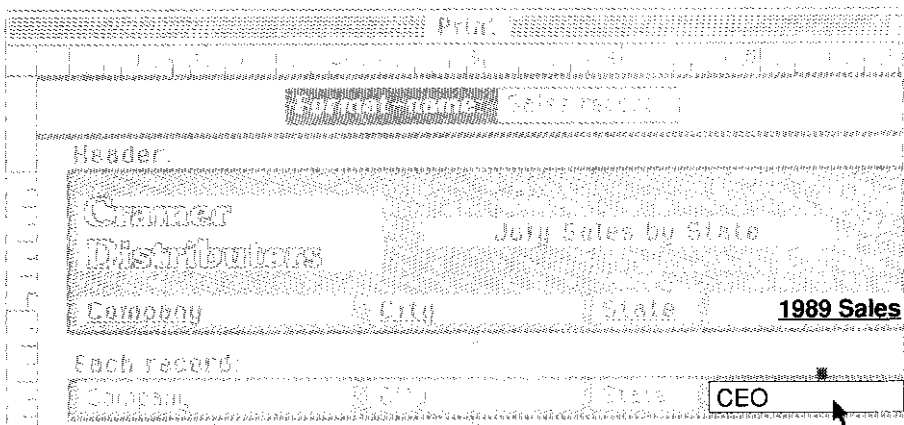


• Click the **Remove Field** button.

The field vanishes. Use this technique to remove any field, whether it's a data field or an annotation field, and whether it's in the **Header**, **Footer**, or **Each record** area of a print format.

• Now change the **CEO** column title in the **Header** area to read **1989 Sales**.

This is an annotation field and could read as anything (such as July 1989 Sales) without affecting the actual sales figures in the Record area.

• From the **Format** menu, select **Align Right**.

The **Footer** contains an annotation field that reads **Page &p**. The ampersand (**&**) next to the **p** indicates that the current page number of the report will be printed in place of the **&p**. This could be changed to read anything or it could be removed.

**adding a
data field**

• Click the **Add Field** button.

A small dialog box appears over the button, giving you the choice between a Data Field and an Annotation Field.

[ Cancel ]    [ Annotation Field ]    **Data Field**

- Click **Data Field**.

Another dialog appears showing a field name in a box. The field name box is a pop-up menu that shows all of the field names for this Type.

```
Choose a field to add:                      ○ Show field name and contents
┌────────────────────────────┐              ◉ Show field contents only
│ CEO                        │
└────────────────────────────┘
┌────────────┐                                           ┌──────────┐
│   Cancel   │                                           │   Add    │
└────────────┘                                           └──────────┘
```

- Press the mouse button with the pointer on the field pop-up menu to select from the list of data fields for the **1989 Sales** field.

```
Choose a field to add:                      ○ Show field name and contents
┌──────────────────────────┐                ◉ Show field contents only
│ 1989 Sales              ▼│
│ Address and Street       │                               ┌──────────┐
│ CEO                      │                               │   Add    │
│ City                     │                               └──────────┘
│ Company                  │
│ Link                     │
│ State                    │
│ ZIP                      │
└──────────────────────────┘
```

- Release the mouse button when you have the **1989 Sales** field selected and click **Add**.

The dialog box disappears and the **1989 Sales** field appears in the middle of the display.

- Use the move handle on the top of the field to place it as shown:

The print format will automatically move left as you move the field beyond the right edge of the display—you don't have to use the scroll bar.

- Choose **Plain text**, **12**, and **Geneva** from the **Text** menu.

- Choose **Numeric**, **Dollar sign**, and **Commas** from the **Format** menu.

Now 1989 Sales figures will be printed with a leading dollar sign and commas.

To recap, the **Report** layout now has six annotation fields in the **Header** area, four data fields in the **Each Record** area and one annotation field in the **Footer** area.

## sorting the Report

Now let's sort the **Report** by **State**, **City**, and **Company** for printing purposes. **State** will be the "primary" sort field. Within the **State** order, records will be sorted by **City**, making **City** the "secondary" sort field. The third level of sorting, **Company**, is called the "tertiary" sort field.

- Click the **Sort** button at the bottom of the display window.
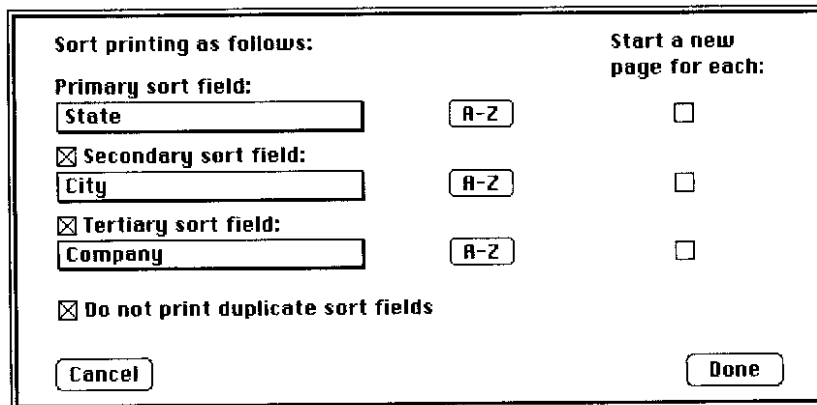
The **Sort printing** dialog box appears.

- Use the **Primary sort field** pop-up menu to select **State**.

- Click the checkbox next to **Secondary sort field:**.

It's now selected.

- Use the **Secondary sort field** pop-up menu to select **City**.

- Finally, click the checkbox next to **Tertiary sort field:** and select **Company**.

That takes care of sorting. Your choices should look like this:

```
┌─────────────────────────────────────────────────────────────┐
│  ┌───────────────────────────────────────────────────────┐  │
│  │                                                         │  │
│  │  Sort printing as follows:          Start a new         │  │
│  │                                     page for each:      │  │
│  │  Primary sort field:                                    │  │
│  │  │ State                    │       [ A-Z ]      ☐      │  │
│  │                                                         │  │
│  │  ☒ Secondary sort field:                                │  │
│  │  │ City                     │       [ A-Z ]      ☐      │  │
│  │                                                         │  │
│  │  ☒ Tertiary sort field:                                 │  │
│  │  │ Company                  │       [ A-Z ]      ☐      │  │
│  │                                                         │  │
│  │  ☒ Do not print duplicate sort fields                   │  │
│  │                                                         │  │
│  │  ( Cancel )                              ( Done )       │  │
│  └───────────────────────────────────────────────────────┘  │
└─────────────────────────────────────────────────────────────┘
```

- Click **Done**.

The Sort printing dialog disappears.

Note: Sort on a print format is used to set the order for printing **Forms**, **Reports**, and **Labels**. The sort field used on the Info and Drawing pages is not affected by this choice.

Each of the three sort fields are set to ascending order (A-Z). to change the order, just click the sort order box ⌐ ◄ ▾ ▸ ⌐ and the order will reverse to descending.

The **Do not print duplicate sort fields** check box is used where there may be a long list of repeat information such as CA in the State field. By checking this box, CA will print only once at the beginning of the column and will be blanked out after that. It will not affect the printing of information in other columns.

It should be mentioned that only the first 31 characters of field information are checked. If you were using a list of part numbers, for instance, and the numbers were sequential as in: AFQ-CMT-10344-4556-1112-5656-AA-**1** through -**20**, only the first number would print. The dash 1 through dash 20 suffix would not be detected and the program would assume that the numbers were all the same.

In the **Start a new page for each:** column, if checked - the printout will do a form feed to the next page each time the information in that field changes.
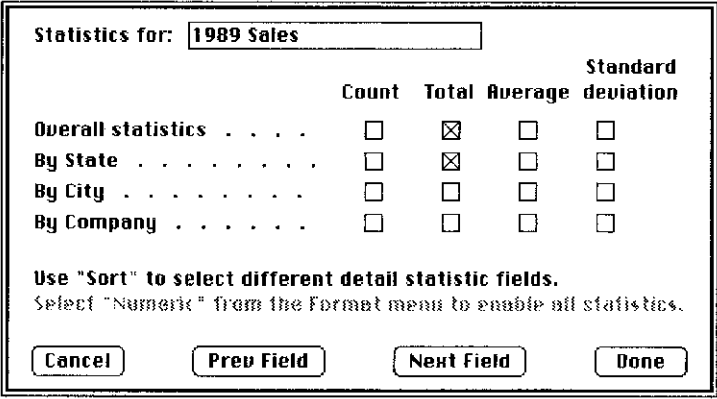
## detail statistics: getting sales by state

Now that we have the proper sort order, we can print a subtotal of 1989 Sales for each State.

- Select the **1989 Sales** field in the **Each record:** area.

- Choose **Statistics** from the **Format** menu.

The Statistics dialog box appears.

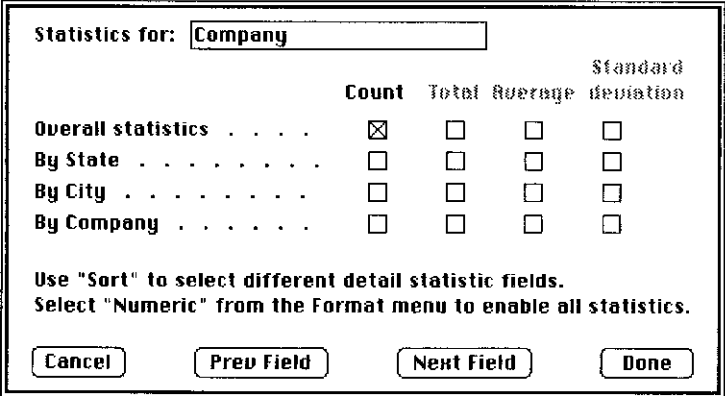- Click the **Total** checkbox for **Overall statistics** and for **By State**.

```
┌─────────────────────────────────────────────────────────────┐
│ Statistics for: [1989 Sales                    ]            │
│                                                  Standard    │
│                           Count  Total  Average  deviation   │
│  Overall statistics . . . .  ☐     ☒      ☐        ☐         │
│  By State . . . . . . . . .  ☐     ☒      ☐        ☐         │
│  By City . . . . . . . . .   ☐     ☐      ☐        ☐         │
│  By Company . . . . . . .    ☐     ☐      ☐        ☐         │
│                                                              │
│  Use "Sort" to select different detail statistic fields.    │
│  Select "Numeric" from the Format menu to enable all statistics. │
│                                                              │
│  [ Cancel ]    [ Prev Field ]    [ Next Field ]   [ Done ]  │
└─────────────────────────────────────────────────────────────┘
```

This will give you an overall sales total, and a sub total on 1989 Sales for each State. Your choices so far should look like the dialog to the left:

## overall statistics: a count of all the records

Normally, you'd click Done, but we also want an overall count—a count of all the Companies in the file.

```
┌─────────────────────────────────────────────────────────────┐
│ Statistics for: [Company                    ]               │
│                                                  Standard    │
│                           Count  Total  Average  deviation   │
│  Overall statistics . . . .  ☒     ☐      ☐        ☐         │
│  By State . . . . . . . . .  ☐     ☐      ☐        ☐         │
│  By City . . . . . . . . .   ☐     ☐      ☐        ☐         │
│  By Company . . . . . . .    ☐     ☐      ☐        ☐         │
│                                                              │
│  Use "Sort" to select different detail statistic fields.    │
│  Select "Numeric" from the Format menu to enable all statistics. │
│                                                              │
│  [ Cancel ]    [ Prev Field ]    [ Next Field ]   [ Done ]  │
└─────────────────────────────────────────────────────────────┘
```

- Click the **Next** field button until the top reads **Statistics for Company**.

- Click the **Count** checkbox for **Overall statistics**.

Now you're finished.

- Click **Done**.

You return to the report format you've been designing.

- Click **Done** to save the format.

You return to the **Print Library**. As you can see, the print format you just designed has been added to the **Print Library**.

## previewing the Report

Remember that there are two steps in printing reports: designing a format, and printing the report. You've just completed the first step, the designing. But before the Report is sent to a printer, let's first check it to see if everything will print OK.

- From the **Print Library**, click **Screen** under **Print to:**.

Clicking **File** would create a Macintosh disk file of the output for use with a word processor application like MacWrite. Clicking **Printer** would send the output to your printer.

- Click **Print**.

There is a short delay while the records are being sorted. The screen display window, **View Print**, is then displayed:

**Print Library**

| Print format | Type | Style |
|---|---|---|
| Sales Report | Customer | Report |

[ Delete ]   [ Edit ]   [ New ]

**Records to print:**
- ⦿ All
- ○ Highlighted
- ○ Selected

**Print to:**
- ○ Printer
- ⦿ Screen
- ○ File

[ Quit ]   [ Page setup ]   [ Print ]

---

**View Print**

**Cramer Distributors**            **July Sales by State**

| Company | City | State | 1989 Sales |
|---|---|---|---|
| Bob's Audio | Los Angeles | CA | $89,333 |
| Manson Plumbing | | | $12,692 |
| Flex Plastic Products | Newport Beach | | $44,652 |
| Sampson Plastics | Orange | | $23,540 |
| | | **State Total:** | $170,217 |
| | | | |
| Bear Bicycle Parts | Cambridge | CT | $34,551 |
| King, Inc. | Cavannaugh | | $45,223 |
| Del Mar Farm Supplies | Del Mar | | $25,632 |
| | | **State Total:** | $105,406 |

**Overall Count:**
7

**Overall Total:**                                          $275,623

[ Cancel ] [ Done ]

Notice that the states only printed on the first row of each state and that Los Angeles was only printed for Bob's Audio and not Manson Plumbing. All of those items would print if you set the **Do not print duplicate sort fields** check box to off (no check mark) in the **Sort** dialog box.
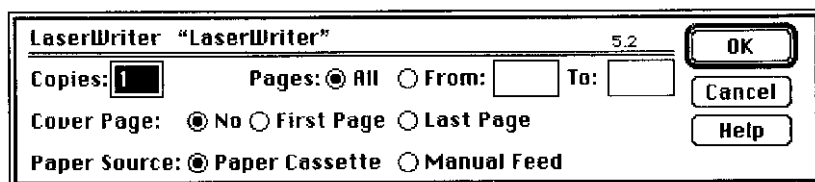
The location of statistical information can be controlled by which sort field you request the information on. The statistic, such as Overall Count: 7 for the Company field will print under the field that the statistic is called for. The statistic alignment will be the same as the field alignment.

## printing the report
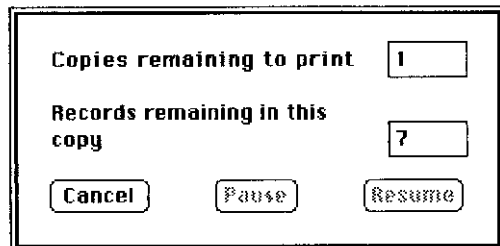
To send this **Report** to a printer:

- From the **Print Library** dialog, select **Printer** under **Print to:** then click **Print**.

The records are sorted, then a standard printer dialog box appears, depending on the type of printer being used and the current version of the driver. For the LaserWriter, version 5.2, it would look like the following:

```
LaserWriter  "LaserWriter"                    5.2        OK
Copies: 1          Pages: ● All  ○ From:      To:         Cancel
Cover Page:    ● No ○ First Page  ○ Last Page              Help
Paper Source: ● Paper Cassette  ○ Manual Feed
```

```
Copies remaining to print    1

Records remaining in this
copy                         7

Cancel        Pause        Resume
```

You will also see a progress dialog box that advises of the number of copies left to print and the number of records to print. If using an ImageWriter, a **Pause** button allows you to halt the printing temporarily. If using a LaserWriter, the **Pause** button is inactive:

- Click the appropriate printer settings, then **OK** to begin printing.

That's it! Your report is printed, and the Print Library reappears when printing is complete.

## other features of Reports

This section showed only two of the many possible ways you can print **Reports**. For a complete reference on designing Report formats, see Part 16, "Printing Recap" page 286, and Part 17, "Special Printing Features" page 296.

## Preparing a Form for printing

There are two steps in printing **Forms**. The first is designing a print format, and the second is printing using that format. This section walks you through the design and printing of an example printout of **Forms**.

Once you design the print format, it's automatically saved in the Print Library, and you can reuse and edit it anytime. Keep in mind that any **Form** includes records of only one Type.

For a complete reference on designing Form formats, see Part 16, Printing Recap" page 286, and Part 17, "Special Printing Features" page 296.

The picture below shows a simple Type layout, which we'll use to create the **Form**. You may want to create a small file based on this Type layout. Then you can fill in a few records (two is plenty), and if you follow the steps here as you read them, you'll be able to print out the **Forms** for those records.
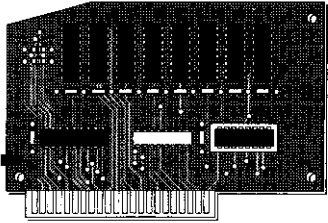


An example screen preview of the finished print layout **Form** sent to the **View Print** window would look like the picture on the next page. As you can see, a **Form** print style approximates your original Type layout. This can be modified to appear any way that you want.

The graphic used for the logo in the Header area could be imported via the **File** menu **Import Graphics...** function using scanned photographs or one of the PostScript illustrations or other graphic type. It could also be illustrated on the drawing page and pasted in. The graphics contained in the **Part Illustration** field would be entered in each Info page record using the same methods.

```
================================ View Print ================================
```

Valley
Computer
Supply Co.

| Item name | Apple IIXT Video board |
|---|---|
| Catalog no. | 303-33-198 |

| Unit Cost | Quantity |
|---|---|
| $124.95 | 1 |

| Customer | Order Date: |
|---|---|
| John Godfrey | 06/07/89 |
| 206 Mathias Dr. | |
| Thor, NH 03454 | |

| Ship to Address: | Delivered on: |
|---|---|
| Same | 19/07/89 |

**Part Illustration**

| Item name | Clock chip |
|---|---|
| Catalog no. | 8-301 |

| Unit Cost | Quantity |
|---|---|
| $1.95 | 200 |

| Customer | Order Date: |
|---|---|
| Computer Specialty Co. | 02/07/89 |
| 4201 E. Chestnut St. | |
| Thor, NH 03454 | |

| Ship to Address: | Delivered on: |
|---|---|
| 4100 E. Walnut | 19/07/89 |
| Thor, NH 03454 | |

**Part Illustration**

[ Cancel ] [ Done ]

---

## going to the Print Library

- Choose the Type for which you want to design a **Form** from the **Types** menu.

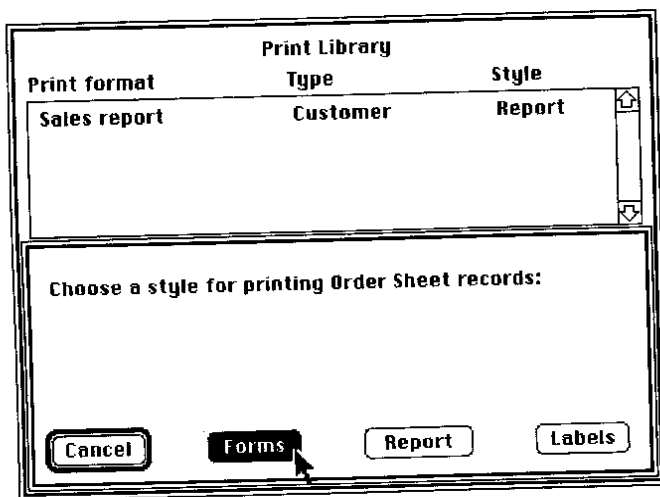In this example it's Type **Order Form**.

- Choose **Print Records...** from the **File** menu.

The Print Library appears.

If you want to edit an existing format, select it and click **Edit**. However, we'll design a new one in this example.

- Click the **New** button.

Part 14. Printing Reports, Forms and Labels    253

A dialog box appears, asking you what style you want to print.



- Click the **Forms** button.

An initial print format appears. Filevision automatically creates such a format each time you click the **New** button, but you can alter the format any way you wish.

Its main body is labeled **Each record**. The size of the **Each record** area helps determine how many records will be printed on a page.

The **Header** and **Footer** areas contain information that will be printed at the top or bottom of each page. They can be edited or removed.

**naming the Print Format**

The first box, **Format-name**, contains a preset name like Format A or Format B.

- Replace the name in the Format-name box with **Order Sheet**.

**Order Sheet** will appear in the Print Library as the name of the print format you're designing.

**setting up a title for the Form**

- Press **Tab** once.

The words **Report title** in the Header area are shown selected. Grab the resize handle and reduce the length of the annotation field and open it to 3 lines deep.

- Type in **Valley Computer Supply Co.** on the 3 lines as shown.

**Valley Computer Supply Co.** will be printed at the top of each page.



**adding Header information**

Add a second annotation field to the **Header** area :

- Click the **Add Field** button.

- Select **Annotation Field** from the **Add Field** dialog.

A blank annotation field will appear in the Header area. Move it to the left side and open it to fit the full left area of the Header using the move and resize handles.

- Select **Import Graphics...** from the **File** menu.

Import the EPSF Macintosh computer graphic (this assumes that you have one available). Any picture from any EPSF, PICT or MacPaint source can be imported directly into the annotation field. Any image that can be copied to the Clipboard can also be pasted into an annotation field.

## removing unwanted fields

The field that reads **Date format: DD/MM/YY, For example, July 7, 1989 is 07/07/89** is only there as a reminder to the data-entry person. Let's remove it.

- Press the **Tab** key several times until that field is selected.

When you select a field with the Tab key, the field is shown in reverse: If you copied the sample Type layout at the beginning of this section, you'll notice that the print format window is repositioned to give you a better view of the field when you Tab to it.

Each record:

| Item name | | Part Illustration |
| Catalog no. | | |
| Unit Cost | Quantity | |
| Customer | Order Date: | |
| | Date format: DD MM YY For example, July 7, 1989 is 07 07 89 | |
| Ship to Address: | | |

- Click the **Remove Field** button.

The field vanishes. Use this technique to remove any field, whether it's a data field or an annotation field, and whether it's in the Header, the Footer, or the Each record area of a print format.

## adding an annotation field

Let's add an annotation field to the **Each record:** area that will show the date of the printout.

- Click the **Add Field** button.

A small dialog box appears over the button, giving you the choice between a data field and an annotation field.

- Click **Annotation Field**.

The dialog box disappears and a blank annotation field appears.

- Use the top handle to move the annotation field under the **Order date:** field and align it even with the **Ship to Address field**.

- Use the stretch handle on the bottom right to pull the field down to open to 2 lines.

**printing the date on each record**

- Type **Delivered on: &d**

The ampersand (**&**) next to the **d** indicates that the system date will be printed in place of the **&d** in each record.

- Choose **Bold**, **10**, and **New York** from the **Text** menu.

- Choose **Align Middle** and **Hide Border** from the **Format** menu.



The **Footer** contains an annotation field that reads **Page &p**. The ampersand (**&**) next to the **p** indicates that the current page number of the report will be printed in place of the **&p**. This could be changed to read anything or it could be removed.

## spacing the Forms vertically

The **Each record** area shows how much room each record will occupy on the printed page. As the side ruler shows, this form takes up about 4 1/4" including the Header and Footer which means that only three forms can be printed on each page (4 1/4" for the 1st form plus about 2 1/2" for each of the 2nd and 3rd forms). A fourth form would increase the size beyond the capacity of letter size paper.

Let's add some room to the bottom of the **Each record** area so that it will be easier to distinguish between the three records that will appear on each page of the printout.

- Pull down the bottom handle on the **Each record** area about 1/2".



As you pull down on the **Each record:** area to make it larger, the **Footer:** area also moves down automatically to make additional room.

You're now finished designing the print format.

- Click **Done**.

You return to the Print Library. As you can see, the print format you just designed has been added to the Print Library.

## repeating the Forms Across

By doing a little redesigning of the print layout, the example Form can be adjusted to print four records up per page. This is accomplished by using **Across...** from the **Format** menu. Before we set the format to print more than one across, an adjustment is required to the layout.

- Select the **Order Sheet** menu option from the **Print Library** dialog.

- Click the **Edit** button.

The **Order Sheet** print layout is again displayed. Adjust the fields as shown and reduce the width of the Each record area by using the right resize handle:

If you plan to print this layout to a LaserWriter, keep the width of the Each Record area to 4" or less. This will print 2 across on the 8" standard print width of the LaserWriter in portrait mode.

- Select **Across...** from the **Format** menu.



The Across dialog appears:
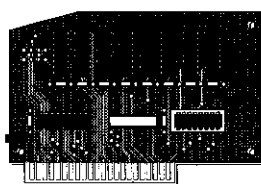


- Click the **2** button.

Depending on the amount of information you wish to present in each Form, the Form print layout can provide up to 4 Forms across and as many down the page as will fit. Additional room for adding more Forms per page could be achieved by reducing or removing the Header and/or Footer areas.

The final four up print of the adjusted Forms would appear as:



**Valley Computer Supply Co.**

| Item name | Apple IIXT Video board |
|---|---|
| Catalog no. | 303-33-198 |

| Customer | Ship to Address: |
|---|---|
| John Godfrey 206 Mathias Dr. Thor, NH 03454 | Same |

| Unit Cost | Part Illustration |
|---|---|
| $124.95 | |

| Quantity |
|---|
| 1 |

Order Date:
06/07/89

Delivered on:
11/19/88

| Item name | Clock chip |
|---|---|
| Catalog no. | 8-301 |

| Customer | Ship to Address: |
|---|---|
| Computer Specialty Co. 4201 E. Chestnut St. Thor, NH 03454 | 4100 E. Walnut Thor, NH 03454 |

| Unit Cost | Part Illustration |
|---|---|
| $1.95 | |

| Quantity |
|---|
| 200 |

Order Date:
02/07/89

Delivered on:
11/19/88

| Item name | Mac SE Accelerator Board |
|---|---|
| Catalog no. | MSE-34-6781 |

| Customer | Ship to Address: |
|---|---|
| Craig Sampson 4471 Grange Ave | Same |

| Item name | Macintosh II Power Supply |
|---|---|
| Catalog no. | MII-34-889 |

| Customer | Ship to Address: |
|---|---|
| Jack Beresford 6681 Crest Dr. | Same |

## printing the Forms

Remember that there are two steps in printing Forms: designing a format, and printing the Forms. You've just completed the first step, which is designing the format.

The second and final step is printing the Forms. In this example we're assuming that you have a printer with the appropriate software attached to your system.

- From the Print Library dialog, click **Printer** under **Print to:**.

Clicking **Screen** would preview your forms on screen, and clicking **File** would create a Macintosh disk file of the output for use with a word processor application like MacWrite.

- Click the **Print** button.

The records are sorted, then a standard printer dialog box appears.

- Click the appropriate settings, then **OK** to begin printing.

That's it! Your Forms are printed, and the Print Library reappears when printing is complete.

## Preparing Labels for printing

There are two steps in printing Labels. The first is designing a format for Labels, and the second is printing using that format. This section walks you through the design and printing of an example **Label** format.

Once you design the format, it's automatically saved in the Print Library, and you can reuse and edit it anytime. Keep in mind that a **Label** format includes Labels of only one Type.



The picture to the left shows a simple Type layout, which we'll use to create the Labels. You may want create a small file based on this Type layout. Then you can fill in a few records (half a dozen is plenty), and if you follow the steps here as you read them, you'll be able to print out the Labels for those records.

A partial page of Labels would look something like this:



Anne Moore
2222 Damarascotta Ave.
Solon, OH 44139

Brian Anderson
8820 Algonquin Circle
Solon, OH 44139

Danny Novak
1982 American Rd.
Solon, OH 44139

Evan Birkhead
1897 Cosell St.
Solon, OH 44139

John E. Campbell
9591 Banta Ave.
Solon, OH 44139

Larry McClain
10 E. Liberty
Solon, OH 44139

Meaghan Carpenter
4045 Edwin Blvd.
Solon, OH 44139

- Choose the Type for which you want to print labels from the **Types** menu.

In this example, it's **Customer**.

- Choose **Print Records...** from the **File** menu.

The Print Library appears.

If you want to edit an existing format, select it and click **Edit**. However, we'll design a new one in this example.

- Click the **New** button.

A dialog box appears, asking for what style you'd like to print records.

```
                        Print Library
Print format            Type              Style
┌──────────────────────────────────────────────────┐
│ Sales report          Customer          Report    │ ⬆
│ Order Sheet           Order Sheet       Form      │
│                                                    │
│                                                    │
│                                                    │ ⬇
└──────────────────────────────────────────────────┘
┌──────────────────────────────────────────────────┐
│                                                    │
│  Choose a style for printing Customer records:     │
│                                                    │
│                                                    │
│                                                    │
│                                                    │
│  ( Cancel )    ( Forms )    ( Report )    ▐Labels▌ │
│                                                    │
└──────────────────────────────────────────────────┘
```
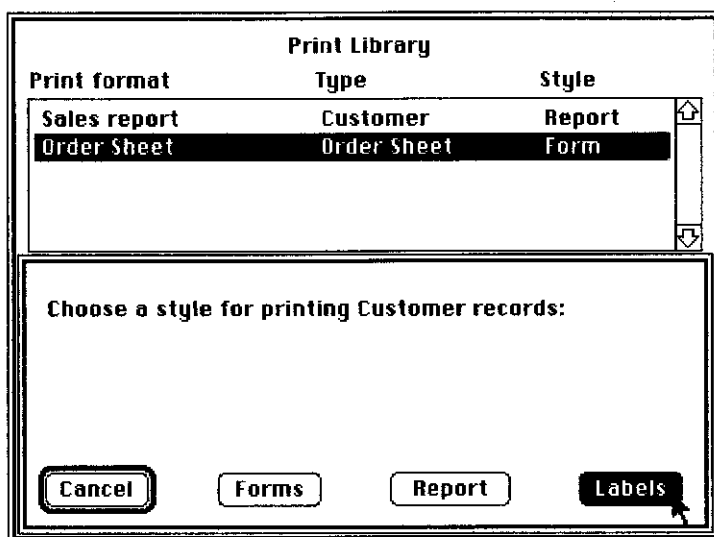
- Click the **Labels** button.

An initial print format appears. Filevision automatically creates such a format each time you click the **New** button, but you can alter the format any way you wish.

**naming the
print format**

The first box, **Format-name**, contains an automatically entered name like **Format A** or **Format B**.

- Replace the name in the **Format-name** box with **Mailer**.

The automatic Label layout will appear as in the picture below. **Mailer** will appear in the Print Library as the name of the format you're now designing.



## removing unwanted fields

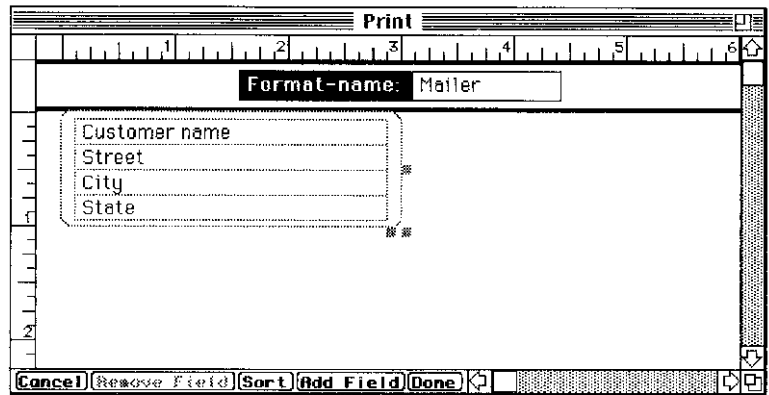We aren't going to use the City or State data fields in this example. They will be replaced with an annotation field containing the same information in a different way.

- Select the **City** field.

- Click the **Remove** button.

The field vanishes. Use this technique to remove any field, whether it's a data field or an annotation field.

- Remove the **State** field.

It vanishes too.

Your layout should now appear as:
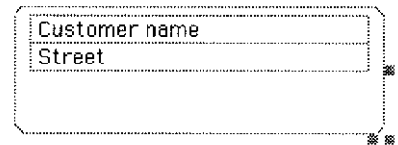


## adjusting the Label size

The label stock that will be used for this example is 1 1/2" high by 4" wide. To space the Labels properly for printing on this standard label stock, the Label print layout background can be stretched using the stretch handles.



The side and bottom handles are constrained and will either widen or deepen the Label. The corner handle can be used to adjust the size in either direction.
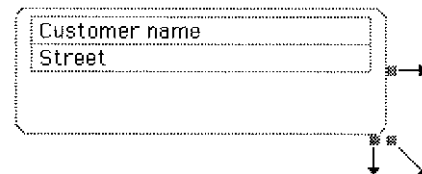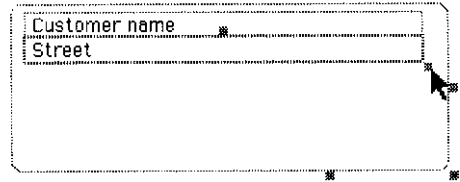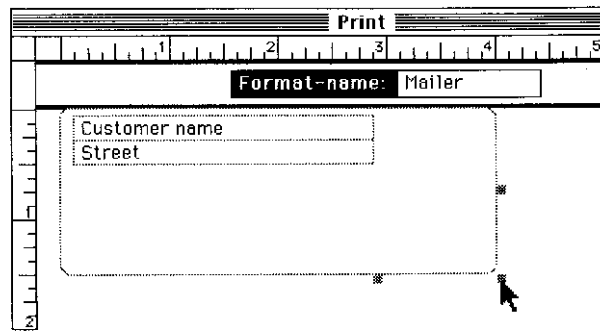
Resize the Label to 1 1/2" high by 4" wide.

The Label print format should now appear as:



To take advantage of the larger label size, stretch the Customer name and Street fields to the width of the label background.

The Label now appears as:



## using an annotation field to print the contents of other fields

To get the city, state, and zip code all on one line, we'll use a different method that provides certain advantages. Annotation fields have no data of their own, but you can use them to print the contents of data fields simply by typing the names of the data fields inclosed by square brackets [ ]. The advantages of using this method is in creating an automatic "slide" between the fields, removing any spaces due to the varying lengths of the field data and the ability to add commas or other punctuation marks between fields.

• Click the **Add Field** button.

A small dialog box appears giving you the choice between a data field and an annotation field.



• Click **Annotation Field**.

The dialog box disappears and a blank annotation field appears.

• Use the move handle on top to move the field snugly underneath the **Street** field.

• Use the stretch handle on the bottom to stretch the field to the same length as the **Street** field:

**slide left**                     • Type "**[City], [State] [Zip]**" in the annotation field.

The Label format now appears as:

Customer name
Street
[City], [State] [Zip]

Bracketed fields will automatically slide the text data to the left to remove any blank spaces.
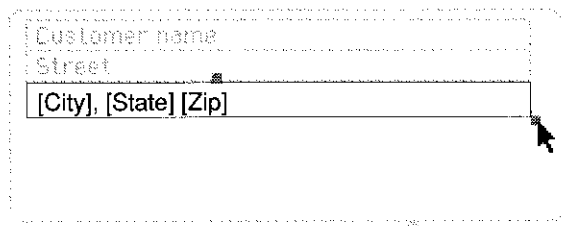
**final label adjustments**

The fields still require some final adjustments.

• With the Option key down, select **14** point size and **Geneva** from the **Text** menu.

Using the Option key while changing any of the text attributes will make the same changes to all fields.

The fields will be overlapping due to the increased text size. Adjust them so that they all clear each other.

• Drag a marquee around all fields to select them and center them by dragging any one of the top move handles.

Customer name
Street
[City], [State] [Zip]
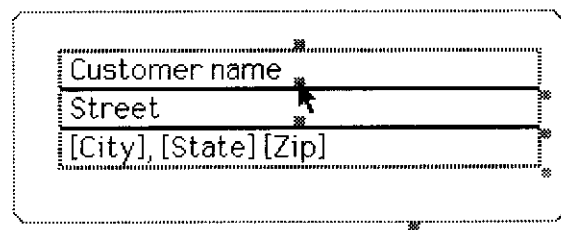
**close lines**

If you are using fields that may be empty on some labels, the fields below the blank line(s) can be moved up to fill the empty space. In order to achieve this "closing of blank lines", the Label would have to be formatted using bracketed fields in an annotation field such as in the [City], [State] [Zip] line in the above example. Restructure the Label to appear as follows, also adding [Company]:

[Customer name]
[Company]
[Street]
[City], [State] [Zip]
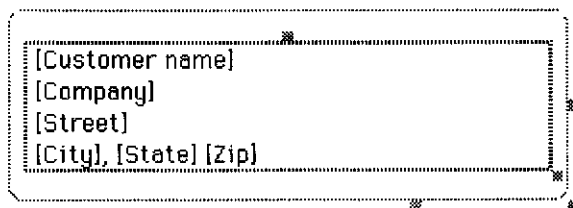
In the top example on the previous page, any records that did not supply either the Customer name or Street would leave a potential blank line during printout. By using a single annotation field and bracketed data fields from the database file, the automatic space and line compression will slide all lines together to fill in the blank lines and will eliminate all unwanted spaces between fields.

If the empty lines and blank spaces are required, use all standard data fields. If a combination of blank and compressed lines or spaces are required, use both methods together.

## using Across...

Now all you have to do is to instruct Filevision to print two Labels wide (or however many labels across your label stock can print).

- Choose **Across...** from the **Format** menu.

**Format**

| | |
|---|---|
| ✓Alphabetic | ⌘0 |
| Numeric | ⌘9 |
| Dollar Sign | ⌘M |
| Commas | ⌘, |
| Decimals... | ⌘. |
| Statistics... | ⌘- |
| ✓Align Left | ⌘6 |
| Align Middle | ⌘7 |
| Align Right | ⌘8 |
| Hide Border | |
| Do Not Invert | |
| Hide Field Name | |
| **Across...** | |
| Show Ruler | ⌘R |
| Metric Ruler | |

A dialog box appears, giving you the choices for the number of records you can print across each page: (Each Label is a record.)

Print how many records across each page?

The current setting is: 1.

[ Cancel ]      [ 1 ]      [ 2 ]      [ 3 ]      [ 4 ]
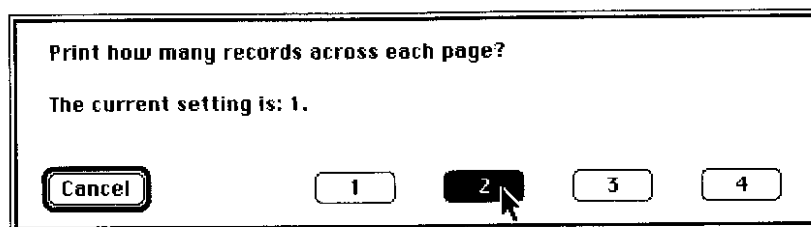
- Click the **2** button.

That's it. The **Label** print format is finished.

- Click **Done**.

You are returned to the Print Library. As you can see, the print format you just designed has been added to the Print Library.

## printing the Labels

Remember that there are two steps in printing Labels: designing a format, and printing the Labels. You've just completed the first step, which is designing the format. For a complete reference on designing Label formats, see Part 16, Printing Recap" page 286, and Part 17, "Special Printing Features" page 296.

The second and final step is printing them. In this example we're assuming that you have a printer with the appropriate software attached to your system.

- From the **Print Library** dialog, click **Page setup**.

A dialog similar to the following will be presented depending on the type of printer you are using and the version of the driver software:

```
LaserWriter Page Setup                              5.2    [  OK  ]
Paper: ◉ US Letter   ○ A4 Letter   ○ Tabloid
       ○ US Legal    ○ B5 Letter                         [ Cancel ]
       Reduce or [100] %    Printer Effects:             [ Options ]
       Enlarge:             □ Font Substitution?
       Orientation          □ Text Smoothing?            [  Help  ]
       [🔲][🔲]             □ Graphics Smoothing?
                            □ Faster Bitmap Printing?
```
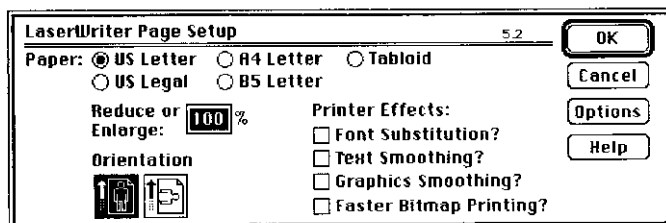
You will need to click the appropriate buttons for label stock. It's often 12", and the button may be labeled "International Fanfold". If you are using a Laser-Writer, be sure to select **Larger Print Area** by first clicking the **Options** button which brings up the following LaserWriter Options dialog.

```
LaserWriter Options                                 5.2    [  OK  ]
      [📄]    □ Flip Horizontal
      [🐕]    □ Flip Vertical                           [ Cancel ]
              □ Invert Image
              □ Precision Bitmap Alignment (4% reduction)
              ⊠ Larger Print Area (Fewer Downloadable Fonts)
              □ Unlimited Downloadable Fonts in a Document
```
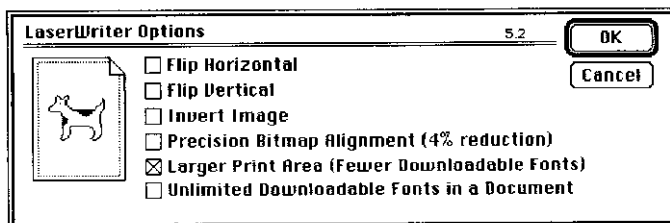
- From the **Page Setup** dialog, click the appropriate settings, then **OK**.

- From the **Print Library** dialog, click **Printer** under **Print to:**.

Clicking **Screen** would preview your labels on screen, and clicking **File** would create a Macintosh disk file of the output for use with a word processor application like MacWrite.

- Click **Print**.

The records are sorted, then a standard printer dialog box appears.

- Click the appropriate settings, then **OK** to begin printing.

That's it! Your Labels are printed, and the Print Library reappears when printing is complete.

# 15. Form Letters and Mail Merge

Form letters, also called mail merge, are "personalized" with information from data fields in the letters. You can create form letters of one page in size with up to 16,000 characters (or bytes), the maximum a record can hold.

There are two steps in printing Form letters. The first is designing a format for the letters, and the second is printing using that format. This section walks you through the design and printing of an example business promotion letter.

Once you design the format, it's automatically saved in the Print Library, and you can reuse and edit it anytime. Keep in mind that a report includes records of only one Type.

The example shown here uses only a few of Filevision's printing capabilities. For a complete reference on designing Form Letter formats, see Part 16, "Printing Recap" page 286, and Part 17, "Special Printing Features" page 296.

The picture below shows a simple Type layout, which we'll use to create the form letters. You may want to create a small file based on this Type layout. Then you can fill in a few records (three is plenty), and if you follow the steps here as you read them, you'll be able to print out the form letters for those records.

We're going to create a business letter that looks like this:



Brushwood Hills Estates Development Company
P.O. Box 4069, Malibu, California 90265-1369

Al Hockwalt                                    Wednesday, November 23, 1988
P.O. Box 7788
Saint Louis, MS 33401

Dear Al,

I wanted to take this opportunity to send you the floor plan of the Adventure model
townhouse that you were interested in when you were in the office on 9/23/88.

The down payment on the Adventures have been reduced to $24,500. If that provides
any renewed interest in the property, give me a call so that we might discuss the
chance of moving you into a new home.

There is also a good chance
that we might be able to
re-negotiate Jack Allen's
commission to make you
a better deal.
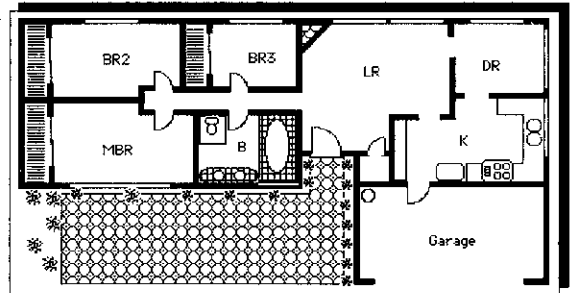
Best Regards,

Jim Callum,
Senior Vice-President of Sales

CC: Jack Allen, Sales Representative

Al, please give me a call at you earliest convenience.

## setting up records for the Form letter

In setting up the records for this example, you will need to copy the floor plan
from the Tour file found in the Townhouse Type (unless you wish to draw your
own). See the section on Importing and Exporting Graphics, page 151 for
details on how this is done.

The floor plan can either be copied to the Scrapbook or Exported to a PICT file.
Either method will allow you to use it in your form letter layout.

As soon as you have the floor plan ready for importing into your Customer Type, set up your records by entering some general data in the data fields and pasting the floor plan picture into the Picture field.

A filled in record should appear similar to the following:

## going to the Print Library

- Choose the Type for which you want to design a print format from the **Types** menu.

In this example it's Type Customer.

- Choose **Print Records...** from the **File** menu.

The Print Library appears.
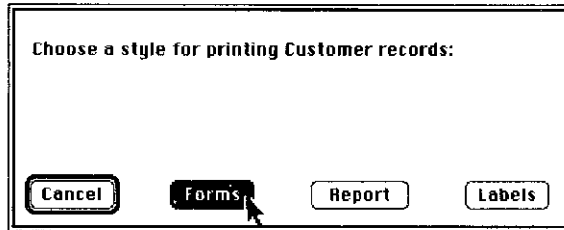
If you want to edit an existing format, select it and click Edit. However, we'll design a new one in this example.

- Click the **New** button.

A dialog box appears, asking you what style you want to print.

```
┌─────────────────────────────────────────────┐
│ Choose a style for printing Customer records: │
│                                               │
│                                               │
│ [Cancel]   [ Forms ]    [ Report ]   [ Labels ] │
└─────────────────────────────────────────────┘
```

- Click the **Forms** button.

An initial print format appears. Filevision automatically creates such a format each time you click the **New** button, but you can alter the format any way you wish.



Its body is labeled "Each record:". The size of the Each record area helps determine how many records will be printed on a page. The header and footer areas contain information that's printed at the top or bottom of each page; they can be edited or removed.

In this example, none of the fields that were automatically entered by Filevision will be used.

## naming the print format

The first box, Format-name, contains a preset name like Format A or Format B.

- Replace the name in the **Format-name** box with **Follow up**.

**Follow up** will now appear in the Print Library as the name of the print format you're now designing.

## editing the print format

As previously mentioned, we will not be using any of the fields as they currently exist. We can also close the Header and Footer areas as we will not require them.

- Select all of the fields one at a time and click the **Remove Field** button.

NOTE: Filevision will not allow you to remove the last field. To remove all of the unwanted fields, we must first add one field to satisfy the one field requirement.

- Click the Add Field button.



The add field dialog appears:



- Click **Annotation Field**.

- Using the top move handle, move the new annotation field anywhere into the **Each Record:** area.

The last automatic field can now be selected and removed.

After all of the fields have been removed except the new annotation field, the Print Format should appear as follows:
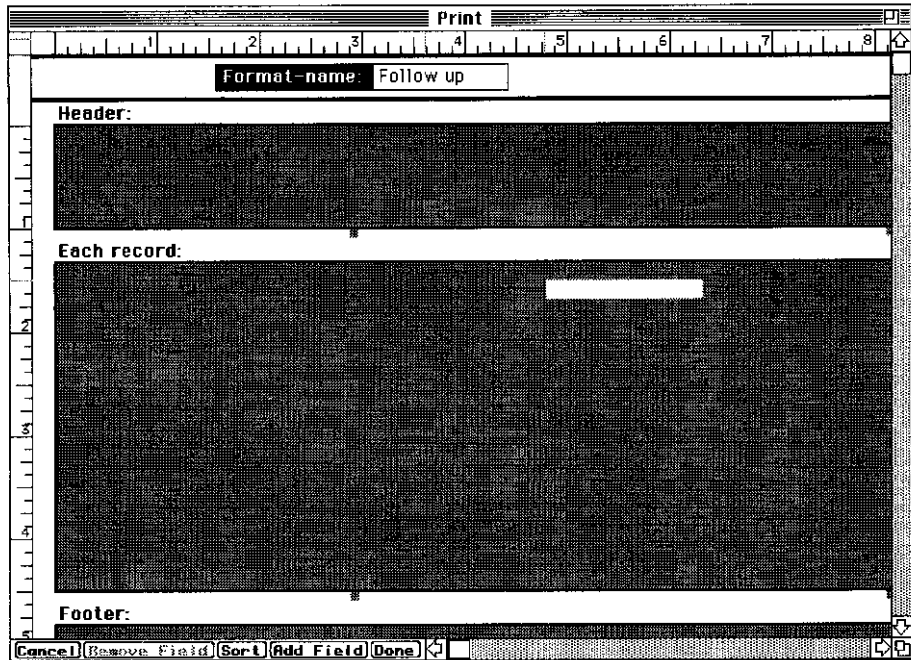


**closing the Header and Footer**

While we could use the Header area for this form letter, it is not necessary and will be easier to layout the contents of the letter in their proper positions without using the Header or Footer areas.

- On both the Header and Footer, grab the bottom handles and slide the field closed.

The print layout should now appear as:

Using the same method of grabbing the bottom area handle, stretch the Each Record: area down until it is a full 10 inches (the normal printing area). This will provide enough room to lay out our letter.
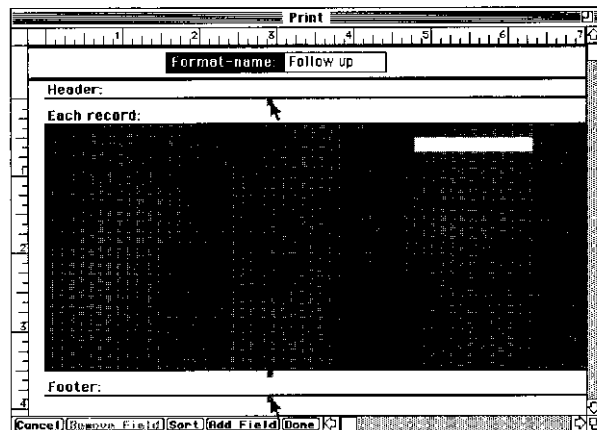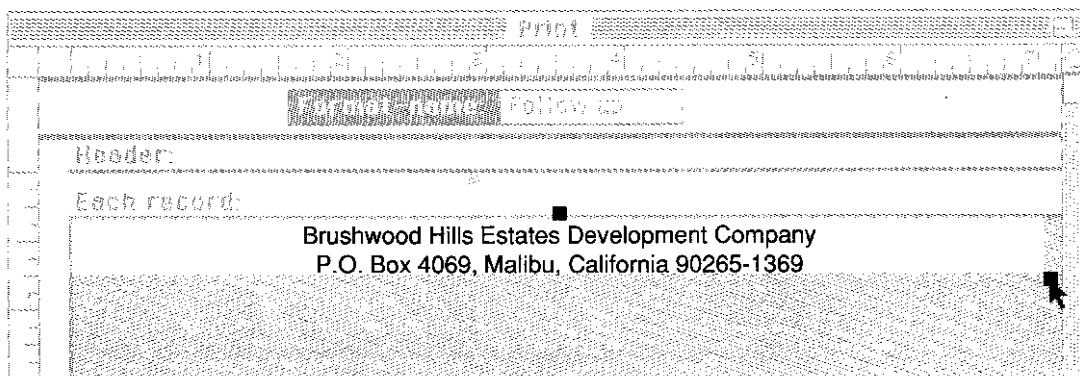
If you are using a printer that has larger than the normal 8 x 10 printing area, open the Each Record area to take advantage of it.

## the Form letter layout

To start the form letter layout, you would have the option to use one large annotation field with the Picture data field and an annotation field for the signature, or you can break the form up into smaller fields. The smaller fields will allow you more flexibility in final adjustment of the letter for best appearance.

- Click the annotation field that was added, then use its top move handle to move the field into the upper left corner.

- Using the lower stretch handle, stretch the field to about 7" wide by 2 lines deep.

- Type in the company name and address as shown and set the text to 12 point, Plain, Helvetica (or Geneva) from the **Text** menu and **Align Middle, Hide Border** and **Do Not Invert** from the **Format** menu.

The form layout should appear similar to:



We need to add a line under the company name which could be done either as an annotation field entering the underline character or as a line drawn on the drawing page and pasted in as a graphic. The drawn line will insure a clean non-breaking line when printed.

- Add another annotation field and move it under the company letterhead field. Stretch it so that it is slightly narrower than the bottom line of the company address. Set it to 6 point from the **Text** menu.

- Exit the Print Layout temporarily by clicking the **Done** button.

- Click **Quit** from the Print Library dialog.

- On returning to the drawing page, draw a horizontal line about 5" or 6" long using a 1 point line width from the lines pop-up menu.

- With the line still selected, copy it to the Clipboard using **Copy** from the **Edit** menu.

- Re-enter the Follow up Print Layout by selecting **Print Records...** from the **File** menu and **Edit** from the Print Library dialog while **Follow up** is selected.

- As soon as you are back in the Print Layout for Follow up, select the new line annotation field and select **Paste** from the **Edit** menu.

The line that was just drawn was still in the Clipboard and was pasted into the annotation field.

The layout should now appear as:
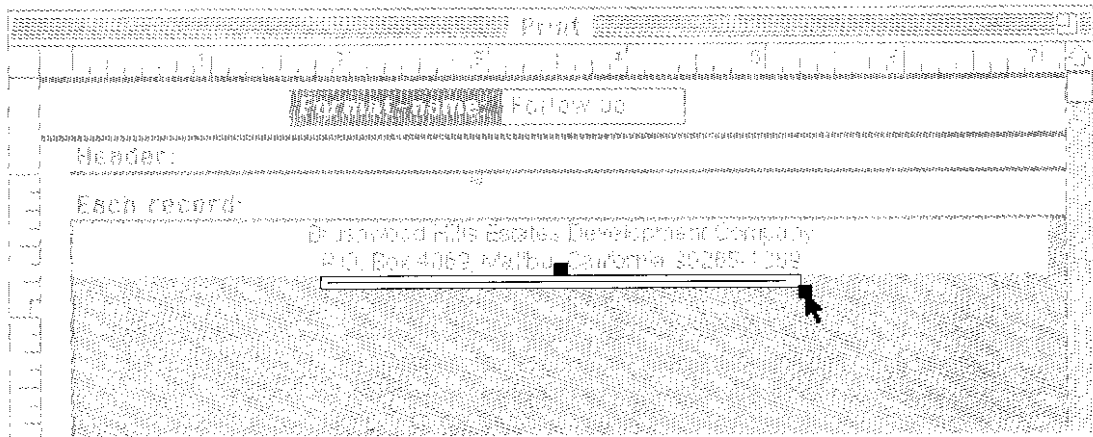


The next field to be added is the customer name and address annotation field.

- Add another annotation field as described previously and move it to the left edge of the **Each Record** area at about the 1 1/4" inch mark on the ruler. Stretch it to 2 1/2" wide and 4 lines deep.

- Set the field to 12 point, Plain, Times (or New York) from the **Text** menu and **Align Left, Hide Border** and **Do Not Inver**t from the **Format** menu.

- Enter the data field names in square brackets for **[First name] [Last name]** and **[Current Mailing Address]** as shown below.



Any time that a data field name is entered in an annotation field in square brackets, the contents of that data field replaces the bracketed field name. This is true where ever the bracketed field name is entered within the body of the text (as we will see later). The annotation field will not increase in size if there is more information than can be contained in the pre-sized annotation field. It is therefore necessary to estimate the largest amount of data that will be substituted for the bracketed field names and to make the annotation field large enough to accommodate it.

## adding ampersand &D auto dates

The next thing that we will add is an automatic date entry field. Again, this is done using another annotation field.

- Add another annotation field and move it to the right side of the **Each Record** area, in line with the address field above. Stretch it to approximately 2 1/2" wide.

- Set the field to 12 point, Plain, Times (or New York) from the **Text** menu and **Align Right, Hide Border** and **Do Not Invert** from the **Format** menu.

- Type an **&D** in the annotation field (no brackets).

Your form letter layout should now appear similar to the illustration on the next page:

The ampersand (**&**) **D** will be replaced with today's full system date in the form of **Thursday, May 20, 1989**. If you prefer the short form date format, enter a lower case "d" as in **&d**. This will be replaced with the short form **89/05/20** date format (for example) during print out.

## using bracketed field names in annotation fields

The next part of our form letter will be the salutation field. This could be placed within the body of the letter field but will offer more versatility in the final position adjustments if kept separate.

- Add another annotation field and place it under the address field as shown in the next illustration.

- The remainder of the text fields should be set to 12 point, Plain, Times (or New York) from the **Text** menu and **Align Left, Hide Border** and **Do Not Invert** from the **Format** menu.

Once these field formatting attributes are selected, they should remain the same after each field is entered (unless changed deliberately).

- Type in "**Dear [First name],**", in the field. Notice that any punctuation entered outside of the field will print as entered.

Typing punctuation marks or any other text in-line with a bracketed data field name will automatically print as entered relative to the data field information that replaces the bracketed field name. This allows a smooth normal flow of text without breaks or unusual spacing.

The form letter layout should now appear as illustrated on the next page.

Format-name: Follow up

Header:

Each record:

Brushwood Hills Estates Development Company
P.O. Box 4069, Malibu, California 90265-1369

[First name] [Last name]
[Current Mailing Address]

&D

Dear [First name],

The remaining annotation fields and text entry for the body of the letter can be entered using the same general method that has been described above. The body text layout should appear as follows:

I wanted to take this opportunity to send you the floor plan of the [Model] model townhouse that you were interested in when you were in the office on [Last Contact].

The down payment on these [Model]s have been reduced to [Down Payment]. If that provides any renewed interest in the property, give me a call so that we might discuss the chance of moving you into a new home.

There is also a good chance that we might be able to re-negotiate [Salesperson]'s commission to make you a better deal.

Best Regards,

Jim Callum,
Senior Vice-President of Sales

CC: [Salesperson], Sales Representative

[First name], please give me a call at your earliest convenience.

Cancel  Remove Field  Sort  Add Field  Done

## adding graphics to annotation fields

There are two more fields to place that will contain graphics and one field for design effect.

- Add another annotation field and place it for a **signature**.

- Unless you have a signature graphic handy, return to the drawing page and create one using the freehand or polygon tool. You can create the signature oversize as it will be scaled when added to the signature annotation field.

Note: An actual scanned signature could be imported here using **Import Graphics...** from the **Text** menu.

- Copy it to the Clipboard using **Copy** from the **Edit** menu.

- Return to the Follow up form letter print layout.

- Select the annotation field that will contain the signature and paste the contents of the Clipboard using **Paste** from the **Edit** menu.

- Resize the annotation field (and signature) by using a combination of the stretch handle and text **Size** from the **Text** menu.

Even though the text size has nothing to do with the signature graphic, by changing the height of the field, the size of the graphic is adjusted to fit. If using the stretch handle or text size seems to have no affect on the signature graphic, one of the field handles may have been inadvertently selected while the Option key was down. This will cause the graphic contents of any field to rescale to full size. To remedy this, hold the Option key down again and click on one of the field handles. This will toggle the graphic from full to scaled size.

Now that the signature is added, the form should appear as follows:

## adding data fields to form letters

We still need to enter the field for showing the floor plan of the model townhouse of interest by the customer. If all customers were interested in one model and every form letter were to show that same model, a floor plan of the one model could be pasted into an annotation field. Every letter would show the same graphic.

However, in this example, each follow up letter may contain a different floor plan. In this case, the actual floor plan of the model of interest to a specific customer would have to be placed in that customers record. To change the graphic on each letter, the **data field** for that graphic will have to be used in the form letter.

- Click the **Add Field** button.

The add field dialog appears:

| | Cancel | Annotation Field | **Data Field** |

- Click the **Data Field** button.

The data field dialog appears:

```
Choose a field to add:              ○ Show field name and contents
[ Last name              ]          ● Show field contents only
( Cancel )                                         ( Add )
```
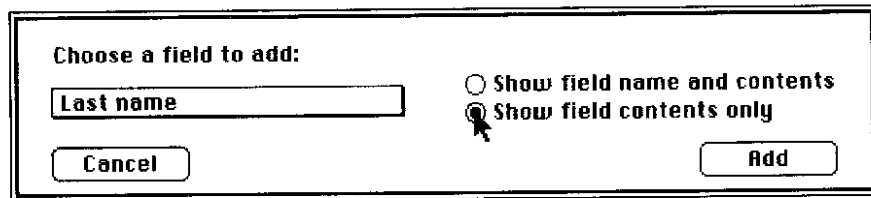
When setting up a Form, the **Choose a field to add:** dialog opens with **Show field name and contents** selected. In this example, the letter will look more professional if the field name does not appear on the floor plan graphic.

- Select **Show field contents only**.

- Hold the pointer and mouse button down on the **Choose a field to add:** pop-up menu.

A menu of all the fields in the currently selected Type are displayed.

The field that contains the various floor plans is **Picture**.

- Select the **Picture** field.

- Click the **Add** button.

The picture field appears in the middle of the display.

Using the move and stretch handles, reposition the field and stretch it to the approximate size show in the following illustration:

The precise shape and size of the field is not important as the graphic will scale to fit whatever size is provided. If you wanted to create a full size graphic in this field, you could use the Option key - click on a field handle method. Only that portion of the graphic that fit in the field would print in this case.

## overlapping fields

There is one more touch to the layout before we are finished. Using the ability to show an annotation field **Inverted** (black on white) provides an ideal drop shadow for our graphic field. A shade pattern could be pasted into the annotation field for effect; however, black will do.

- Add a blank annotation field and resize it to the same size as the **Picture** field.

- Set the field to **Invert** from the **Format** menu while it is still selected.

- Move the field so that it is slightly above and to the right of the **Picture** field.

The inverted annotation field drops behind the **Picture** field, creating a drop shadow.
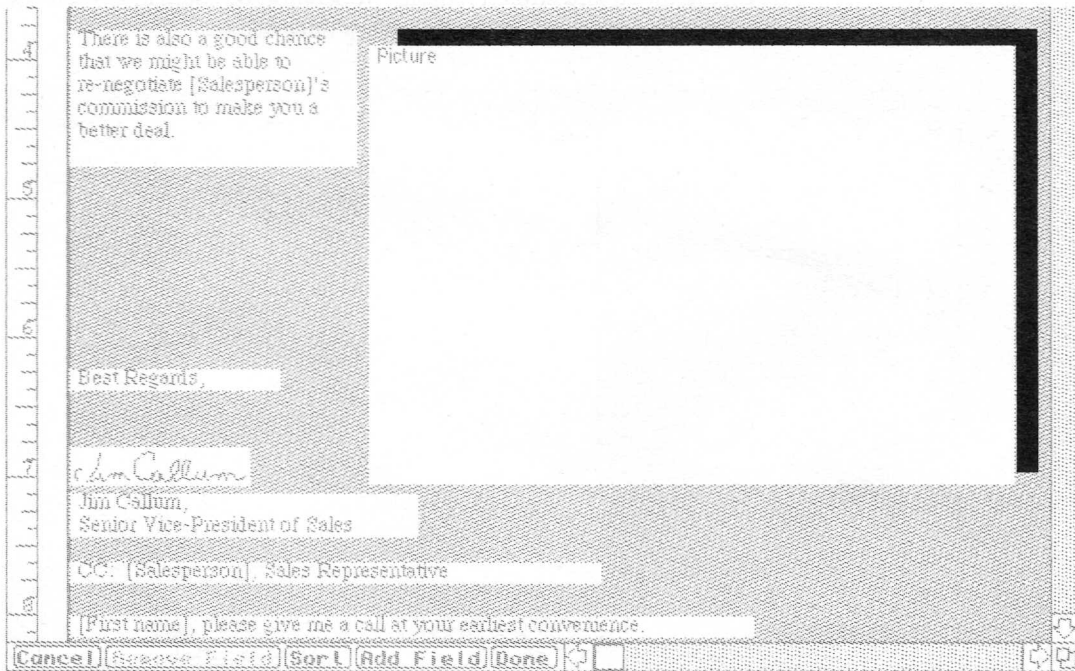
The precedence of overlapping fields of either kind (annotation or data) is governed by the relative positions as there is no front/back control. The field that moves to the back is the field that is first encountered when scanning the layout from the top down. This allows data fields (or other annotation fields) to easily overlay an annotation field for background effects.

Importing or pasting an illustrated background or a company's standard form into an annotation field background allows overlaying of data fields over the background or standard form.

You're now <u>almost</u> finished designing the Form Letter print format.

- Click **Done.**

You return to the Print Library. As you can see, the print format you just designed has been added to the Print Library.

## previewing the Form letter

From the Print Library, let's preview the form to see if it centers to the page correctly and to determine any other adjustments required.

- Click **Screen** under **Print to:.**

- Click the **Print** button.

The **View Print** window is displayed:
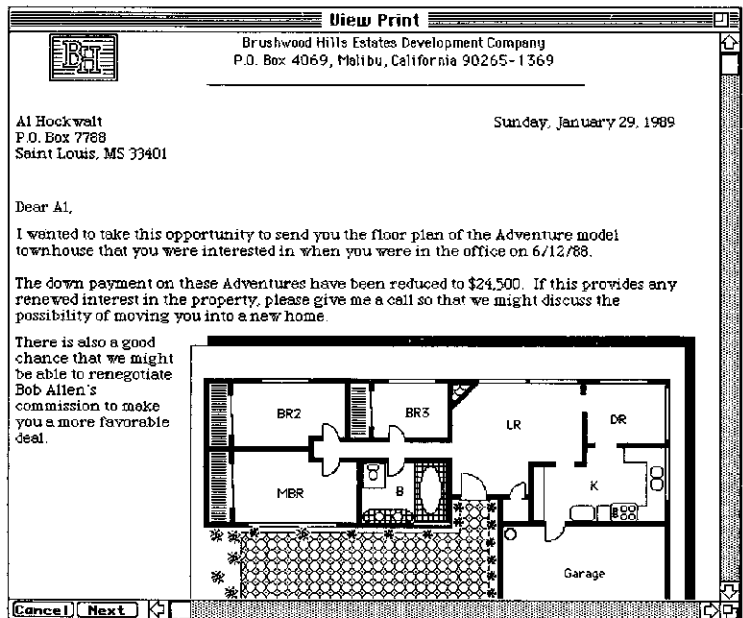
## adjusting the position of the letter contents

If you scroll to the bottom of the page using the vertical scroll bar, you will notice that there is a lot of "white" indicating that the letter is too high on the page. This can be easily adjusted:

- Click the **Cancel** button on the **View Print** window.

You are returned to the Print Library dialog.

- Click the **Edit** button.

* After returning to the Follow up print layout, grab the **Header** area stretch handle and reopen the **Header**. As the normal print area is 8" x 10" and as there is approximately 2" of white space below the letter, stretch the **Header** to about 3/4".

The Each record: area moves down an inch to accommodate the larger header.



If you wanted to move the letterhead annotation field and line up, select both the letterhead and the line field by using the marquee drag method (mouse down outside the upper left and drag the pointer to the lower right encompassing both fields). Use either of the two move handles that are now showing to move the letter heading up into the Header area. The Header must be large enough to accommodate both fields or the computer will beep at you and the fields will snap back to the Each record area.

This same method (marquee drag selection) can be used to move all of the fields to the right (or down) if required.

## printing the Form letters

Remember that there are two steps in printing form letters: designing a format, and printing the form letter. You've just completed the first step, which is designing the format.

The second and final step is printing the form letters. In this example we're assuming that you have a printer with the appropriate software attached to your system. There are several other printing options, however, and they are covered in the sections beginning with Part 16, "Printing Recap" page 286, and Part 17, "Special Printing Features" page 296.

- Click **Printer** under **Print to:**.

Clicking Screen would preview your form letters on screen, and clicking File would create a Macintosh disk file of the output for use with a word processor application like MacWrite.

- Click **Print**.

The records are sorted, then a standard printer dialog box appears.

- Click the appropriate settings, then **OK** to begin printing.

That's it! Your form letters are printed, and the Print Library reappears when printing is complete.

# 16. Printing Recap

This section covers miscellaneous information that is common to printing all Reports, Forms and Labels.

**selecting records to print**

You can print records for:

- all objects of a type
- highlighted objects of a type
- selected objects of a type

If you want to print records for highlighted or selected objects, they must be highlighted or selected <u>before</u> you choose **Print Records...** from the **File** menu

- To print Forms, Reports, or Labels, choose **Print Records...** from the **File** menu.

You'll see the Print Library. It contains any print formats you have created.

```
┌─────────────────────────────────────────────────────┐
│                    Print Library                     │
│  Print format         Type              Style        │
│  ┌──────────────────────────────────────────────┐    │
│  │ Mail-Labels         Salesperson      Label    │⇧│  │
│  │ Sales Report        Salesperson      Report   │ │  │
│  │ Form-letter         Salesperson      Form     │ │  │
│  │ Form-letter         Customer         Form     │ │  │
│  │ Letter (Gr.)        Customer         Form     │⇩│  │
│  └──────────────────────────────────────────────┘    │
│   ( Delete )         ( Edit )          ( New )        │
│  ──────────────────────────────┬──────────────────   │
│    Records to print:           │   Print to:          │
│       ⦿ All                    │      ○ Printer       │
│       ○ Highlighted            │      ⦿ Screen        │
│       ○ Selected               │      ○ File          │
│  ( Quit )        ( Page setup )           ( Print )   │
└─────────────────────────────────────────────────────┘
```

If you forgot to highlight or select records, click **Quit**, take care of the highlighting or selection, and return to the Print Library. You can always choose to print **All** records.

If you selected **Print Records...** while working in the Info page, the record that was showing at the time is the **Selected** record. If you invoked **Print Records...** while working on the drawing page and had more than one object of the current Type selected, then **Selected** includes ALL of the attached records for those objects. If you entered **Print Records...** from the drawing page and had no objects selected and a record icon was not present, then the Selected radio button will not be selectable.

- Choose the **Print format** you want to print from:

- Click the appropriate choice under **Records to print:**.

## Page Setup... dialog

The Macintosh has to know what kind of paper you're using. If it's anything other than 8 1/2" x 11", continuous feed computer paper, make sure the page setup is correct by clicking the **Page setup** button on the Print Library or by choosing **Page Setup...** from the **File** menu.

For instance, labels are frequently packaged on 12" continuous feed stock; the settings for it are shown below. Notice that 12" paper is shown as **International Fanfold** on the Imagewriter **Page Setup...** dialog.
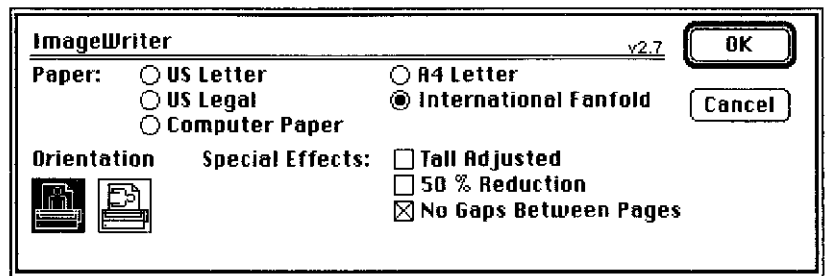


A less obvious use of **Page Setup...** is in printing much larger records using the **50 % Reduction** check box. For example, if you create a type layout 16" wide by 20" long, you can print the whole thing on a standard 8 1/2" x 11" paper by clicking the **50 % Reduction** check box. Likewise, you could print a 27" record using legal paper, which is 14" long. In printing ImageWriter label stock, be sure to click the **No Gaps Between Pages** check box.

Standard paper sizes offered for the ImageWriter are:

- US Letter:              8 1/2" by 11"
- US Legal:               8 1/2" by 14"
- Computer Paper:        11" by 15"
- A4 Letter:              8.3" by 11.7"
- International Fanfold:  12" label

Part 16. Printing Recap    287

If you are using a LaserWriter, the **Page Setup...** shows a different dialog than that of the ImageWriter:

```
┌─────────────────────────────────────────────────────────────┐
│ LaserWriter Page Setup                        5.2   ┌──────┐ │
│ ─────────────────────────────────────────────────  │  OK  │ │
│ Paper: ◉ US Letter   ○ A4 Letter   ○ Tabloid        └──────┘ │
│        ○ US Legal    ○ B5 Letter                    ┌──────┐ │
│        Reduce or [100] %   Printer Effects:         │Cancel│ │
│        Enlarge:            ☒ Font Substitution?     └──────┘ │
│                            ☒ Text Smoothing?        ┌──────┐ │
│        Orientation         ☒ Graphics Smoothing?    │Options│ │
│        [icons]             ☒ Faster Bitmap Printing?└──────┘ │
│                                                     ┌──────┐ │
│                                                     │ Help │ │
│                                                     └──────┘ │
└─────────────────────────────────────────────────────────────┘
```
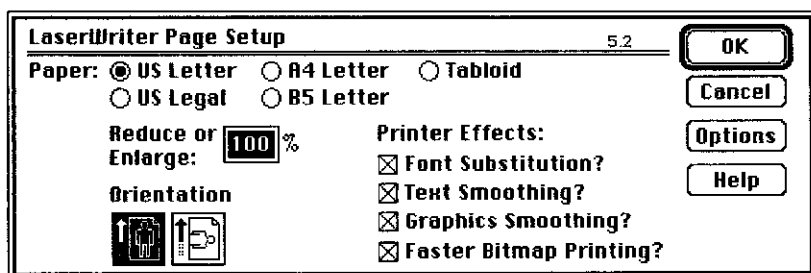
Here you are offered additional standard paper sizes of B5 which is 6.9" by 9.8" and Tabloid which is 11" x 17". Special **Printer Effects:** are offered, scaled reductions and enlargements and a special **Options** dialog for several other effects:

```
┌─────────────────────────────────────────────────────────────┐
│ LaserWriter Options                           5.2   ┌──────┐ │
│ ─────────────────────────────────────────────────  │  OK  │ │
│ [dog icon]  ☐ Flip Horizontal                       └──────┘ │
│             ☐ Flip Vertical                         ┌──────┐ │
│             ☐ Invert Image                          │Cancel│ │
│             ☐ Precision Bitmap Alignment (4% reduction)└────┘ │
│             ☒ Larger Print Area (Fewer Downloadable Fonts)   │
│             ☐ Unlimited Downloadable Fonts in a Document     │
└─────────────────────────────────────────────────────────────┘
```
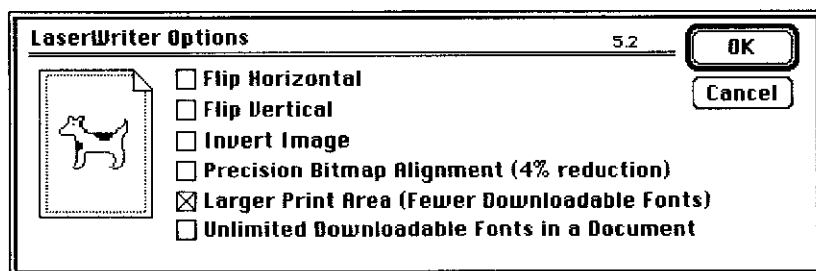
The icon in the LaserWriter Options dialog changes to reflect any of the check boxes that are checked. In printing LaserWriter label stock, be sure to check the **Larger Print Area** check box. Without this box being selected, the standard page output for US Letter is 8" x 10" which clips the top and bottom 1/2" margin. For additional information on Page Setup, consult your printer manual.

Your **Page Setup...** dialog box may look different, depending on the kind of printer or printer software you're using.

Filevision actually offers three kinds of "printing", as you can see from the Print to: choices in the Print Library.

- "Printing" to the printer

This is just what you'd expect; normal printed output of your Forms, Reports, and Labels, using your ImageWriter, LaserWriter, or other printer with the appropriate software.

- • "Printing" to the screen

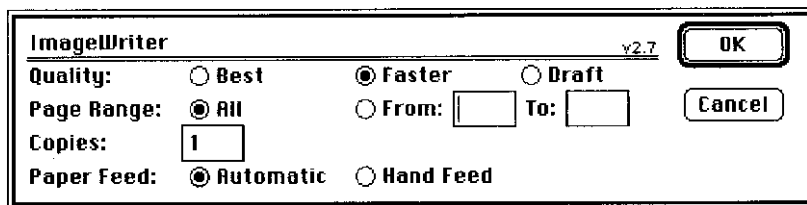Filevision lets you preview your printed output on the Macintosh screen.

- • "Printing" to a file

You can create a standard Macintosh text file of the field contents (and names, wherever Show field name and contents is selected from the add field dialog) by choosing **Print to: File**.
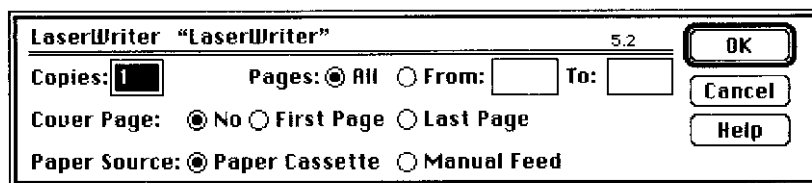
## printing to the printer

- • From the Print Library dialog, click **Printer** under **Print to:**

- • Click the **Print** button.

The records will be sorted and after a few moments this dialog appears if you are using an ImageWriter,

| ImageWriter | | | v2.7 | OK |
|---|---|---|---|---|
| Quality: | ○ Best | ⦿ Faster | ○ Draft | |
| Page Range: | ⦿ All | ○ From: | To: | Cancel |
| Copies: | 1 | | | |
| Paper Feed: | ⦿ Automatic | ○ Hand Feed | | |

or this dialog if you are using a LaserWriter:

| LaserWriter "LaserWriter" | | | 5.2 | OK |
|---|---|---|---|---|
| Copies: 1 | Pages: ⦿ All ○ From: | To: | | Cancel |
| Cover Page: | ⦿ No ○ First Page ○ Last Page | | | Help |
| Paper Source: ⦿ Paper Cassette ○ Manual Feed | | | | |

After the printing is started, a status dialog appears letting you know the number of copies remaining to be printed and the number of records remaining in each of those copies:

If you are using an ImageWriter, the **Pause** button will be active and you can pause at any time to change paper or make adjustments to the printout. Click **Resume** to continue. If you are using a LaserWriter, the Pause button will be inactive. The LaserWriter prints a page at a time while the ImageWriter prints a line at a time. This means that Pause has no real meaning when using a Laser-Writer.

- Click the appropriate settings, then **OK** to begin printing.

You can cancel printing anytime by clicking **Cancel** or by using the standard Command-. (period) cancel action key chord

## previewing forms, reports and labels on the screen

When you're designing formats, you're not always sure what the printed version will look like. The Screen button on the Print Library offers a good way to find out without wasting paper.

- From the Print Library dialog, click **Screen** under **Print to:**.

- Click the **Print** button.

After a few moments you'll see the **View Print** window:

**Cancel** returns you to the Print Library.

**Next** previews the next record or page full of records.

### View Print

**Desert Golf Information**

| Name | Five West |

| Champ Yardage | 276 |
| Men's Yardage | 265 |
| Ladies' Yardage | 249 |

| RLP Handicap (9) | 7 |
| CC's Handicap (9) | 5 |
| CC's Handicap (27) | 14 |

| Par | 4 | | Key | 5 |

Comments

Not quite as evil as it appears from the tee, this hole requires the player to hit the drive and the approach shot over water. Any shot right of the fairway is gonna drown. If a tee shot is hit left through the fairway on this slight dogleg right hole it could also find water in the lake fronting Six West's green or sand in the greenside bunker.

View

( Cancel )( Next )

Due to the size of the Macintosh Plus and SE screens, you can see only about the leftmost 7" of the printed output when previewing. Use the scroll bars to bring the rest of the page into view.

The View Print window will utilize the full size of the monitor being used. Expand the window by using the window zoom box or resize box.

Headers and footers are shown at the top and bottom of the preview area. Information in the Each record: area fills the screen (or page) in between with as many records as will fit.

## saving Forms, Reports and Labels in a disk file

You can "print" forms, reports and labels to a Macintosh text file on the disk for use with programs like MacWrite or other databases and word processors.
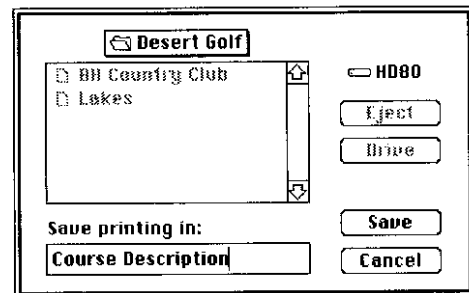
The text file includes only the field contents and where Show field name and contents was chosen, the field name. Annotation fields with pictures, and field sizes and layouts are omitted so that any application that uses tab delimited text files can use Filevision text files.

This same information can be exported to an intermediate file using **Import/ Export Text...** from the **File** menu; however, for simple tab delimited file handling, print to file provides an easy method. The file created using print to file can be re-imported into another Filevision file or new Type by using **Import/Export... Text**.

Fields are separated by tabs, and records are separated by carriage returns.

- Click **File** under **Print to:**.

- Click the **Print** button.

- You'll be asked to name the file.

- Type in a name.

- Click the **Save** button.

After the file has been created, you're returned to the Print Library.



```
┌─────────────────────────────────────┐
│        [🗁 Desert Golf]               │
│  ┌──────────────────────┐            │
│  │ 🗋 BN Country Club  ⬆│   ⊂⊃ HD80  │
│  │ 🗋 Lakes              │  ┌────────┐│
│  │                      │  │ Eject  ││
│  │                      │  └────────┘│
│  │                      │  ┌────────┐│
│  │                    ⬇│  │ Drive  ││
│  └──────────────────────┘  └────────┘│
│  Save printing in:          ┌────────┐│
│  ┌──────────────────────┐   │  Save  ││
│  │ Course Description    │  └────────┘│
│  └──────────────────────┘  ┌────────┐│
│                            │ Cancel ││
│                            └────────┘│
└─────────────────────────────────────┘
```

## Editing print formats

You can reuse print formats, change them, or throw them out. You can save up to 20 print formats in each file. You can even save copies of them in the Scrapbook.

This section, "Editing print formats", assumes you are designing a new print format or editing an existing one. To edit a print format, go to the Print Library by selecting **Print Records...** from the **File** menu, select the format you want to edit and click the **Edit** button. To start designing a new print format, click the **New** button.

## adding a data field to the print format

You can put data fields anywhere in the Header, Each record and Footer areas. When working in the Print layout, there are several buttons at the bottom of the window for performing various functions in setting up the layout:



- Click the **Add Field** button.

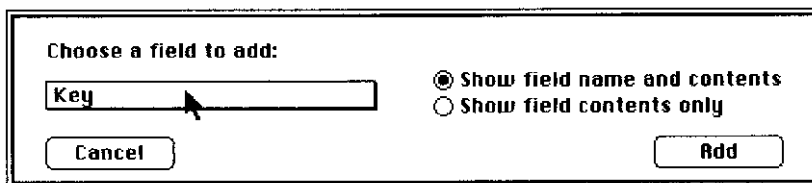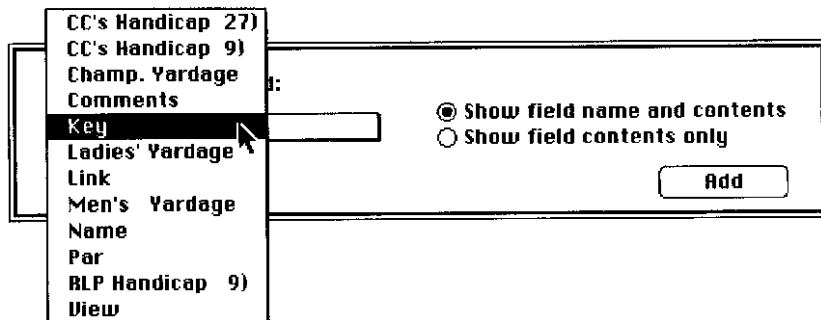A small dialog box appears:



- Click the **Data Field** button.

Another dialog box appears. It shows a field name in a box and radio button options in how you want the field name to display (or not display):



- Move the mouse pointer to the field name box and press and hold the mouse button to display the list of data fields in the type layout in alphabetical order, allowing you to select one.

```
CC's Handicap  27)
CC's Handicap  9)
Champ. Yardage
Comments
Key
Ladies' Yardage
Link
Men's  Yardage
Name
Par
RLP Handicap  9)
View
```

◉ Show field name and contents
○ Show field contents only

[ Add ]

- Move the pointer to the field name that you want to add.  Click **Show field name and contents** or **Show field contents only**, depending on how you want the field to look on the printout.

- Click the **Add** button.

The dialog box disappears and the selected field appears in the middle of the display.

- Use the move handle on the top of the field to place the field where you want it (see "moving fields" below, if you don't know how to use the move handle).

**moving a field or fields on the print format**

- To move a data or annotation field on a print format, first select it.

- Select the move handle on top of the field and, holding down the mouse button, drag the field.

- Release the mouse button.

- To move several fields at one time, first select the fields by dragging a marquee around all fields to be moved.
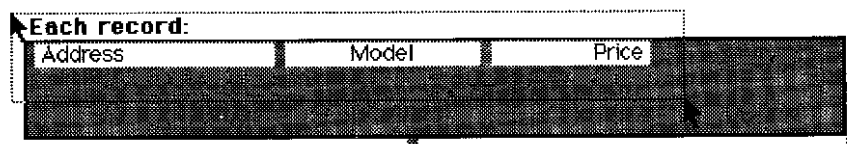
Field handles appear on all of the fields within the marquee:
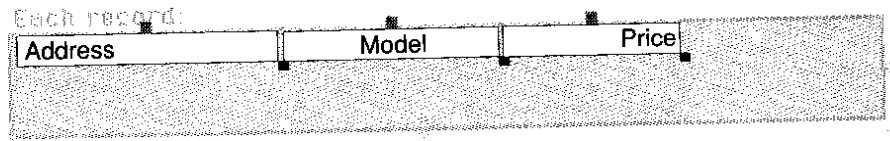


Grab one of the top move handles with the mouse pointer and drag to the new position:
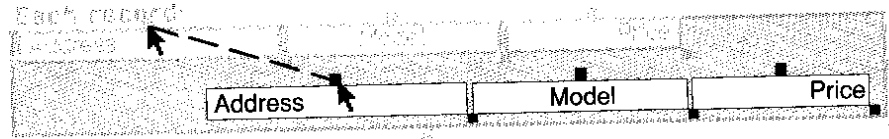


Moving fields on the print format does not affect fields on the Type layout.

**changing the size of a field on the print format**

- Move the pointer to the stretch handle on the lower right corner of the field.

- Press and hold the mouse button down and drag the handle to stretch or shrink the field size.
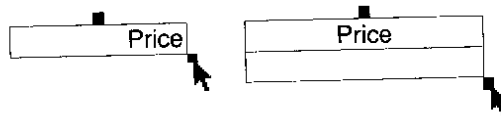


- Release the mouse button.

Changing the sizes of fields on the print format does not affect fields on the Type layout.

**removing a field from the print format**

- To remove a field from the print format, select the field, then click the **Remove Field** button.



Removing fields from the print format does not affect the Type layout.

## using scroll bars to move your work area

The print format is often larger than the part you're working with on-screen; for instance, most printers have 8 1/2" wide paper and the print format display on smaller Macintosh monitors is only 6" wide. To maneuver around the whole working area of the print format, use the scroll bars.
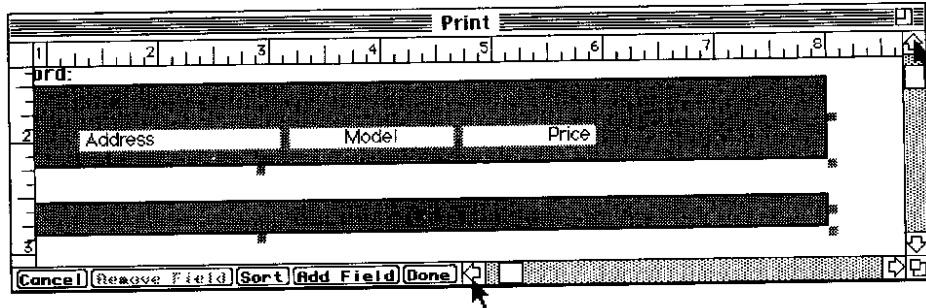
# 17. Special Printing Features

This section explains:

- how to use annotation fields in printing

- how to use special information in printing

- how to use the **Format** menu

- how to use the **Text** menu

- how to get running totals in forms and columnar reports

- how to sort records

- how to get statistics in columnar reports

**adding annotation fields to the print format**

You can use annotation fields on print formats for:

- titles for reports and forms (text or pictures)

- column titles for reports (use underlined annotation fields with the names of the data fields that make up the columns)

- print the contents of data fields (for instance, in form letters)

- the page number (use the special characters **&p**)

- the system time and date (use the special characters **&t**, **&T**, **&d**, and **&D**)

You can put annotation fields anywhere in the Header, Footer, and Each record areas.

- From the bottom bar of the **Print** window, click the **Add Field** button.

[Cancel] [Remove Field] [Sort] [Add Field] [Done] ◁ ▯

A small dialog box appears:

| ( Cancel ) | **Annotation Field** | ( Data Field ) |
|---|---|---|

- Click **Annotation Field**.

The dialog box disappears and a blank annotation field appears in the middle of the display.

- Move the field where you want it and stretch or shrink it as appropriate.

- Type in text, paste a picture from the Clipboard or import a picture using **Import Graphics...** from the **File** menu into the annotation field. If you type text, choose a text style, text size, color, background color and font from the **Text** menu.

Every record that's printed will show what you just typed or pasted into the annotation field.

You can also use "special information", characters that print the page number, the system time or date, or print the contents of another field. See "printing with special information", below.

Adding annotation fields to the print format does not affect the Type layout.

## printing with special information

Filevision has a number of typewritten "special characters" that can be used in annotation fields. Special characters are all used in conjunction with the ampersand (**&**).

Special characters themselves aren't printed, only what they stand in for. For example, &p will be replaced by the page number of the printout every time &p is used in an annotation field.

- To use a special character, click the annotation field to select it, then type one (or more) of the following:

- **&p** prints the page number.

- **&D** prints the system date in long form, for example, **Tuesday, March 11, 1989**.

- **&d** prints the system date in year-month-day short form, for example, **89/ 03/11**.

- **&T** prints the system time with seconds.

- **&t** prints the system time without seconds.

- The contents of a data field are printed if the field name is enclosed in brackets, for example, **[Name]**.

If you want to print an ampersand before a "**p**", "**D**", or "**T**", precede the letter with two ampersands. For example, to print "**&p**" you would type "**&&p**".

## using page Headers

You can have information printed at the top of every page of a Form or Report. That top area is called a page Header. All you have to do is put fields in the Header box when you're editing the Form or Report.

The header area has stretch handles on its bottom; you can eliminate the header by removing fields from it and shrinking it until it looks like a single line, or stretch or shrink the header to any size.

## stretching or shrinking a header

- Press and hold the mouse button on a stretch handle, drag until the header is the correct size, and release the mouse button.



Headers are frequently used for:

- titles for Reports and Forms (use text or pictures in annotation fields)

- column titles for reports (use underlined annotation fields that have the names of the data fields that make up the columns)

- the page number (use annotation fields with the special characters **&p**)

- the system time and date (use annotation fields with the special characters **&t**, **&T**, **&d**, and **&D**)
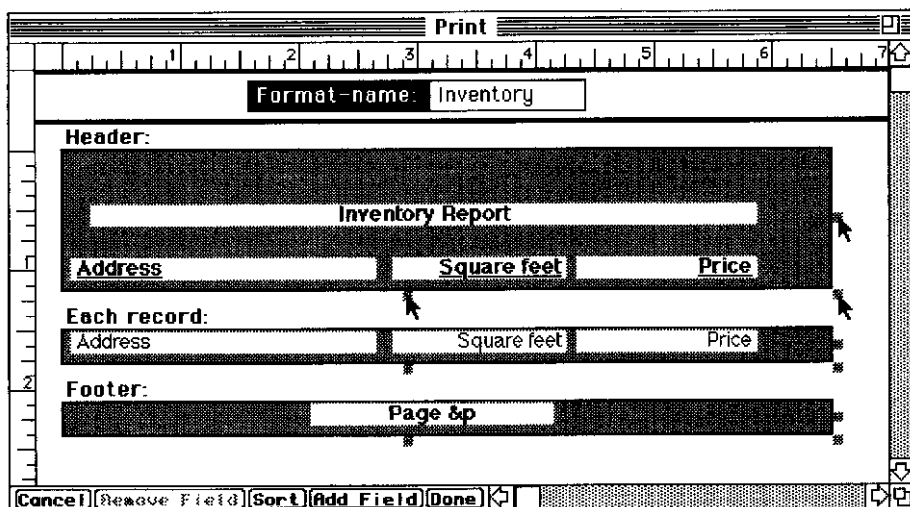
## using page Footers

You can have information printed at the bottom of every page of a Form or Report. That bottom area is called a page Footer. All you have to do is put fields in the Footer area when you're creating the Form or Report.

Label formats don't have Headers or Footers.

Footers use exactly the same techniques as Headers, above.

## controlling how the contents of fields are printed with the Format menu

When you're creating or editing print formats, you have a number of options from the Format menu when you select a field.

- Click the field to select it. Then choose from these items on the **Format** menu:

- **Alphabetic**: Nothing special is done to the information as it's printed. This is the standard setting for all fields except formula fields.

- **Numeric**: If the field begins with a number, print only the number. You can then choose whether you want commas, dollar signs, or a different number of decimal places; see the following three paragraphs for more details.

- **Dollar Sign**: Contents of numeric fields will be preceded by a dollar sign.

- **Commas**: Print the contents of numeric fields numbers with a comma every 1,000.

- **Decimals...**: Contents of numeric fields will be printed using one of these choices of decimal formats: no decimals, for whole numbers; or one, two, three, or four digits to the right of the decimal point.

```
┌─────────────────────┐
│ Format              │
├─────────────────────┤
│ Alphabetic     ⌘0   │
│✓Numeric        ⌘9   │
├─────────────────────┤
│✓Dollar Sign    ⌘M   │
│✓Commas         ⌘,   │
│ Decimals...    ⌘.   │
├─────────────────────┤
│ Statistics...  ⌘-   │
├─────────────────────┤
│ Align Left     ⌘6   │
│ Align Middle   ⌘7   │
│✓Align Right    ⌘8   │
│ Show Border         │
│ Invert              │
│ Hide Field Name     │
├─────────────────────┤
│ Across...           │
│ Hide Ruler     ⌘R   │
│ Metric Ruler        │
└─────────────────────┘
```

```
╔════════════════════════════════════════════════════════╗
║ Display "Square feet" numbers with this decimal format: ║
║                                                          ║
║  ●7      ○7.7     ○7.77     ○7.777    ○7.7777           ║
║ ┌────────┐ ┌──────────┐ ┌──────────┐ ┌──────┐          ║
║ │ Cancel │ │Prev Field│ │Next Field│ │ Done │          ║
║ └────────┘ └──────────┘ └──────────┘ └──────┘          ║
╚════════════════════════════════════════════════════════╝
```

- **Align Left**, or
  **Align Middle**, or
  **Align Right**: Field information can be aligned to the left, right, or center.

- **Show/Hide Borders**: Show borders causes the field borders to be printed; Hide borders reverses it.

- **Invert/Do Not Invert**: Invert causes field names and the text contents of annotation fields to be printed in white letters on a black background; Do not invert reverses it.

- **Hide Field Name**: Prevents the field name from showing in the print layout window and printed report.

- **Across...**: Across may be used for both Labels and Forms. It gives you some control over how many records are printed horizontally. For example, you can print from one to four labels across each page of label stock. Or you can print more than one Form across each page, if the Each record area is narrow enough.

---

**Print how many records across each page?**

**The current setting is: 1.**

[ **Cancel** ]        [ 1 ]    [ 2 ]    [ 3 ]    [ 4 ]

---
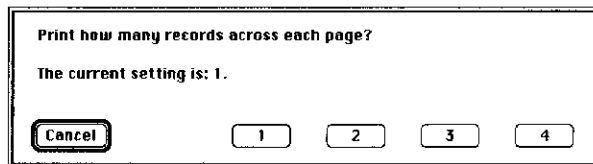
**Page setup...** from the **File** menu or the Print Library (see page 287, "the Page setup..." dialogue) determines the physical width of the page. So check your page setup if **Across...** doesn't do what you expected it to.
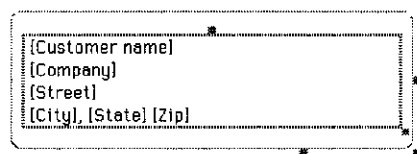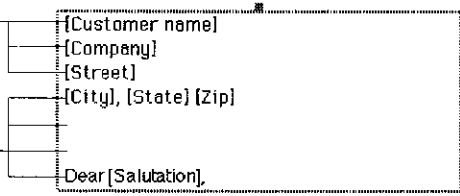
- **Show/Hide Ruler**: Show ruler displays a ruler on the top and left sides of the print format. It's never printed, except with Print page.

- **Metric/Inch Ruler**: The ruler can be either in inches or centimeters. The ruler is never printed, except with **Print Page**.

## Close lines

An automatic close lines function moves field information up to fill blank lines in a Label or Form letter. Field names must be entered in brackets in a single annotation field. Only lines that begin and end with brackets and that contain no other information (such as the comma in the example) will close.

these lines would
close if no data
were available

[Customer name]
[Company]
[Street]
[City], [State] [Zip]

[Customer name]
[Company]
[Street]
[City], [State] [Zip]

these lines would
not close

Dear [Salutation],
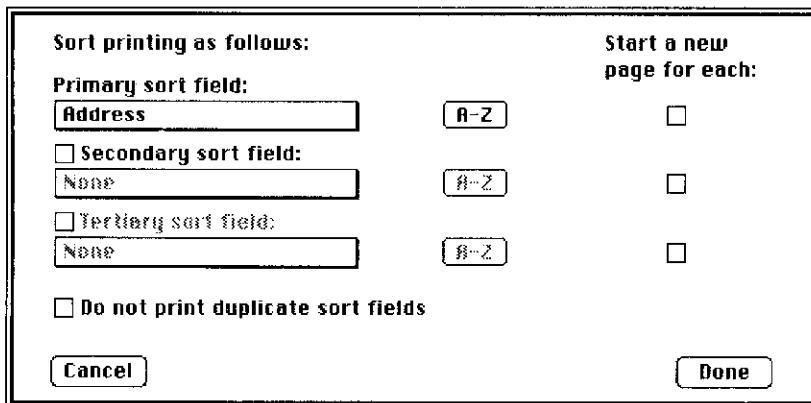
## sorting printed output

**Sort** is used to set the order for printing Forms, Reports, and Labels. It may also be used to control where detail statistics are printed in reports.

| Cancel | Remove Field | **Sort** | Add Field | Done | ⬅ |

- Click the **Sort** button at the bottom of the **Print** format window.

Note: The sort field used on the Info and Drawing displays is not affected by this choice.

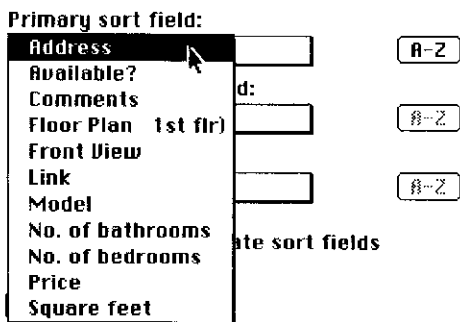You're presented with these choices:

```
Sort printing as follows:                              Start a new
                                                       page for each:
Primary sort field:
 Address                               [ A-Z ]              □

□ Secondary sort field:
 None                                  [ A-Z ]              □

□ Tertiary sort field:
 None                                  [ A-Z ]              □

□ Do not print duplicate sort fields

[ Cancel ]                                             [ Done ]
```

- To change the sort field, click the field name pop-up menu.

```
Primary sort field:
┌─────────────────────┐
│ Address          ↖  │              [ A-Z ]
│ Available?          │   d:
│ Comments            │
│ Floor Plan   1st flr)│             [ A-Z ]
│ Front View          │
│ Link                │
│ Model               │             [ A-Z ]
│ No. of bathrooms    │  te sort fields
│ No. of bedrooms     │
│ Price               │
│ Square feet         │
└─────────────────────┘
```

Secondary and tertiary sorting are sorting within the primary sort field.

- To enable secondary or tertiary sorting, click the appropriate box and select a sort field with the pop-up menu.

- To choose whether the sort fields will be sorted in ascending or descending order, click the **A-Z** button.

Filevision normally prints the contents of a sort field only if they are different from the last record's.

- If the **Do not print duplicate sort fields** box isn't checked, Filevision will print the contents of a sort field regardless of the value in the previous record.

- You can automatically start a new page each time the contents of one of the sort fields change using the **Start a new page for each** checkbox next to each sort field.

For example, if State is the primary sort field and the **Start a new page for each State** box is selected for the secondary sort field, then a new page will be started each time the name of the state in the State field is different from the last record's.

## running totals in forms, reports, and labels

You can create fields on the type layout that will show running totals when printing.

Let's create a cumulative inventory cost field in this hypothetical Type layout. The layout already has **Unit cost** field and **Quantity on hand** fields.

- Choose **Change Layout...** from the **Types** menu because you're going to add a field to a Type layout.

- Add a data field and name it **Cumulative cost**.

- Choose **Field Setup...** from the **Edit** menu.

```
Setup for the Cumulative cost field:
○ Standard            ○ Copy from previous record
○ Initial Text        ◉ Compute using a formula
Formula:
┌──────────────────────────────────────────────────┐
│[Unit cost]*[Quantity on hand]+[Cumulative cost]   │
│                                                    │
│                                                    │
│                                                    │
│                                                    │
│                                                    │
└──────────────────────────────────────────────────┘

Field Names: [Cumulative cost                      ]
( Cancel )   ( Prev Field )   ( Next Field )   ( Done )
```

- Click the **Compute using a formula** button.

- Type [Unit cost] * [Quantity on hand] + [Cumulative cost].

- Choose **Dollar Sign** from the **Format** menu

- Click **Done**.

The Field Setup dialog disappears.

- Click Done to save the revised Type layout.

Here's a table showing what might happen in the first three records of the file:

**Table 3-6**

| Unit cost | Quantity on hand | Cumulative cost (on Info page) | Cumulative cost (on Report layout) |
|-----------|------------------|--------------------------------|-------------------------------------|
| $3.00     | 4                | $12.00                         | $12.00                              |
| $5.00     | 6                | $30.00                         | $42.00                              |
| $8.00     | 6                | $48.00                         | $90.00                              |

Note: Running total fields show the contribution to the running total on the Info page, and the accumulation on Forms, Reports, or Labels. In more technical terms, it means that formula fields that refer to their own values use a value of 0 when computing their values on the Info page. But in Forms, Reports, and Labels, they use the value printed for the previous record.

## using statistics in columnar reports

Reports allow you to get statistics about fields.

- Click the field for which you want statistics.

- Choose **Statistics...** from the **Format** menu.

You're given these choices for statistics:

```
┌─────────────────────────────────────────────────────────────┐
│  Statistics for: ┌───────────────────────────────────┐       │
│                  │ Price                             │        │
│                  └───────────────────────────────────┘        │
│                                                 Standard       │
│                              Count   Total  Average deviation  │
│  Overall statistics  . . . .   ☐      ☐      ☐       ☐         │
│  By Address . . . . . . . .    ☐      ☐      ☐       ☐         │
│  By Square feet . . . . .      ☐      ☐      ☐       ☐         │
│  By Price . . . . . . . . .    ☐      ☐      ☐       ☐         │
│                                                               │
│  Use "Sort" to select different detail statistic fields.      │
│  Select "Numeric" from the Format menu to enable all statistics. │
│  ( Cancel )      ( Prev Field )    ( Next Field )   ( Done )   │
└─────────────────────────────────────────────────────────────┘
```

If the field you selected is **Alphabetic** according to the **Format** menu, the only statistic available will be **Count**. You can treat a field as numeric for printing purposes by selecting the field and choosing **Numeric** from the **Format** menu while you are editing a print format. However, on the Info page, only formula fields are numeric, so don't worry if you make a field **Numeric** for printing purposes and find out that it's still **Alphabetic** on the Info page.

There are two ways statistics can be used: as overall statistics and as detail statistics.

## Overall statistics

- Click **Overall statistics** if you want statistics to be computed at the end of the report.

For example, if you chose Overall Average for a **Price** field, and the price of the items average $199,500, then at the end of the report this will automatically be printed:

**Overall Average: $199,500**

## Detail statistics

- Click the detail statistics (**By Address** in the above example dialog) if you want statistics to be computed whenever the value in a sort field changes. The statistic is printed with the name of the field and type of statistic in front of it, just after the value in the specified sort field changes.

For example:

**Address Average: $186,000**

If you want detail statistics for a field it must be one of the sort fields; see "Sorting printed output", page 301. This refers to the sort fields as established from the print layout **Sort** function, not the Info page sort field. If the Primary, Secondary and Tertiary sort fields are all active, statistics will be available on all three fields.

## Counts

- Click **Count** to count the number of occurrences of that field in the report.

It counts only unique occurrences of values in a sort field, so:

- If you sort on the Address field and have a total of 28 records from all addresses, and you count addresses, you'll get a count of 28 addresses.

- If the field you are counting is alphabetic but not a sort field, then all records that are printed are counted, regardless of repeat occurrences of a value.

- If the field you are counting is numeric but not a sort field, then only valid numbers and empty fields will be counted. Empty fields are treated as containing zero.

## Totals

- Click **Total** to add the values of a single field.

If a file has three records, and the **Orders received** fields in them contain 11, 21, and 13, then an overall total of the **Orders received** field will print 45.

## Averages

- Click **Average** for the average of values in a single field.

If a file has three records, and the **Orders received** fields in them contain 11, 21, and 13, then an overall average of the **Orders received** field will print 15.

## Standard deviations

- Click **Standard deviation** for standard deviation according to this formula:

$$S_x = \sqrt{\frac{\sum (\bar{x} - x_i)^2}{n - 1}}$$

$\bar{x}$ = average of x

If a file has three records, and the **Orders received** fields in them contain 11, 21, 13, and 32, then an overall standard deviation of the **Orders received** field will print 8.

**sample Report**    Here's an example of a what a very small Report listing could look like:

August Sales by Selected Regions

| Division | Region | Sales |
|----------|--------|-------|
| Seattle | Western | $123,000 |
| San Francisco | | $286,976 |
| Los Angeles | | $766,768 |
| | **Region Total:** | **$1,176,744** |
| | **Region Average:** | **$392,248** |
| | | |
| Chicago | Central | $498,722 |
| Houston | | $323,685 |
| | **Region Total:** | **$822,407** |
| | **Region Average:** | **$411,204** |
| | | |
| New York | Eastern | $658,732 |
| Miami | | $552,456 |
| | **Region Total:** | **$1,211,188** |
| | **Region Average:** | **$605,594** |
| | **Overall Total:** | **$3,210,339** |

**Page 1**

## Reusing print formats

You can copy an entire print format onto the Clipboard, then paste it into another format in the file or save it in the Scrapbook for use in another file.

This is often helpful when you're creating several print formats that will have similar characteristics. It saves you the time required to create them from scratch.

## copying the print format

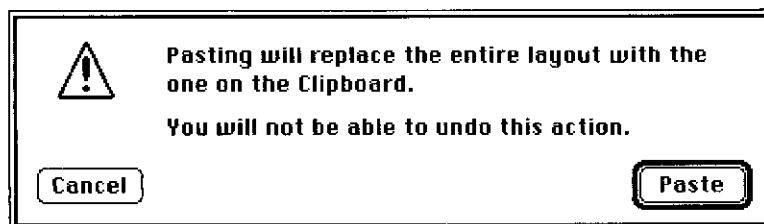- While you're editing a print format, hold down the **Option** key and choose **Copy** from the **Edit** menu.

A copy of the print format is now on the Clipboard.

Remember that the next thing you cut or copy will replace the print format on the Clipboard, so you may want to save it in the Scrapbook.

## pasting the print format

- While you are editing a print format and you have a print format on the Clipboard, choose Paste from the Edit menu.

A dialog box appears, warning you that you are about to replace the print format you are editing with the one on the Clipboard.
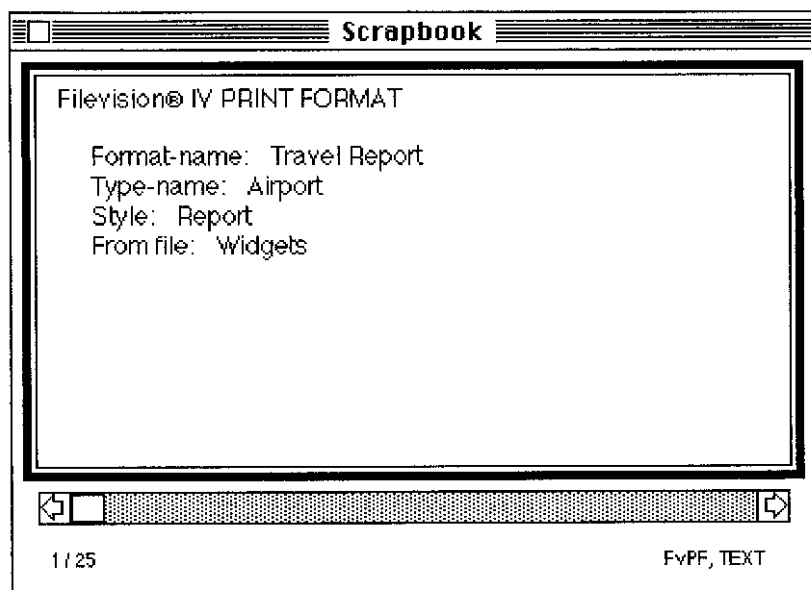
> ⚠️ **Pasting will replace the entire layout with the one on the Clipboard.**
>
> **You will not be able to undo this action.**
>
> ( Cancel )                                    [ Paste ]

(This only works if you have a print format on the Clipboard.)

## saving a print format in the Scrapbook

While you have a print format on the Clipboard, you may want to save it in the Scrapbook.

- Immediately after you've copied a print format onto the Clipboard, choose **Scrapbook** from the **Apple** ( 🍎 ) menu.

- Choose **Paste** from the **Edit** menu.

The Scrapbook will show this information about a print format:

```
┌─────────────────────────────────────────────────────┐
│ ▣ ═══════════════ Scrapbook ═══════════════════════ │
├─────────────────────────────────────────────────────┤
│  ┌───────────────────────────────────────────────┐  │
│  │ Filevision® IV PRINT FORMAT                   │  │
│  │                                               │  │
│  │    Format-name:  Travel Report                │  │
│  │    Type-name:  Airport                        │  │
│  │    Style:  Report                             │  │
│  │    From file:  Widgets                        │  │
│  │                                               │  │
│  │                                               │  │
│  │                                               │  │
│  │                                               │  │
│  │                                               │  │
│  │                                               │  │
│  └───────────────────────────────────────────────┘  │
│  ◁ █▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒▒ ▷  │
│  1 / 25                                FvPF, TEXT    │
└─────────────────────────────────────────────────────┘
```

All of the information necessary to recreate this print format in another Type or another file is now stored in the Scrapbook. Even if you were to remove the file that this print format was taken from, the format could be used in other Filevision files.

If you have set up a new Form and decide to paste in a Report from the Scrapbook, the current Form will be changed to a Report. The current print format's Type fields must include the Type fields that the original print format was saved from or the paste will not function properly.

Only the data and annotation field set up and text entered in annotation fields is stored in the Scrapbook. Any graphics in annotation fields aren't saved. If the graphics being used in these annotation fields are not easily accessible from their original source, they should be copied and pasted to the Scrapbook separately.

**imported graphics in print formats**

Graphics may be imported into or exported from print layout annotation fields. This includes PICTs, bit or pixel mapped Paints and EPSF (Encapsulated Post-Script Format) graphics. All of these graphic formats can be copied to the Scrapbook and can be used by other Filevision files. See the section on Importing and Exporting Graphics, page 151.

## Printing what you're working on

You can print your current activity easily.

Depending on what you're doing, you can quickly print:

- The Info page record you're looking at or
- Any section of the drawing page or
- A Shade or Symbol Editor page or
- The Print Layout page.

## Print Page...

- To print your current activity, choose **Print Page** from the **File** menu.

If you are working on the Info page, the following dialog will be displayed:

```
Select info pages to be printed:

        [ Cancel ]

        [ Done ]
```
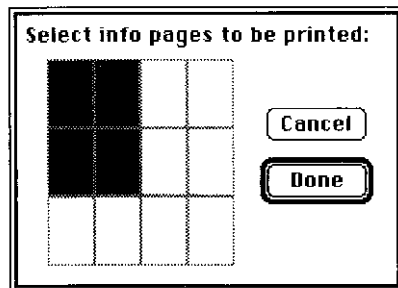
Select any one or group of the page rectangles that you want to print by clicking on it. Each rectangle represents an 8" x 10" section of the full size Info page working area.

If you are working on the drawing page, the following dialog will be displayed: Again, select the page or pages that you would like to print by clicking on the corresponding page rectangle.

```
Select drawing pages to be printed:

        ☒ Print guides
        ☒ Print grid

[ Cancel ]          [ Done ]
```
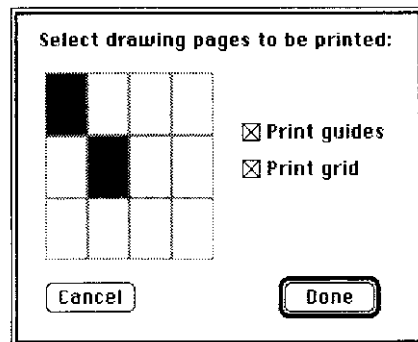
You also have the option to print the guidelines and/or grid by checking the appropriate check boxes. Grids and Guidelines will only print if they are currently visible on the drawing page.

# 18. Editing Tools and Other Features

Editing tools provide ways to use Filevision efficiently and in concert with other Macintosh applications like MacPaint and MacWrite.

The editing tools (**Cut, Copy, Paste** and **Clear**) not only work on Filevision graphics and text, they can also be used to copy the symbol and shade palettes, Type layouts, and print formats onto the Clipboard and Scrapbook for use with other Filevision files.

The Clipboard and Scrapbook let Filevision trade information with other applications like MacPaint, and among its own files.

Understanding the Clipboard is central to using the editing tools. The Clipboard is where the last object that was cut or copied is stored. The Clipboard only holds one thing at any one time, so if you cut an object, then another, you won't be able to get the first one back with **Paste** or **Undo**. Use the Scrapbook to hold several items; anything that can be put on the Clipboard can go into the Scrapbook, and your Scrapbook is limited in size only by disk space.

You can hold these things in the Clipboard or Scrapbook:

- text
- pictures
- graphics and their records
- Type layouts
- print formats
- single symbols
- symbol palettes
- single shades
- shades palettes

## Using the editing tools

This section shows how **Cut, Copy, Paste, Clear** and **Reshape** can help you get the most out of Filevision **Cut, Copy, Paste** and **Clear** are shown on both the Drawing and the Info pages, and **Copy** and **Paste** are shown in use with the symbol and shade editors, and the Type and print layouts.

**Cutting** something moves it to the Clipboard. The next item to be cut or copied replaces it, so if you want to save it permanently, paste it into the Scrapbook.

**Copying** something duplicates it onto the Clipboard. The next item to be cut or copied replaces it, so if you want to save it permanently, paste it into the Scrapbook.
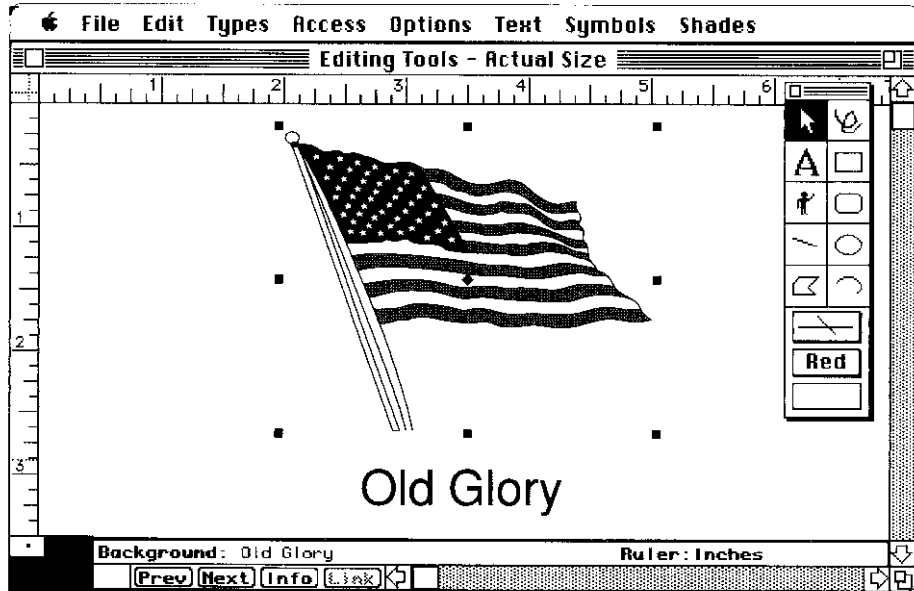
If you select more than one object , you can cut or copy them all at once.

The Clipboard is the only way to the Scrapbook. To paste something into the Scrapbook, it must first be on the Clipboard. To get something onto the Clipboard, copy or cut it.

The Scrapbook can hold anything the Clipboard can; the difference between them is that the Scrapbook holds more than one item at a time.

## Cutting graphic objects

- Select the object or objects.



- Choose **Cut** from the **Edit** menu.

The object vanishes.

Editing Tools - Actual Size

Old Glory

Background: Old Glory                                   Ruler: Inches

Prev  Next  Info  Link
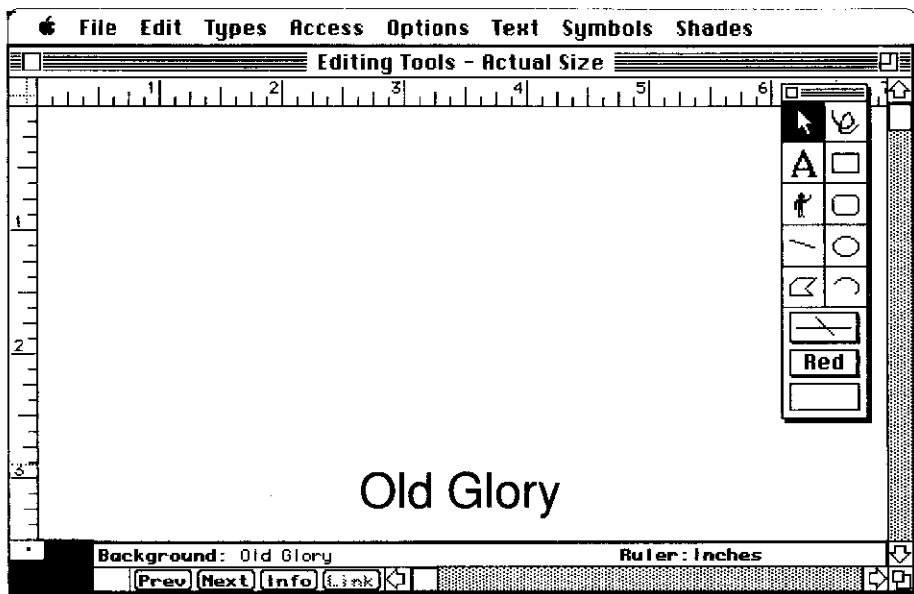
When you cut an object, it doesn't just wink out of existence. It gets moved to the Clipboard. You can paste the object into the Scrapbook and use it in MacPaint or in another Filevision file. However, as soon as you cut or copy another object, the new one will replace the one on the Clipboard, so paste it into the Scrapbook immediately if you plan to use it later.

If you cut an object that has a record, the record is cut along with the object, and is also moved onto the Clipboard.

## Copying and pasting objects

"Copying" something means to copy it onto the Clipboard. In this example we'll make use of that fact by pasting a copy of an object several times to save ourselves the work of drawing a new one each time. This technique is especially useful when you want copies of a graphic to repeat in precise relationship with its parent (original) graphic.

- Click the object to select it.
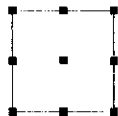
- Choose **Copy** from the **Edit** menu. Though it looks like nothing has changed, there's now a copy of the object on the Clipboard. You can now make as many duplicates of it as you want.

- Choose **Paste** from the **Edit** menu.

The object appears in the middle of the display or near a currently selected object.

- Use its move handle or grab anywhere on the line or background (if filled with glass or a shade) to place it.
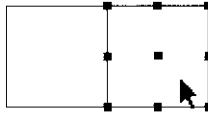
- Without deselecting the pasted copy, **Paste** the same object (or objects) as many times as you want.
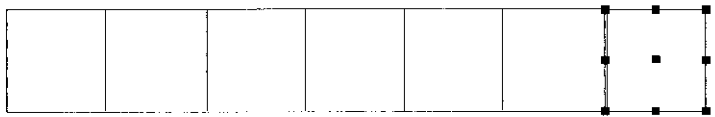
Each pasted copy of the object will be positioned in the exact relationship with the last pasted object as the first pasted object was to the parent object.

If you copy and paste a graphic that has a record, the record is copied and pasted with it. Pictures in fields aren't pasted.

## copying and pasting the symbol palette

You can save a single symbol or the whole symbol palette in the Scrapbook for use with another Filevision file.

The symbol and palette is the set of 40 symbols you see on the **Symbols** menu.

- Choose **Editor** from the **Symbols** menu or double-click on the symbol tool in the tool box.

The **Symbol Editor** display appears.

- To copy a single symbol onto the symbol palette, choose **Copy** from the **Edit** menu.

- To copy the entire symbol palette onto the Clipboard, hold down the **Option** key and choose **Copy** from the **Edit** menu.

A copy of the symbol or symbol palette is now on the Clipboard.

- To copy the symbol palette into the Scrapbook, choose Scrapbook from the Apple menu, then choose **Paste** from the **Edit** menu.

You'll see this information about the symbol palette in the Scrapbook:
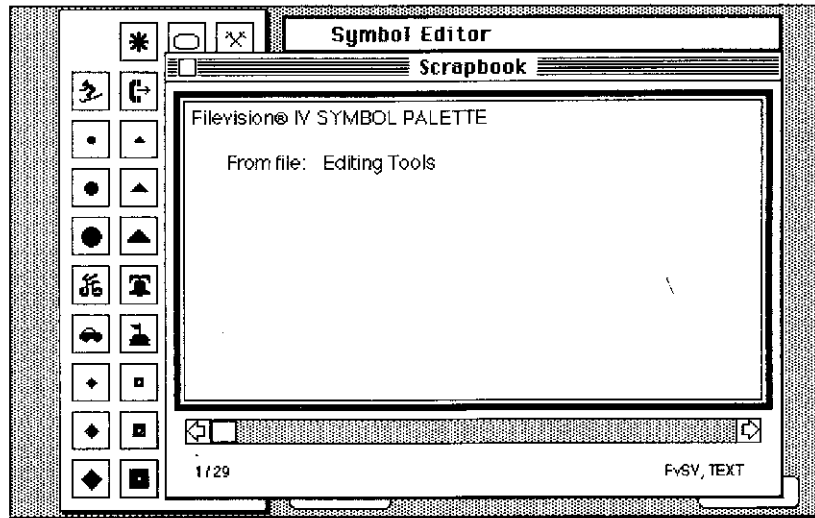


To use the symbol palette in another file:

- Choose **Close** from the **File** menu.

- Choose **New...** or **Open...** to start a new file or open and existing one.

- Click **Drawing** if you are looking at the Info display.

- Choose **Editor...** from the **Symbols** menu or double-click on the symbol tool in the tool box.

- Choose **Paste** from the **Edit** menu.

**copying and pasting the shade palette**

Copying and pasting the shade palette is done using the same method as the symbol palette. (See above)

## copying and pasting Type layouts

You can save Type layouts in the Scrapbook for use with another Filevision file.

- Choose the Type whose layout you want to save from the **Types** menu.

- Choose **Change Layout...** from the **Types** menu.

- Select any field or the **Type-name** box.

- Hold down the **Option** key and choose **Copy** from the **Edit** menu.

- To copy the Type layout into the Scrapbook, choose Scrapbook from the **Apple** menu ( ), then choose **Paste** from the **Edit** menu.

You'll see this information in the Scrapbook:



```
Scrapbook

Filevision® IV TYPE LAYOUT

    Type-name:  Edit Features
    From file:  Editing Tools




1 / 32                                    FvTL, TEXT
```
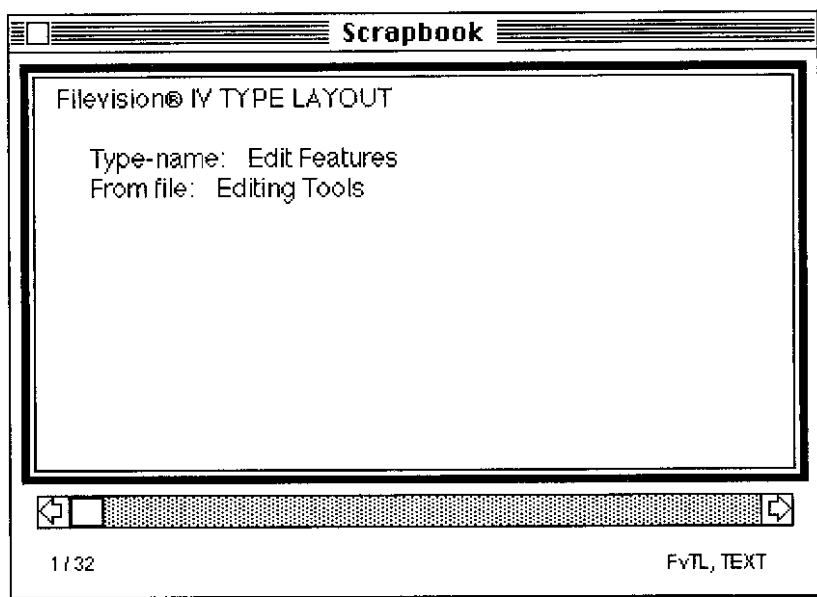
To use the Type layout in another file:

- Choose **Close** from the **File** menu.

- Choose **New...** or **Open...** to start a new file or open an existing one.

- Choose **Add Type...** from the **Types** menu.

- Choose **Paste** from the **Edit** menu.

## copying and pasting print formats

You can save print formats in the Scrapbook for use with another Filevision file.

- Choose **Print Records...** from the **File** menu.

The Print Library appears.

- Click the name of the print format you want to copy.

- Click the **Edit** button.

The print format appears.

- Hold down the **Option** key and choose **Copy** from the **Edit** menu.

A copy of the print format is now on the Clipboard.

- To copy the print format into the Scrapbook, choose **Scrapbook** from the **Apple** ( ) menu, then choose **Paste** from the **Edit** menu.

You'll see this information in the Scrapbook:

Filevision® IV  PRINT FORMAT:

Format-name:  Listings
Type-name:  Townhouse
Style:  Report
From file:  Tour

To use the print format in another file:

- Choose **Close** from the **File** menu.

- Choose **New...** or **Open...** from the **File** menu to start a new file or open an existing one.

- Choose **Print records...** from the **File** menu.

- Click **New**, then **Report, Forms**, or **Labels**, whichever is appropriate—**Report** in this example.

- Choose **Paste** from the **Edit** menu.

## Clearing objects

Clearing is an alternative to cutting. The only difference is that the object isn't copied onto the Clipboard. If you make a mistake and realize that you didn't want to clear the object, you can restore it with Undo last change.

- **Click the object to select it.**

- **Choose Clear from the Edit menu.**

The object vanishes.

It's not stored on the Clipboard the way it would be if you had **Cut** it, so the only way to restore it if you made an error is to choose **Undo** from the **Edit** menu immediately.

## Reshaping

Reshape is used to modify straight lines, freehand lines, arcs, rectangles and polygons. Each of these objects (except arcs) are drawn with an anchor point (reshape handle) every time the line changes direction. These handles can then be dragged to new positions which stretches the connecting lines like rubber bands. Anchor points can be added anywhere on the line to create a new potential change of direction point.

To reshape, you can either add reshape handles or move the existing handles of an object, then stretch or shrink the line between the reshape handles.

In this example, we will change a straight line into a square wave form.

- **First draw a single horizontal line the length of the square wave. Hold the Option key down to constrain the line to horizontal.**

- **Move a horizontal guide line down from the top ruler, dragging it with your mouse pointer.**

- **Select the line and choose Reshape from the Edit menu.**

- **Add the reshape handles by clicking where you want them. Use the pointer tool to add a reshape handle to every juncture (click at that point on the line).**

- Grab any area of the line between reshape handles an drag the point to the guide line.
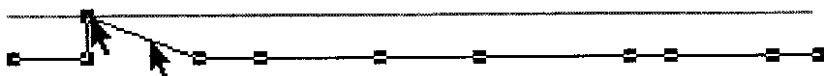


- Grab the next area on the half finished square and do the same.

- Repeat these steps until the square wave is finished.



You can remove points by dragging one point on top of another, a process that's made easier when alignment is on. You can turn on alignment temporarily: hold down the Command key before you drag the point.

- Click the pointer tool or click on an inactive area to deselect the square wave object and end reshaping.

## Other features

This section contains information on miscellaneous Filevision features:

- memory and disk use

- using **Save As...** on the **File** menu

## memory and disk use

- To find out how much memory and disk space you have left, choose **About Filevision® IV...** from the **Apple** ( ) menu.



**Filevision® IV**
**Version 1.0 – Thursday, April 6, 1989**
**Copyright 1985-1989 Marvelin Corporation.**

**Phone: (213) 450-6813**

**By David Murray, Matthew Jacobs, Robert Jeckell, Howard Metcalfe & Scott Sullivan. Rewritten by Faulkner White.**

"Brushwood Heights" uses:
**52328 bytes of memory, 506K of disk.**

**Approximate room to grow:**
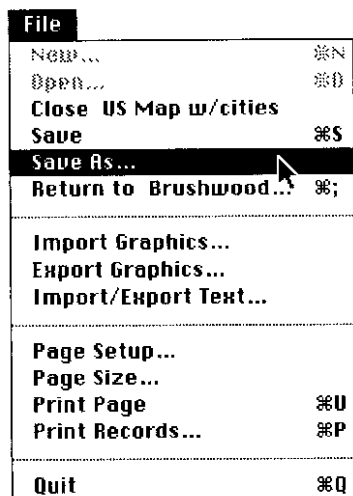**416504 bytes, 4331K disk.**
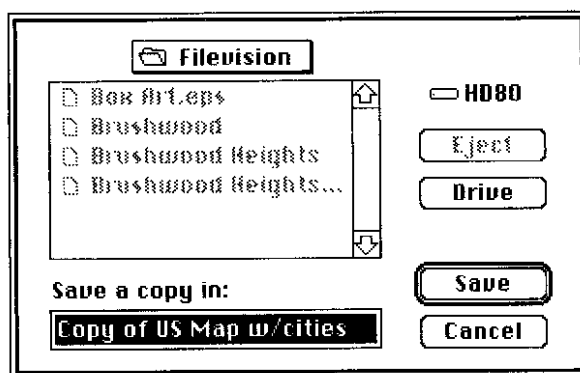
OK
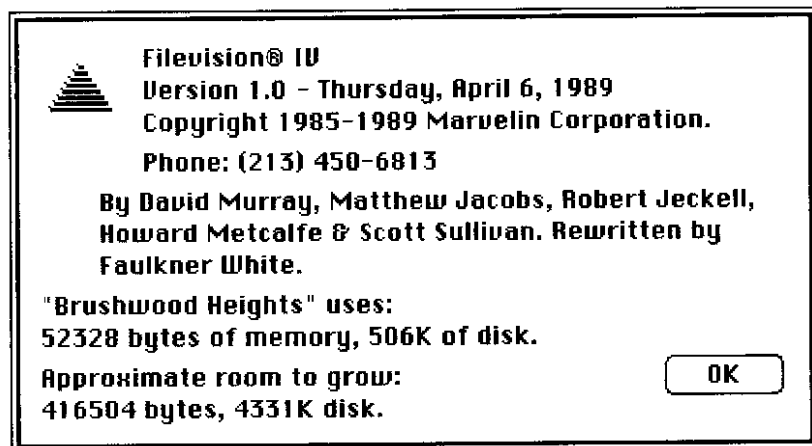
## Using Save as...

**Save as...** on the **File** menu lets you save a duplicate of the file you are working on, without leaving it.

Use it when:

• You first open an important file.

• You are about to make a major change to a file and would like to have a backup.

• Select **Save As...** from the **File** menu.

```
File
New...                    ⌘N
Open...                   ⌘O
Close  US Map w/cities
Save                      ⌘S
Save As...
Return to  Brushwood...   ⌘;

Import Graphics...
Export Graphics...
Import/Export Text...

Page Setup...
Page Size...
Print Page                ⌘U
Print Records...          ⌘P

Quit                      ⌘Q
```

The save dialog will be displayed with the file name preceded by **Copy of** already entered.

```
        ☐ Filevision

  ☐ Box Art.eps       ⬆      ⬜ HD80
  ☐ Brushwood
  ☐ Brushwood Heights          [ Eject ]
  ☐ Brushwood Heights...
                               [ Drive ]
                      ⬇

  Save a copy in:              [  Save  ]
  Copy of US Map w/cities      [ Cancel ]
```

Use the name as is, or change it to one of your choice.

# Printex
## PRINTING AND GRAPHICS INC
23024 LAKE FOREST DRIVE ◇ LAGUNA HILLS ◇ CA 92653

| WORKORDER # | DUE DATE: |
|---|---|
| 20034 | 4/05/89 10:00 AM |
| ORDER BY: | D   A   C |
| Denise |         X |

| Customer: | Ship to: | |
|---|---|---|
| Protec Corporation | C.P.U. | Date:   3/23/89 |
| 3420 El Toro Blvd. | | |
| El Toro, CA 92650 | | Phone:   (714) 386-8820 |

| Date | Time | Who | Regarding | Date | Time | Who | Regarding |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| PRE-PRESS: | Estimate | Extension |
|---|---|---|
| Typesetting, Paste up: | 30.00 | 25.95 |
| Customer changes: | | 49.95 |
| Negs and Plates: | 10.00 | 10.00 |

PRESS:

| | DESCRIPTION | RUN | X UP | = TOTAL | COLORS | UNIT | |
|---|---|---|---|---|---|---|---|
| P1 | Letterhead | 1,000 | 1 | 1,000 | 2 | 68.50/M | 68.50 |
| P2 | Envelope | 500 | 1 | 500 | 2 | 69.90/M | 34.95 |
| P3 | Business Card | 250 | 4 | 1,000 | 2 | 34.50/M | 34.50 |
| P4 | Pads | 1,000 | 4 | 4,000 | 2 | 9.50/M | 38.00 |
| P5 | | | | | | | |

MATERIALS:

| | ORD IN | PAPER STOCK | COLOR | SIZE | BASIS | |
|---|---|---|---|---|---|---|
| S1 | x | Classic Linen | Ivory | 8.5 x 11 | 24# | |
| S2 | x | Classic Linen | Ivory | 10 | 24# | |
| S3 | x | Classic Linen | Ivory | 2 x 3.5 | 65# | |
| S4 | x | Neenah Bond | White | 4 x 5 | 20# | |
| S5 | | | | | | |

| | ORD IN | INK COLORS | | |
|---|---|---|---|---|
| I1 | x | Black | PMS 293 Green | |
| I2 | | Same | Same | |
| I3 | | Same | Same | |
| I4 | | Same | Same | |
| I5 | | | | |

| BINDERY / SPECIAL INSTRUCTIONS: | PRICE / UNIT | | |
|---|---|---|---|
| B1 | | | |
| B2 | | | |
| B3 | Trim | NC | |
| B4 | Pad in 50s | .25 | pad | 20.00 |
| B5 | | | |

| | | |
|---|---|---|
| | Press Wash-up(s) | 15.00 |
| Order approved by: | PMS Ink colors | 40.00 |
| | Sub Total | 336.85 |
| | Tax/Resale | 20.21 |
| | Shipping | |
| Signature | Total | **$357.06** |
| Cash - Ck #3054 | Deposit | **$200.00** |
| C.O.D. | Balance | **$157.06** |

Courtesy Printex

# Section Four

# *Reference*

Grid #E13

PARKS, ETC. — STREETS
HOSPITAL — HIGHWAYS
SCHOOL — FREEWAYS
CHEMICAL FAC — CITY LIMITS
OIL FACILITY

Seattle

Mercer Island

Boeing Field

Courtesy NOAA - HAZMAT

Info for this Facility: (22 records)

Name: The Welding Shop    Link: E13
Facility Address
7777 NE 77th St, Seattle, WA 90000
Mailing Address
same as above
Phone: 777-7777    Contact: Normie Peterson, Plant Superintendent

Prev  Next  Revert  Drawing  Link

# Reference

**Overview**

Section four is the reference section and includes several appendices and a glossary of terms to enhance the use of Filevision.

Appendix A, "Filevision specifications", lists Filevision's attributes in a series of tables.

Appendix B, "Converting Filevision files for use with Filevision IV", shows you how to use the "Convert" application that comes with Filevision IV. This is only for owners of the original Filevision. Conversion of Business Filevision is also covered as part of the Filevision to Business Filevision to Filevision IV conversion process.

Appendix C, "Filevision IV menus and primary dialogs", shows pictures of all the Filevision menus with all menu items enabled and the dialogs that are displayed where applicable.

Appendix D, "Shortcuts and Special key combinations", lists all the double-clicks you can use to shortcut the menus. This section also lists all the commands that require holding down a key while clicking or choosing from a menu, like pressing Option while drawing with the oval tool to draw only circles. A command key chord chart is also included.

Appendix E, "Filevision error messages", expands on error messages the Macintosh or Filevision may issue. For example, you might leave out a parenthesis or bracket in the formula for a computed field, or you might try to print without the printer properly attached. This section tries to help you understand and correct such situations.

Appendix F, "How to Import and Export text with other programs", provides examples for importing and exporting specific target programs. Included are exchanges between Filevision, Filemaker, Helix, MacWrite, Microsoft File, Multiplan, Omnis and OverVUE.

Appendix G, "How to enter character codes", explains how to enter ASCII characters codes to set parameters for processing Imported and Exported text files. This section also provides a table of all ASCII character codes for reference.

Glossary, provides a brief explanation for all of the major terms used in Filevision IV.

Index, provides a quick lookup of where to find the information on any subject in Filevision IV.

# Appendix A:
# Filevision IV specifications

**Table 4-1**

| File specifications | |
|---|---|
| Maximum file size:<br>Minimum file size: | 16 megabytes<br>10 kilobytes |
| Maximum number of Types per file: | 32 |
| Maximum number of objects and/or records allowed per file: | 32,000 - Limited by memory and disk space. |
| Maximum number of fields per Type layout: | 255 |
| Maximum number of characters per field: | 8,000 |
| Maximum number of characters per record: | 16,000 |
| File Save - Info page:<br>File Save - drawing page: | Automatic<br>Manual |
| File recovery - Info page:<br>File recovery - drawing page. | To last manual Save plus<br>To last manual Save |
| Maximum length of field name: | 31 characters |
| Maximum field size for graphics: | 30" by 30" |
| Maximum graphic size per field: | Limited by memory |
| Maximum freehand or polygon graphic size: | 3,000 anchor points |
| Maximum size of drawing page: | 30" high by 32" wide |
| Maximum size of Info page: | 30" high by 30" wide |
| Maximum number of text characters as one object on the drawing page: | 4,000 characters |
| Graphic formats that can be imported: | Paint (bit or pixel mapped), PICT, EPSF, Filevision IV (PicB) |
| Discrete object graphic import: | PICTs, Filevision IV (PicB) |
| Color supported: | Version 1 internal<br>Version 2 as imported graphics |

**Table 4-2**

| Working with files | |
|---|---|
| Query (Highlight) conditions for graphics and/or records | Up to 4 conditions<br>Value comparisons<br>Interfield comparisons<br>Rank comparisons<br>Can replace, refine or expand existing query<br>Fades graphics that do not meet highlight conditions<br>Provision for manual highlighting of objects |
| Evaluation order of query conditions | (A and/or B) and/or (C and/or D) |
| Find<br>Find via Highlight | 22 significant characters (sort field only)<br>8,000 significant characters (any field) |
| Wildcard characters in Find and Highlight | ..  (double periods) matches any string of characters<br>^   constrains search to first word in field<br>@ matches any single character |
| Link function | Chains unlimited number of files with nesting to 5 levels |
| Sort By<br>Sort | Sort on any field in the information entry mode<br>Sorts to 3 levels in the print records mode (independent of Sort By) |
| Hide/Show | Hides or shows selected graphics or selected Types |
| Ignore/Activate | Suppresses selection of the Type's objects |
| Import Graphics | Will import graphic formats directly from MacPaint, PICT (discrete objects or single object) or EPSF files |
| Export Graphics | Will export the selected graphic to a PICT or EPSF file. |
| Import/Export Text | Will allow the import or export of text files from other Macintosh programs or other systems by the use of an internal filter capability |

**Table 4-3**

| Drawing and graphics | |
|---|---|
| Drawing area | Up to 30" by 32" selectable in page increments of 8" by 10" |
| Graphic objects | Text - font, size, style, color, masked and mask color<br>Symbols - 16 x 16 dot editable from a palette of 40<br>Shades - 8 x 8 dot editable from a palette of 40<br>Straight lines - constrainable to 0°, 45° and 90° angles<br>Polygons - constrainable to 0°, 45° and 90° angles<br>Rectangles - constrainable to squares<br>Round rectangles - infinite corner radii control<br>Ovals - constrainable to circles<br>Arcs - elliptical or circular, shaded or non shaded<br>Freehand lines - from 1 to 14 point |
| Imported graphics | PICTs (discrete object or single object), EPSF (Encapsulated PostScript Format), MacPaint (bit or pixel mapped) and Filevision IV (PicB which includes attached records)<br>Any currently available clip-art.<br>Filevision IV symbols and symbol palettes.<br>Filevision IV shades and shade palettes. |
| Lines | Adjustable width - none to 14 points in increments of 1 pt. |
| Shades | 38 editable plus **Glass** which is transparent but selectable, **None** is transparent and unselectable. **Glass** and **None** cannot be edited. |
| Object selection | Shown with handles, blinking, black or nothing |
| Multiple selection | As with the Finder; using marquee and Shift/click methods. Using the Option key when selecting objects with a marquee constrains the selection to the current Type only. Multiple selection allows a single action to affect all selected objects; for example, all selected graphics will be filled with a shade chosen from the **Shades** menu. |
| Stretch and shrink | Stretching and shrinking of graphics can be constrained to square stretch using the Option key and a proportional stretch using the Shift and Option keys together. |
| Drawing layers | 32 individually controllable via the **Types** and **Access** menus. |
| Overlapped graphics | Unlimited layers in a front and back relationship. Object's positions can be altered using **Bring To Front** and **Send To Back**. All objects retain their individual Type identities. |

**Table 4-3 continued**

## Drawing and graphics: continued

| | |
|---|---|
| Grouping | Graphic and text objects can be grouped "permanently" using **Group** (they can be ungrouped at any time). Graphic objects and their records can be grouped and ungrouped. Graphic objects of different Types or with more than one record between them can be temporarily grouped using **Gather**. Grouping is restricted to a maximum of 10 levels. |
| Pop-ups | Pop-ups are grouped graphics consisting of a trigger button and a pop-up body. The body is invisible and unselectable until the trigger button is selected. |
| Double-click | Can be set to go to the object's record, to activate a file link or to be ignored. |
| Page zoom views | Selectable in Actual size (100%), 33%, 50% or 200% zoom views. All drawing and text is fully functional in all zoom views. |
| Colors supported | All graphic objects, symbols and text can be foreground and background colored in Black, White, Red, Green, Blue, Cyan, Magenta or Yellow. Background colors will be converted to White when using a monochrome monitor. Imported graphics from Version 2 (256 color palette) and gray scale scanned images are supported. |
| Grid | Optional. Adjustable in 1/12" increments from 1 to 120. Can be printed or suppressed when using **Print Page**. |
| Rulers | Optional. Selectable from Inches, Centimeters, Points and Pixels which are all proportional and Feet, Yards, Miles and Kilometers which are all scalable. Adjustable zero point, starting values and page orientation (upper left or lower left origin). |
| Guide lines | Optional. Vertical or horizontal dragged from the ruler bars. Enable or disable **Snap To Guides** or **Show/Hide** functions. Can be printed or suppressed when using **Print Page**. |
| Alignment | Optional. Adjustable in 1/72" increments from 1 to 71. |

**Table 4-4**

| Adding and removing information | |
|---|---|
| Editing tools | Superset of standard Macintosh editing tools. In addition to cut, copy, paste and clear for text, these items may also be cut, copied and/or pasted: Graphics and their records, Type layouts, print formats, single symbols and symbol palette, single shades and shade palette. |
| Record deletion | Selected graphic(s) only. Selected graphic or group and its record. Selected record only. All highlighted objects and/or their records. Complete Type with all records and graphics. |
| Fields | Data, link or annotation. Data fields can be added, deleted or changed from record to record and can contain either data or graphics. Annotation fields can only be changed from the Type layout form. All fields are size adjustable at anytime. Individual field selection for fonts, font sizes, font styles and font colors. |
| Data entry | Tab moves to next field. Shift-tab moves to previous field. Option-tab moves to the first field. Formula fields are only editable for succeeding records. All Macintosh editing features supported. Link fields can be hidden or displayed. |
| Field setup | Standard (holds numbers, text or pictures), Formula, Initial Text (enters this in each new record) and Copy from previous record. |
| Formula field specifications: | Operators: + - / *<br>Numbers from 9,999,999,999.9999 to -9,999,999,999.999<br>Unary operators: + - √<br>Commas entered in numbers are ignored<br>Square bracketed field name enters contents of a field.<br>Nested parentheses up to 15 levels<br>Absolute value: \|value\|<br>Local currency symbols entered in fields are ignored<br>Text following a numeric entry is ignored<br>% multiplies the preceding value by .01 |
| Clipboard & Scrapbook can hold: | Text (can be exported to other applications)<br>Pictures (can be exported to other applications)<br>Records<br>Graphics and their records<br>Type layouts<br>Print formats<br>Single symbols and the symbol palette<br>Single shades and the shades palette |

**Table 4-5**

| Printed output | |
|---|---|
| Copy of current activity | 30" by 32" drawing page selectable in any 8" by 10" increments. The current Info page up to 30" by 30" selectable in any 8" by 10" increments. The Type layout. The Symbol and Shades palettes. A Print format. Highlight conditions. |
| Styles of printing records | Forms (can be used for form letters and mail merge) Reports Labels |
| General features Forms, Reports and Labels | Generated automatically from the Type layout. Completely editable. Can be sorted on up to three fields. Headers, Footers and Each record areas occupy any amount of space on printout. Data fields can be moved, removed, resized and used in multiple locations. Annotation fields independent of the Type layout annotation fields. Special information such as system date and time in two formats each, current page number (Form or Report only). Print formats (editable layouts for printing Forms, Labels and Reports. Up to 20 print formats can be saved in each file's library. Reports, Forms and Labels can be previewed on screen. Reports, Forms and Labels can generate text file output. Field alignment: Center, Right or Left Field formatting: As numbers, as text, numbers with commas, decimal point (1 to 4 places) and currency symbols. |
| Annotation fields | Can print: Fixed text or pictures on each record. Pictures can be pasted from the Clipboard or imported directly from PICT, bit/pixel map or EPSF files. Contents of data fields (field names in square brackets []). Special information. |
| Report statistics | Count, Total, Average, Standard deviation For entire report or by break Running total |
| Sort | Can sort on up to 3 fields in printing. Ascending or descending order. Printing of duplicate sort field information can be suppressed. Optional new page (form feed) on report break points. |

# Appendix B:
# Converting files for use with Filevision IV

Before you can convert Filevision files to Filevision IV format, you must first convert the file to Business Filevision format.

The Convert application on the Start-Up Disk converts the original Filevision files into Business Filevision for just that purpose. Once the file is in Business Filevision format, Filevision IV can convert the file automatically.

Because the Start-Up Disk comes to you almost full, the best way to use Convert is to copy it onto a disk of its own along with the "System" and "Finder" files. Remember to leave disk space on it or the external disk for the converted files, and keep in mind that the Filevision IV files may take up to 400% more space than the original Filevision files and 100% more than Business Filevision files.

## Converting Filevision files to Business Filevision

This example assumes that the disk in the internal drive contains the "Finder", "System", and "Convert" files on it, and that the external drive is less than half full and contains the Filevision 1 files to be converted.

- Click the **Convert** icon:

Filevision Convert

- Choose **Open ...** from the desktop **File** menu.

A gray desktop appears.

- Choose **Open ...** from the Convert **File** menu.

You'll be given a list of Filevision files on that disk:

```
┌─────────────────────────────────────────┐
│  ┌───────────────────┐                   │
│  │ 🗂 Hydraulics Folder │                  │
│  └───────────────────┘                   │
│  ┌──────────────────────────┐ ⇧  ⊂⊃Genus │
│  │ 🗋 BF-START HYD.DESIGN 2  │▒│          │
│  │ 🗀 DRAWING FILE           │ │ ┌──────┐ │
│  │                          │ │ │ Eject│ │
│  │                          │ │ └──────┘ │
│  │                          │ │ ┌──────┐ │
│  │                          │ │ │ Drive│ │
│  │                          │ │ └──────┘ │
│  │                          │ │ ┌──────┐ │
│  │                          │ │ │ Open │ │
│  │                          │⇩│ └──────┘ │
│  └──────────────────────────┘  ┌──────┐  │
│                                 │Cancel│  │
│                                 └──────┘  │
└─────────────────────────────────────────┘
```
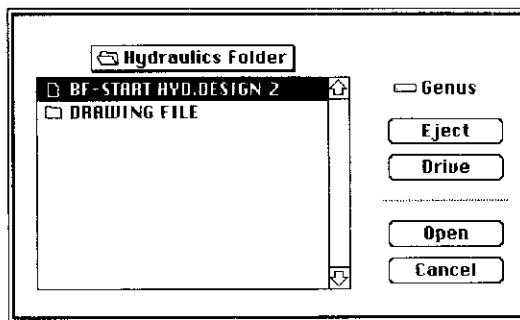
If you don't see any Filevision files listed, click the Drive button.

- **Click the name of the file you want converted to select it.**

- **Click the Open button.**

The convert program suggests a name under which you can save the converted file; type in a new one if you wish.

```
┌─────────────────────────────────────────┐
│  ┌───────────────────┐                   │
│  │ 🗂 Hydraulics Folder │                  │
│  └───────────────────┘                   │
│  ┌──────────────────────────┐ ⇧  ⊂⊃Genus │
│  │ 🗀 DRAWING FILE           │▒│          │
│  │ 🗋 START HYD.DESIGN 2     │ │ ┌──────┐ │
│  │                          │ │ │ Eject│ │
│  │                          │ │ └──────┘ │
│  │                          │ │ ┌──────┐ │
│  │                          │⇩│ │ Drive│ │
│  └──────────────────────────┘  └──────┘  │
│  Save converted file as:        ┌──────┐ │
│  ┌──────────────────────────┐   │ Save │ │
│  │ BF-START HYD.DESIGN 2     │   └──────┘ │
│  └──────────────────────────┘   ┌──────┐ │
│                                 │Cancel│  │
│                                 └──────┘  │
└─────────────────────────────────────────┘
```
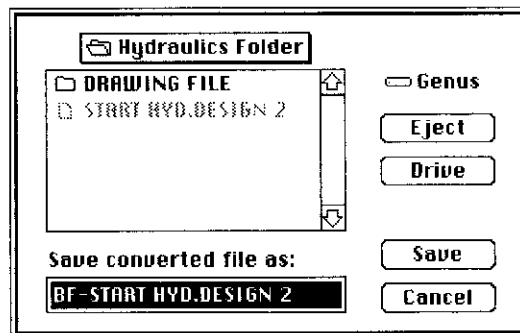
- **Click the Save button.**

A conversion progress dialog will be displayed:

```
┌─────────────────────────────────────────────────────────┐
│  Converting Filevision® file "START HYD.DESIGN 2" to     │
│  Business Filevision® file "BF-START HYD.DESIGN 2".       │
│                                                          │
│  18% complete                                            │
│                                          ┌──────────┐    │
│                                          │  Cancel  │    │
│                                          └──────────┘    │
└─────────────────────────────────────────────────────────┘
```
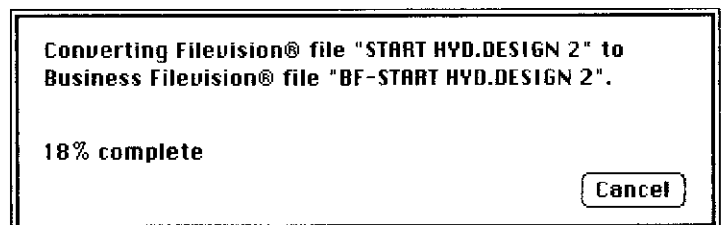
After a few moments your Filevision file will be converted and the gray desktop reappears. To convert any other files, repeat these steps.

- When you're finished converting files, choose **Quit** from the **File** menu.

You now have a Business Filevision version of your file.

**Converting Business Filevision files to Filevision IV**

To convert Business Filevision files to Filevision IV , use the following procedure:

- Launch Filevision IV as you normally would to open a new or existing file.

- Choose **Open...** from the **File** menu.

The normal Filevision IV Open dialog appears:

```
┌─────────────────────────────────────────────┐
│         ┌─ PDL Filevision ┐                  │
│  ┌──────────────────────────┐  ⊂⊃ Genus      │
│  │ ☐ Hyd. Design 2      △   │                │
│  │ ☐ Hydraulics Folder      │  ┌─────────┐   │
│  │ ☐ Inside Mac Folder      │  │  Eject  │   │
│  │ ☐ Journal Index Folder   │  └─────────┘   │
│  │ ☐ Karmann Ghia Folder    │  ┌─────────┐   │
│  │ ☐ Landscaping            │  │  Drive  │   │
│  │ ☐ Lease Map Folder       │  └─────────┘   │
│  │ ☐ Living Room Inventory  │  ┌─────────┐   │
│  │ ☐ LT ROCK APARTMENT STUDY│  │  Open   │   │
│  │                       ▽  │  └─────────┘   │
│  └──────────────────────────┘  ┌─────────┐   │
│                                 │ Cancel  │   │
│                                 └─────────┘   │
└─────────────────────────────────────────────┘
```
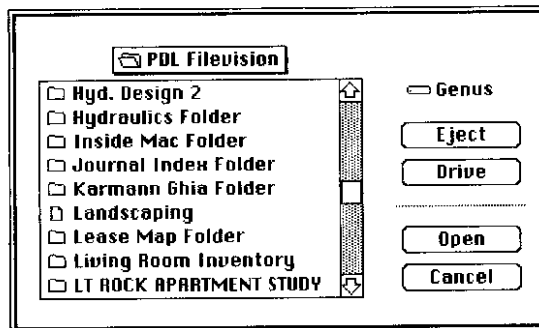
- Select the file to be converted and click the **Open** button.

A Filevision IV conversion dialog will appear asking if you want to save a back up copy of the file in Business Filevision.

```
┌─────────────────────────────────────────────────────────┐
│  ┌───┐                                                   │
│  │ ✋ │  This is an older version Business Filevision file.│
│  └───┘  If you continue, the old version will be lost.   │
│                                                          │
│                                                          │
│  ┌─────────┐    ┌──────────────┐    ┌──────────┐        │
│  │ Cancel  │    │ Save back-up │    │ Continue │        │
│  └─────────┘    └──────────────┘    └──────────┘        │
└─────────────────────────────────────────────────────────┘
```
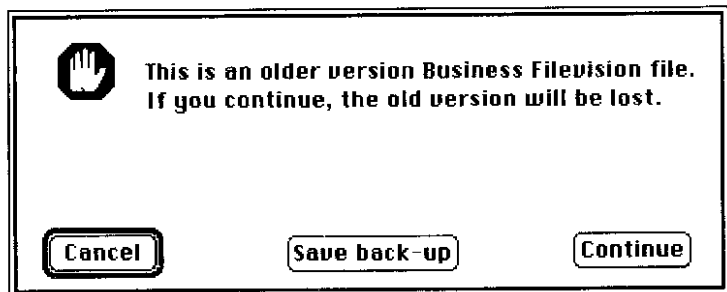
*   If you wish to save the back-up, click **Save back-up**.

•   If you want to go directly into the conversion, click the **Continue**
    button.

After a few moments, the file will be converted and Filevision IV will open with
the new file running.

**file icons**   If you have converted from Filevision to Filevision IV, the file icons created will
appear as:

Filevision ——————

ST ART HYD.DESIGN 2

Business Filevision ——————————————

BF-ST ART HYD.DESIGN 2

Filevision IV ——————————————————————————

BF-ST ART HYD.DESIGN 2
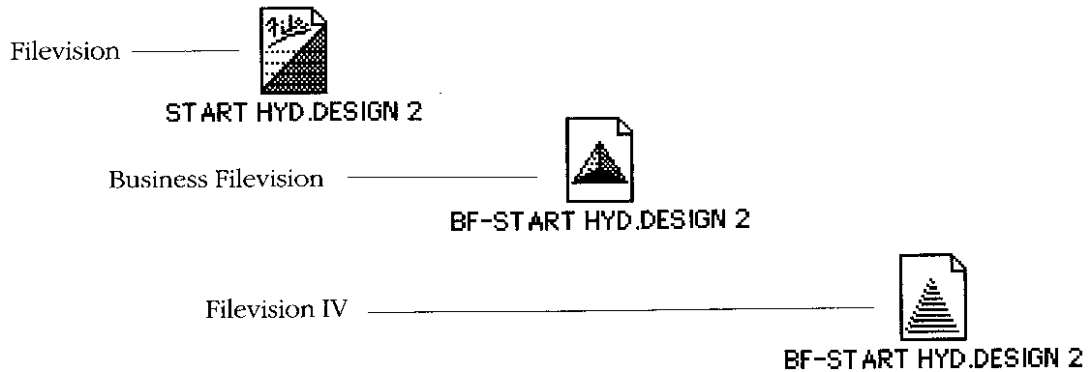
# Appendix C:
# Filevision IV menus and primary dialogs

Some menu items change according to the context, and all menu items are shown enabled. For example, **Ignore** will read **Activate** if you've already set the currently selected Type to **Ignore**, and if you're using a file, **New...** and **Open...** on the **File** menu will be disabled.

## Apple menu

```
About Filevision® IV...
Help...
Set Aside Filevision® IV

✓ ▲ Filevision® IV
  ▤ Finder
```

> **Filevision® IV**
> Version 1.0 - March 30, 1989
> Copyright 1985-1989 Marvelin Corporation.
>
> Phone: (213) 450-6813
>
> By David Murray, Matthew Jacobs, Robert Jeckell, Howard Metcalfe & Scott Sullivan. Rewritten by Faulkner White.
>
> "Brushwood Heights" uses:
> 53318 bytes of memory, 241K of disk.
>
> Approximate room to grow:        [ OK ]
> 253666 bytes, 15437K disk.

**Help Item:** [ About Help ]

Help Item: Click on the Help Item pop-up menu to see an index of all help items. From this menu, select the help item desired by clicking on it.

Page: Whenever the page marker is displayed, there is more than one page included in that help item. To continue to the next or previous page, click the Next or Prev buttons.

Browse: If you wish to page through all of the main help items without selecting any particular item from the Help Item menu, click the Up arrow to go to the previous item and the Down arrow to go to the next item. When you reach a help item with more than one page, click Prev or Next.

Help: If you wish to enable the context sensitive help cursor, click the Help button. Once the "Help" cursor is present, pull down any program menu and click on the menu item that you would like to see help on.

Exit: After you are finished viewing the help screens, click the Exit button to leave the help screen and return to your file.

[ Prev ]

[ Next ]

⇧
**Browse**
⇩

[ Help ]

[ Exit ]

# File menu

**File**

| | |
|---|---|
| New... | ⌘N |
| Open... | ⌘O |
| Close Menus | |
| Save | ⌘S |
| Save As... | |
| Return to Menu Source | ⌘; |
| | |
| Import Graphics... | |
| Export Graphics... | |
| Import/Export Text... | |
| | |
| Page Setup... | |
| Page Size... | |
| Print Page | ⌘U |
| Print Records... | ⌘P |
| | |
| Quit | ⌘Q |

**Filevision® IV**

Create a Filevision File:
New File

⊂HD80
Eject
Drive
New
Cancel

**Filevision**

☐ IE Disk Files
☐ Import/Export
☐ Label File
☐ Menu Source
☐ Menus
☐ Printing File
☐ Printing File 2

⊂HD80
Eject
Drive
Open
Cancel

**Filevision IV**

☐ Archive
☐ ARIZONA AVIATION ...
☐ Banner
☐ Brushwood Heights
☐ Copy of Filevision T...
☐ EPSFs

Save a copy in:
Copy of Banner

⊂HD80
Eject
Drive
Save
Cancel

**Filevision IV**

☐ Archive
☐ Copy of Filevision Tour
☐ EPSFs
☐ Filevision Examples
☐ Filevision Program
☐ Filevision Start-up
☐ FviIV Banner
☐ FviIV Pyramid
☐ Large Files

⊂HD80
Eject
Drive
Import
Cancel

● PICT   ○ MacPaint
○ EPSF

Import as:
○ Single PICT
● Discrete Objects

**🍎 File Edit Types Import O**

✓Import   ⌘I
Export   ⌘E

New Setup   ⌘N
Load Setup...   ⌘L
Save Setup...   ⌘S

Return to Filevision
Quit   ⌘Q

☐ Archive
☐ Backup of Filevisio...
☐ Banners
☐ Conversion Test
☐ EPSFs
☐ Filevision® IV

Save As:
Test PICT

⊂HD80
Eject
Drive
Export
Cancel

● PICT
○ EPSF

**Select drawing pages to be printed:**

☐ Print guides
☐ Print grid

Cancel   Done

**LaserWriter Page Setup**   5.2

Paper: ● US Letter   ○ A4 Letter   ○ Tabloid
○ US Legal   ○ B5 Letter

Reduce or [100]%
Enlarge:

Orientation

Printer Effects:
☒ Font Substitution?
☒ Text Smoothing?
☒ Graphics Smoothing?
☒ Faster Bitmap Printing?

OK
Cancel
Options
Help

**Print Library**

| Print format | Type | Style |
|---|---|---|
| Menu 1 | Background | Form |
| Menu 2 | Background | Report |
| Menu 3 | Background | Label |

Delete   Edit   New

Records to print:
● All
○ Highlighted
○ Selected

Print to:
● Printer
○ Screen
○ File

Quit   Page setup   Print

**Select info pages to be printed:**

Cancel
Done

**Select a drawing page size:**

Cancel
OK

# Edit menu

**Delete records using these options:**

◉ Selected "Townhouse"s only
○ Highlighted "Townhouse"s only
○ All "Townhouse"s

◉ Records and their graphics
○ Records only
○ Graphics only

**You will not be able to undo this action.**

[ Cancel ]          [ Delete ]

## Edit

| | |
|---|---|
| **Undo** | ⌘Z |
| **Cut** | ⌘H |
| **Copy** | ⌘C |
| **Paste** | ⌘U |
| **Clear** | |
| **Bring to Front** | ⇧⌘F |
| **Send to Back** | ⇧⌘B |
| **Group** | ⌘G |
| **Gather** | ⇧⌘T |
| **Reshape** | ⇧⌘R |
| **Add Record** | ⌘A |
| **Duplicate Record** | ⌘Y |
| **Delete Records...** | |
| **Preferences...** | ⌘E |
| **Grid & Rulers...** | |
| **Field Setup...** | ⌘= |

**Preferences for this file:**

• **Show selected graphics using:**
◉ Handles   ○ Black   ○ Blinking   ○ Nothing

• **Double-click on graphics:** ◉ Accept   ○ Ignore

☐ **Info & Form rulers on:** ◉ Inches   ○ Metric

[ Cancel ]          [ Done ]

**Edit drawing page rulers and grid for this file:**

• **Show ruler in:** Feet

With 1 inch = **300** Feet

• **Set initial reference point at:**
◉ Upper left – positive numbers down & right.
○ Lower left – positive numbers up & right.
Initial ruler starting values:  Horiz 0      Vert 0

• **Grid** .......... 6   12ths of an inch   ☐ Show grid
• **Alignment** . 18   72nds of an inch   ☐ Snap to alignment
• **Guides** ........   ☒ Show guide         ☐ Snap to guides

[ Cancel ]          [ Done ]

**Setup for the Comments field:**

○ Standard          ○ Copy from previous reco
◉ Initial Text      ○ Compute using a formula
Initial text:

**Field Names:** Price

[ Cancel ]   [ Prev Field ]   [ Next Field ]   [ Done ]

# Types menu

**Change Layout...** opens the change mode window for the current Type.

**Add Type...** opens the new Type layout window

# Access menu

Sort "Background"s by:

| Current Mailing Address |

You will not be able to undo this action.

( Cancel )                              ( Sort )

Find this Background Name:

| Unit 2 |

( Cancel )   ( Find First )   ( Find Next )

Highlight "Background"s meeting these conditions:

Name

| is | is not |

[=]  [≥]  [≤]  [--]

James Turner

⊙ Value
○ Rank (0 to 0)
○ Field

( Clear )

Name is
equal to
James Turner
⊙ AND —○ OR

⊙ AND —○ OR

⊙ AND —○ OR

( Cancel )                              ( Done )

# Text menu

**Text**
- Font ▶
- Size ▶
- Style ▶
- Color ▶
- Mask Color ▶
- Text Masking

**Text**
- Font ▶
- Size ▶
- Style ▶
- Color ▶
- Mask Color ▶
- Text Masking

Font submenu:
- Avant Garde
- Bookman
- Brush Script
- Cairo
- CalligraphyLaser
- Carta
- Chicago
- Courier
- Garamond
- ✓Geneva
- Helvetica
- Hobo
- Mobile
- Monaco
- N Helvetica Narrow
- New Century Schlbk
- New York
- Palatino
- Times
- Zapf Chancery
- Zapf Dingbats

**Text**
- Font ▶
- Size ▶
- Style ▶
- Color ▶
- Mask Color ▶
- Text Masking

Size submenu:
- 6
- 8
- 9
- 10
- ✓12
- 14
- 18
- 24
- 30
- 36
- 48
- 60
- 72

**Text**
- Font ▶
- Size ▶
- Style ▶
- Color ▶
- Mask Color ▶
- Text Masking

Style submenu:
- ✓Plain text
- Underline
- **Bold**
- *Italic*
- Shadow
- Outline

**Text**
- Font ▶
- Size ▶
- Style ▶
- Color ▶
- Mask Color ▶
- Text Masking

Color submenu:
- ✓Black
- White
- Red
- Green
- Blue
- Cyan
- Magenta
- Yellow

**Text**
- Font ▶
- Size ▶
- Style ▶
- Color ▶
- Mask Color ▶
- Text Masking

Mask Color submenu:
- Black
- ✓White
- Red
- Green
- Blue
- Cyan
- Magenta
- Yellow

# Options menu

**Options**
- Show Ruler ⌘R
- Hide Toolbox ⌘T
- Hide Mini Page ⌘K
- Hide Titles
- Hide Window

- ✓Show Actual Size ⌘1
- Show 50% Size ⌘5
- Show 33% Size ⌘3
- Show 200% Size ⌘2

- Ruler Origin at Bottom Left
- Tracking
- Grid
- ✓Guidelines
- Snap to Guide
- Snap to Alignment
- Edit Rounded Corners...
- Show Grid & Guides in Front

## Symbols menu



## Shades menu

# Format menu

| Format | |
|---|---|
| ✓ **Alphabetic** | ⌘0 |
| **Numeric** | ⌘9 |
| **Dollar Sign** | ⌘M |
| **Commas** | ⌘, |
| **Decimals...** | ⌘. |
| **Statistics...** | ⌘- |
| ✓ **Align Left** | ⌘6 |
| **Align Middle** | ⌘7 |
| **Align Right** | ⌘8 |
| **Hide Border** | |
| **Do Not Invert** | |
| **Hide Field Name** | |
| **Across...** | |
| **Show Ruler** | ⌘R |
| **Metric Ruler** | |

---

Display "Price" numbers with this decimal format:

⦿ 7      ○ 7.7      ○ 7.77      ○ 7.777      ○ 7.7777

[ Cancel ]        [ Prev Field ]        [ Next Field ]        [ Done ]

---

Statistics for: [ Price ]

| | Count | Total | Average | Standard deviation |
|---|---|---|---|---|
| Overall statistics . . . . | ☐ | ☒ | ☐ | ☐ |
| By Model . . . . . . . . | ☐ | ☒ | ☐ | ☐ |
| By Price . . . . . . . . | ☐ | ☐ | ☐ | ☐ |
| By Address . . . . . . . | ☐ | ☐ | ☐ | ☐ |

Use "Sort" to select different detail statistic fields.
Select "Numeric" from the Format menu to enable all statistics.

[ Cancel ]        [ Prev Field ]        [ Next Field ]        [ Done ]

---

Print how many records across each page?

The current setting is: 1.

[ Cancel ]        [ 1 ]      [ 2 ]      [ 3 ]      [ 4 ]

# Import/Export Text...

selection from the main **File** menu creates a new menu bar

**File** menu:

| | |
|---|---|
| **É** | **File** Edit Types Export Options |
| Import | ⌘I |
| ✓Export | ⌘E |
| New Setup | ⌘N |
| Load Setup... | ⌘L |
| Save Setup... | ⌘S |
| Return to Filevision | |
| Quit | ⌘Q |

**Types** menu:

| Types |
|---|
| Background |
| Golf Hole |
| Lake |
| Street |
| ✓Townhouse |
| Model |
| Salesperson |
| Customer |
| Click Link |

**Edit** menu:

| Edit | |
|---|---|
| Undo | ⌘Z |
| Cut | ⌘X |
| Copy | ⌘C |
| Paste | ⌘V |
| Clear | ⌘B |
| Field setup... | ⌘= |
| Append field | ⌘A |

**Field setup dialog:**

Field setup for 2: "Hourly salary":

Field width (in characters):
- ○ Left align data in field.
- ○ Center data in field.
- ○ Right align data in field.

Pad character:

☐ Format data numerically.
 Number of digits to right of decimal point: [0]
 ☐ Suppress leading zeroes.
 ☐ Display sign trailing.

Indicate missing data with: [          ]

[ Cancel ]  [ Prev field ]  [ Next field ]  [ Done ]

**Process imported data dialog:**

Process imported data records based on

- ◉ Add all imported data as new records.
- ○ Update matching records; otherwise a
- ○ Update matching records; otherwise d
- ○ Replace matching records; otherwise
- ○ Replace matching records; otherwise

- ◉ Do not change highlighting.
- ○ Make all new or changed records high
- ○ Make only new records highlighted.
- ○ Make only changed records highlighte
- ○ Make all new or changed records NOT highlighted.

[ Cancel ]

**Select fields dialog:**

File-name: Personnel
Type-name: Employee

| | Order of imported fields |
|---|---|
| City | 1 |
| Employee no. | 2 |
| Federal exemptions | 3 |
| Hourly salary | 4 |
| Link | 5 |
| • Name | 6 |
| Phone no. | 7 |

[ Select all ]   [ Select all ]

☐ File begins with a list of field names.

[ Cancel ]   [ Done ]

**Import** menu:

| Import | |
|---|---|
| Select fields... | ⌘- |
| Select records... | ⌘R |
| ✓ASCII... | ⌘1 |
| DIF | ⌘2 |
| SDF... | ⌘3 |
| SYLK | ⌘4 |
| Start... | ⌘G |

**Process ASCII files dialog:**

Process ASCII files for the following programs:

- ○ Filevision® IV       ○ Excel
- ○ DB Master (Import only)  ○ Jazz
- ○ FileMaker
- ○ Helix             ○ MacWrite, etc.
- ○ Microsoft File
- ○ Omnis 3
- ○ OverDUE 2.0
- ○ PFS:File (Import only)

[ Cancel ]   [ Other ]   [ Done ]

**Process SDF files dialog:**

Process SDF files as follows:

☒ Delimit fields.
 Field delimiter: [■]

[ Cancel ]   [ Done ]

**Translate dialog:**

Translate   Into        End-Of-File Char
[ ][ ]               [ ]

- ◉ Keep CR characters.
- ○ Convert CR to Space.
- ○ Delete CR in exported data.

☐ Append LF to CR.

[ Cancel ]   [ Done ]

**Options** menu:

| Options | |
|---|---|
| Translate... | ⌘T |
| Convert to upper case | ⌘U |

# Appendix D:
# Filevision IV shortcuts and special key combinations

**Keyboard
shortcuts**

Filevision IV, like most Macintosh software, has a number of keyboard and mouse shortcuts for the experienced user.

- Double-click the symbol tool to use the **Symbol Editor**.

- Double-click the shade preview box to use the **Shade Editor**.

- Double-click the rounded rectangle tool to use the **RoundRect Editor**.

- Double-click the **record icon** to look at the current record. This is the same as clicking the **Info** button for that object.

- Double-click an object to get Info on it, or to link to another file. This depends on what choices have been made on the **Edit** menu's **Preferences** dialog.

- Double-click on the field name in an Info record to get the **Field Setup** dialog.

- Double-click on a field in the Print Layout to get the **Statistics** dialog for that field.

- Hold down the Command key ( ⌘ )while clicking the mini page scroller to center the drawing page.

- Clicking on any Filevision IV graphic, text, symbol, line or shaded object with the Option key down will load that object's attributes into the tool box, text menu or symbol and shade palettes. To change the existing attributes of an object, select the object and then make any changes from the respective menus or editors.

**special key combinations**

Holding down the | **Shift** | key

- While selecting objects keeps all currently selected objects.

- While holding down the **Command** key (⌘) and choosing **Group** from the **Edit** menu creates a pop-up.

- While holding down the **Option** key and stretching an object will stretch it proportionately.

- While clicking **Next** or **Prev** will bring the object selected into the drawing window viewing area for the selected graphic.

- While holding down the **Command** key (⌘) and clicking the page miniature will center the drawing window.

- When choosing **Find...** or **Find Same** from the **Access** menu will bring the object into view, if found.

- When choosing a Type from the **Types** menu will change the Type of the currently selected object(s).

- While drawing won't deselect the drawing tool when the mouse button is released.

Holding down the | **Option** | key

- While stretching an object will limit stretching to a square.

- With the straight line tool will draw only 0°, 45°, and 90° lines.

- With the polygon tool will draw only 0°, 45°, and 90° lines.

- With the rectangle or round rectangle tools will draw only squares or rounded squares.

- With the oval tool will draw only circles.

- With the arc tool will draw only circular arcs.

- While moving an object will move it only on a horizontal or vertical plane in the direction you started the move.

- While stretching or shrinking an object will stretch or shrink it only horizontally or vertically.

- During reshaping other than arcs will move handles only horizontally or vertically.

Holding down the **Option** key

- During reshaping arcs will constrain the arc angle to 45° angle click stops.

- With **Copy** from the **Edit** menu will copy the Type layout from the Type layout display, the print format from the Print layout display, or symbol or shade palettes while editing symbols or shades.

- With anything on the **Text** menu from the Info page, Type layout or Print layout display will change all fields to the selected attribute.

- With the Command key ( ⌘ ) will align drawing, moving, stretching and reshaping, even if **Alignment** isn't selected from **Preferences**, or temporarily disable Alignment if it is.

**Command key chord menu and control combinations**

If you press and hold the Command key ( ⌘ ) while pressing one of these keys, you'll activate the menu item or control shown on the following chart. The up arrow and Command key symbol ( ⇧⌘ ) indicates that the Shift key is also held down while applying the Command key chord.

**Table 4-6**

| | Command key chord chart |
|---|---|
| ⌘ - A | **Add** a new record while working in the Info page or, |
| ⌘ - A | **Append** field to exchange file field list if in Import/Export Text... |
| ⇧⌘ - B | send the currently selected object(s) or Type to the **Back** or, |
| ⌘ - B | **Clear** selected without copying to he Clipboard. |
| ⌘ - C | **Copy** the currently selected object or selected text |
| ⌘ - D | access the **Drawing** page if currently working in the Info page |
| ⌘ - E | display the **Preferences**... dialog box or, |
| ⌘ - E | set **Export** text if working with Import/Export Text... |
| ⌘ - F | display the **Find...** dialog box |
| ⇧⌘ - F | bring the currently selected object(s) or Type to the **Front** |
| ⌘ - G | **Group** all selected objects or a record with a graphic object or, |
| ⌘ - G | **Start** Import or Export from Import/Export Text... |
| ⌘ - H | display the **Highlight** dialog |
| ⇧⌘ - H | **Hide** All/Selected of the current Type or selected objects of Type |
| ⌘ - I | access the **Info** page if currently working in the drawing page |
| ⌘ - J | **Cancel** all **Highlighting** |
| ⌘ - K | Hide the mini page |
| ⌘ - L | **Load** Import/Export setup file if working in Import/Export Text... |
| ⌘ - M | Format a Numeric Print Layout field with a Dollar sign |
| ⌘ - N | create a **New** Filevision IV file or, |
| ⌘ - N | start **New** Setup if working in Import/Export Text... |
| ⇧⌘ - N | go to **Next** record (object) |

**Table 4-6
continued**

| | Command key chord chart continued |
|---|---|
| ⌘ - O | **Open** an existing Filevision IV or Business Filevision file. |
| ⌘ - P | access the **Print Records...** Print Library dialog |
| ⇧⌘ - P | go to the **Previous** record |
| ⌘ - Q | **Quit** if working in Filevision IV or Import/Export Text... |
| ⌘ - R | Show/Hide **Rulers** in any window or, |
| ⌘ - R | select **Records** if working in Import/Export Text... |
| ⇧⌘ - R | **Reshape** selected line, rectangle or arc |
| ⌘ - S | **Save** the current file or, |
| ⌘ - S | **Save** the current **Setup** if working in Import/Export Text... |
| ⇧⌘ - S | **Find Same** using the last Find criteria |
| ⌘ - T | Hide/Show the **tool box** or, |
| ⌘ - T | **Translate** if working in Import/Export Text... |
| ⇧⌘ - T | **Gather** all selected objects for temporary grouping |
| ⌘ - U | print the current **Page** or, |
| ⌘ - U | convert to **Upper case** if working in Import/Export Text... |
| ⌘ - V | **Paste** the contents of the Clipboard |
| ⌘ - W | **Highlight Selected** if working on the drawing page or, |
| ⌘ - W | toggle from highlighted to not highlighted if in Info page |
| ⌘ - X | **Cut** currently selected object or text |
| ⌘ - Y | **Duplicate** record |
| ⌘ - Z | **Undo/Redo** the last edit |
| ⌘ - 1 | set drawing page to Actual size (**100%**) or |
| ⌘ - 1 | import or export text to an **ASCII** file |
| ⌘ - 2 | zoom drawing page to **200%** size or, |
| ⌘ - 2 | import or export text to a **DIF** file |
| ⌘ - 3 | zoom drawing page to **33%** size or, |
| ⌘ - 3 | import or export text to a **SDF** file |
| ⌘ - 4 | import or export text to a **SYLK** file |
| ⌘ - 5 | zoom drawing page to **50%** size |
| ⌘ - 6 | Align **Left** in the current text field or, |
| ⌘ - 7 | Align **Middle** (center) in the current text field |
| ⌘ - 8 | Align **Right** in the current text field |
| ⌘ - 9 | set field to **Numeric** in Print layout |
| ⌘ - 0 | set field to **Alphabetic** in Print layout |
| ⌘ - = | select **Field Setup** dialog |
| ⌘ - ; | **Return to** last file linked from or last file closed |
| ⌘ - , | set field to print **Commas** in Print layout |
| ⌘ - . | set field **Decimal** places in Print layout |
| ⌘ - - | select the report **Statistics** dialog or, |
| ⌘ - - | **Select fields** to import or export in Import/Export Text... |
| ⌘ - ? | enter context sensitive help |

# Appendix E:
# Filevision IV error messages

Sometimes the Macintosh or Filevision will encounter a situation so unusual that an error message is issued. An error message attempts to tell you what's wrong and what can be done about it. Here's a list of Filevision error messages and possible remedies for the problems they represent.

## System errors

System errors are shown with an ID number, **Restart** and **Resume** buttons, and a picture of a bomb.

Always click **Resume** when possible. **Resume** attempts to close your file properly before returning you to the desktop. **Restart** returns you to the desktop but risks the loss of your file.

### ID = 3   Illegal instruction error.
This error should never occur. It indicates that the program has malfunctioned. Click Resume and if the problem continues, click Restart. If this does not correct the problem, replace the Filevision IV application or System files.

### ID = 4   Zero divide error.
See ID = 3, above.

## I/O and printing errors

I/O and printing error messages are given with a number. The messages and possible reasons or remedies are listed below.

### -33   The disk directory is full.
Choose Quit from the File menu and throw at least one file into the Trash. You should back up any important files before throwing them away.

### -34   The disk is full
See -33, above.

### -36   Your drive or disk may be faulty
This may represent a mechanical failure. It can be caused by bad drive alignment, a defect in the diskette, or a defective file (which can be eliminated by throwing out the file). These errors are difficult to recover from; you may have to take your Macintosh in for repair.

### -39 The file is damaged

This can happen if you were using a file and the reset switch was hit, or the Macintosh lost power during the brief period that a directory was being updated. Throw away that file and use the last backup copy you made.

### -41 There is not enough memory

Be sure you are using a Macintosh with at least one megabyte. If you're using MultiFinder, make sure that you haven't reduced the minimum amount of memory MultiFinder requests for Filevision. This can be set by selecting the Filevision application icon on the desktop and Get Info from the desktop File menu. Be sure that Application Memory Size is set to at least 650K.
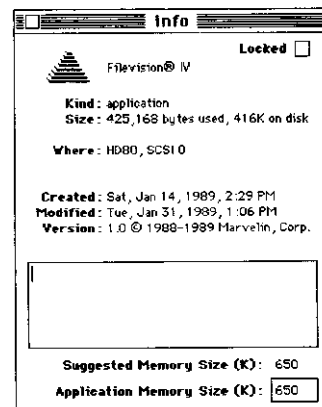
### -43 The printer driver (or some other needed file) cannot be found

Install your ImageWriter or other printer driver in the "System" used by Filevision.

```
▓▓▓▓▓▓▓▓ Info ▓▓▓▓▓▓
                              Locked ☐
    Filevision® IV

  Kind: application
  Size: 425,168 bytes used, 416K on disk

  Where: HD80, SCSI 0

  Created: Sat, Jan 14, 1989, 2:29 PM
  Modified: Tue, Jan 31, 1989, 1:06 PM
  Version: 1.0 © 1988-1989 Marvelin, Corp.

  ┌──────────────────────────┐
  │                          │
  │                          │
  └──────────────────────────┘

  Suggested Memory Size (K):  650
  Application Memory Size (K): [650]
```

### -44 The disk is write protected

Remove the diskette and slide the write-protect tab up so that it covers the hole and try again.

### -47 That file is in use. It cannot be replaced

This can happen if: 1) You're using Filevision in a network and someone else is using the file you are attempting to open, 2) You're running more than one Filevision under MultiFinder and another copy of Filevision is using the file, or 3) There was a bug in the previous application that used the file and you haven't turned the Macintosh off or reset it since the error occurred. Use another file until the first one is closed, or, if 3) occurred, turn the Macintosh off and try again.

### -49 The file has been left open by another application

See -47, above.

### -108 There is not enough memory

See -41, above.

### -192 A needed RESOURCE cannot be found

This can happen when the printer driver and the file called "System" are from different releases and therefore don't recognize each other. If you use the "System" and "ImageWriter" (or other printer driver) resource files we supply, you shouldn't encounter this problem. Install your ImageWriter or other printer driver in the "System" file.

### -193 A needed resource FILE cannot be found

See -192, above.

## Errors in formula fields

Formula fields (see "formula fields", page 170) have their own set of error messages.

**There is an unexpected sequence of characters in the formula**
This is the most commonly encountered error message. Possible causes include:

No formula: You clicked **Compute using a formula** on the **Field Setup...** but didn't enter a formula.

The formula doesn't begin with a valid character: A formula must begin with a number, a unary sign (+, -, or √ ), an opening parentheses, an opening absolute value sign ( I ), or a field name in brackets. For example,

**Net rate]**

The opening bracket is missing in this example.

The formula seems to end before the last character: It looks to Pyramid as if there's garbage at the end of a formula. For example,

**[Dealer price] * 20%0**

The last zero is redundant in this example.

You forgot a closing parenthesis or absolute value sign: Parentheses and absolute value signs come in pairs, and it's easy to forget the one on the right. For example,

**I[Net rate]**

The closing absolute value sign is missing in this example.

**There are unbalanced parentheses**
For example,

**[Quantity on hand] + ([Surplus] - [Spoilage]**

The closing parenthesis is missing in this example.

**There is something wrong with a reference to a field**
Here are the most common problems:

You typed more than 31 characters without a closing bracket: The maximum length of a field name is 31 characters.

A value in brackets isn't a field name: When field names are referred to in a formula, they must be bracketed. If a word in brackets isn't a field name, you get this error.

The left bracket is missing: You may have typed in a field name without an opening bracket.

### There are too many nested parentheses

Formulas allow up to 15 levels of parentheses, "implied" or not. Implied parentheses refer to the order of evaluation: that is, in expression A * B + C evaluates identically to (A * B) + C, because the multiplication operator (*) always takes precedence over the addition operator (+). So the expression A * B + C is considered to have one pair of implied parentheses.

### A value is too large or too small

Both positive and negative numbers are accurate to 10 digits to the left of the decimal and 4 to the right, so any number greater than 9,999,999,999.9999 or less than - 9,999,999,999.9999 won't be stored accurately.

You may also have attempted to take the square root of a negative number.

### ?Val?

This means "Value error" and it usually indicates something pretty obvious: a word appeared where a number should have, or a number was divided by zero, the square root of a negative number was requested, etc.

### ?Ref?

This means "Reference error" and it indicates that you've used a field reference in a formula field, but the field referred to was removed.

# Appendix F:
# How to Import/Export Text with other programs

This appendix includes instructions for using Import/Export with specific target programs. If the program you want to exchange data with appears in this list, please read the appropriate section here. If it does not, please refer to your program's manual and the section on Import and Export Text in this manual.

## How to exchange data between Filevision IV files

Filevision IV includes several tools for exchanging graphics, data, symbols and layouts between Filevision IV files. For a brief review of these features, see: Editing tools, the Clipboard, and the Scrapbook in this manual. You can also use Import/Export Text to exchange data between two Filevision IV files. Here's how:

- Select **Import/Export Text...** from the **File** menu and choose **Export**; choose **ASCII** from the **Export** menu; click **Filevision IV** and click **Done**.

- Choose **Select Fields...** from the **Export** menu; double-click the fields you want to include in the exchange file, in the order you want them to appear — they will be appended to the list of fields in the exchange file in the order you double-click them; click **Done**.

- Choose **Start...** from the **Export** menu; type in a name for the exchange file and click **Save**.

- Open the Filevision file that will import this exchange file.

- Select **Import/Export Text...** and choose **Import** from the **File** menu; choose **ASCII** from the **Import** menu; click **Filevision IV** and click **Done**.

- Choose **Select Fields...** from the **Import** menu; double click the fields that match the fields you chose above in the order that you chose them; click **Done**.

- Choose **Start...** from the **Import** menu; select the exchange file you created above and click **Open**.

- When the process is complete, choose **Return to Filevision** from the **File** menu.

## How to import data from Excel

Microsoft Excel provides for importing and exporting data in Text, SYLK (Symbolic Link), and WKS (Lotus 1-2-3) formats. We describe exchanging Text files here; the process for exchanging SYLK files is similar.

- Select the Excel document that has the data you wish to import into Filevision IV and choose **Open** from the **Finder's File** Menu. This starts Excel.

- Choose **Save As...** from the **File** menu; click **Text**; type a name for the exchange file and click **Save**.

- When the process is complete, choose **Quit** from the **File** menu.

- Start the Filevision IV file that you want to import into; select **Import/ Export Text...** from the **File** menu, select **Import** from the Import/ Export File menu, select the Type that you want to import into from the **Types** menu, choose **ASCII** from the **Import** menu; click **Excel**; click **Done**.

- Choose **Select Fields...** from the **Import** menu; double-click the fields you want to receive data into in the same order as the exchange file.

Note: Excel includes all cells with data in them in the exchange file. A row in the spreadsheet corresponds to a Filevision IV record; a column corresponds to a Filevision IV field. Excel column numbers correspond directly to exchange file field numbers. Therefore, you may need to "move' Filevision IV fields around to match them up with the right columns. Remember, you can use Option-drag to move a field and you can leave exchange file fields "unused" for columns that you don't want to receive data into.

- Click **Done**.

- Choose **Start...** from the **Import** menu; select the exchange file you created with Excel and click **Open**.

- When the process is complete, choose **Return to Filevision** from the **File** menu.

## How to export data to Excel

- From the Filevision file that you are going to export data from, select **Import/Export Text...** from the **File** menu; choose **Export** from the **File** menu; choose **ASCII** from the **Export** menu; click **Excel**; click **Done**.

- Select the Type you want to export from the **Types** menu.

- Choose **Select Fields...** from the **Export** menu; double click the fields you want to include in the exchange file, in the order you want them to appear as columns in Excel. They will be appended to the list of fields in the exchange file in the order you double-click them; click **Done**.

- Choose **Start...** from the **Export** menu; type in a name for the exchange file and click **Save**.

- When the process is complete, choose **Quit** form the **File** menu.

- Start Excel; choose **Close All** from the **File** menu.

- Choose **Open** from the **File** menu; select the exchange file you created in Import/Export Text...; click **Open** and wait for the process to complete.

## How to import data from FileMaker

FileMaker provides for importing and exporting data in three formats that it calls "Text files (word processing)", "Text files (BASIC)", and "SYLK files". We describe exchanging "Text files (word processing)" here; the processes for the other formats are similar.

Note: FileMaker converts carriage-return characters found in the data to spaces when it created an exchange file,. It expects no carriage-return characters in data when it receives an exchange file. When you click FileMaker in the ASCII dialog, Import/Export Text... automatically sets the Convert CR to Space option on the Translate dialog. Do not change this choice.

- Select the FileMaker file that has the data you wish to import into Filevision IV and choose **Open** from the **Finder's File** menu. This starts FileMaker.

- Choose **Output to...** from the **File** menu. Type in a name for the exchange file and click **New**; click **Text file** (word processing).

- Click the fields you want to exchange in the order you want them to occur in the exchange file, and click »**Move**» for each field you select.

- Click **Output**. When the process is complete, choose **Quit** from the **File** menu.

- Start the Filevision IV file that you want to import into; select **Import/ Export Text...** from the **File** menu, select **Import** from the **Import/ Export File** menu, select the Type that you want to import into from the **Types** menu, choose **ASCII** from the **Import** menu; click **File-Maker**; click **Done**.

- Choose **Select Fields...** from the **Import** menu; double-click the fields you selected in creating the exchange file, in the same order you specified them in FileMaker; click **Done**.

- Choose **Start...** from the **Import** menu; select the exchange file you created in FileMaker and click **Open**.

- When the process is complete, choose **Return to Filevision** from the **File** menu.

## How to export data to FileMaker

- From the Filevision IV file that you are going to export data from, select **Import/Export Text...** from the **File** menu; choose **Export** from the **File** menu; choose **ASCII** from the **Export** menu; click **FileMaker**; click **Done**.

- Choose **Select fields...** from the **Export** menu; double-click the fields you want to include in the exchange file, in the order you want them to appear. They will be appended to the list of fields in the exchange file in the order you double-click them; click **Done**.

- Choose **Start...** from the **Export** menu; type in a name for the exchange file and click **Save**.

- When the process is complete, choose **Quit** from the **File** menu.

- Select the FileMaker file that you want to add the data to and choose **Open** from the **Finder's File** menu. This starts FileMaker.

- Choose **Input From...** from the **File** menu; select the exchange file you just created in Import/Export Text... above and click **Open**; click **Text file** (word processing).

- Click the fields you include in the exchange file, in the order you included them in Import/Export, and click **»Move»** for each field you select.

- Click **Input** and wait for the process to complete.

## How to import data from Helix

Odesta's Helix provides for importing and exporting data using a pair of processes it calls "loading" and "dumping". Here's how to use them:

- Select the Helix **Collection** document that has the data you wish to import into Filevision IV and choose **Open** from the **Finder's File** menu. This starts Helix.

- If necessary, choose **Show Collection** from the **File** menu.

- Select the **Relation** icon that has the data and choose **Open** from the **Icons** menu.

- Drag a **Template** icon from its well to the work area of the **Relation** window; name it; choose **Open** from the **Icons** menu; click the **Pen & Ink** switch and draw rectangles in the work area, one for each field you want to exchange. Next, click the **Field icon list** switch; drag a field from the field list to an empty rectangle for each field you want to exchange. The order of fields on the exchange file is left to right, top to bottom on the **Template**. Choose **Close** from the **Icons** menu.

- Drag a **Selection** icon from its well to the work area of the **Relation** window; name it; choose **Open** from the **Icons** menu; select the **Template** you just created above from the list in the **Templates** column; choose **Show Form** from the **Search** menu.

- Choose **Dump...** from the **File** menu; type in a name for the exchange file and click **Save**.

- When the process is complete, choose **Quit** from the **File** menu.

- Start the Filevision IV file that you want to import into; select **Import/ Export Text...** from the **File** menu, select **Import** from the Import/ Export **File** menu, select the Type that you want to import into from the **Types** menu, choose **ASCII** from the **Import** menu; click **Helix**; click **Done**.

- Choose **Select fields...** from the **Import** menu; double-click the fields you selected in creating the exchange file, in the same order you specified them in the Helix **Template**. They will be appended to the list of fields in the exchange file in the order you double-click them; click **Done**.

- Choose **Start...** from the **Import** menu; select the exchange file you created in Helix and click **Open**.

- When the process is complete, choose **Return to Filevision** from the **File** menu.

## How to export data to Helix

- From the Filevision IV file that you are going to export data from, select **Import/Export Text...** from the **File** menu; choose **Export** from the **File** menu; choose **ASCII** from the **Export** menu; click **Helix**; click **Done**.

- Choose **Select fields...** from the **Export** menu; double-click the fields you want to include in the exchange file; in the order you want them to appear. They will be appended to the list of fields in the exchange file in the order you double-click them; click **Done**.

- Choose **Start...** from the **Export** menu; type in a name for the exchange file and click **Save**.

- When the process is complete, choose **Quit** from the **File** menu.

- Select the Helix **Collection** document that you want to add the data to and choose **Open** from the **Finder's File** menu. This starts Helix.

- Create a **Template** and **Selection** icon in a manner similar to the one described just above. Remember, make sure the order of fields in the **Template** matches the order you defined in Import/Export Text.

- While the **Selection** icon is open and the form is showing, choose **Load...** from the **File** menu; select the exchange file you just created in Import/Export Text above.

- Click **Load Text** and wait for the process to complete.

## How to import data from MacWrite and other word processors

MacWrite and most other Macintosh word processors can save a document in either their own internal format or in TEXT format. They can also convert TEXT documents into their own format. You can use these features to exchange data with them. Here's how: (The following example shows MacWrite Version 4.6 command sequences.)

- Select the MacWrite document that has the data you wish to import into Filevision IV and choose **Open** from the **Finder's File** menu. This starts MacWrite.

Note: Ensure that the MacWrite data has "fields" separated by tab characters and "records: terminated by carriage-returns. You cannot include carriage-returns in the data except as "record separators.

- Choose **Save As...** from the **File** menu; click **Text only**; type a name for the exchange file and click **Save**; click **Paragraphs** for "**Should a Carriage return be put at the end of each line or only between paragraphs?**".

- When the process is complete, choose **Quit** from the **File** menu.

- Start the Filevision IV file that you want to import into; select **Import/ Export Text...** from the **File** menu, select **Import** from the Import/ Export **File** menu, select the Type that you want to import into from the **Types** menu, choose **ASCII** from the **Import** menu; click **MacWrite, etc.**; click **Done**.

- Choose **Select Fields...** from the **Import** menu; double-click the fields you included in the exchange file, in the order you placed them above; click **Done**.

- Choose **Start...** from the **Import** menu; select the exchange file you created in MacWrite and click **Open**.

- When the process is complete, choose **Return to Filevision** from the **File** menu.

**How to export data to MacWrite and other word processors**

- From the Filevision IV file that you are going to export data from, select **Import/Export Text...** from the **File** menu; choose **Export** from the **File** menu; choose **ASCII** from the **Export** menu; click **MacWrite, etc.**; click **Done**.

- Choose **Select Fields...** from the **Export** menu; double click the fields you want to include in the exchange file, in the order you want them to appear as columns in MacWrite (or other word processor). They will be appended to the list of fields in the exchange file in the order you double-click them; click **Done**.

- Choose **Start...** from the **Export** menu; type in a name for the exchange file and click **Save**.

- When the process is complete, choose **Quit** from the **File** menu.

- Select the exchange file and choose **Open** from the **File** menu. This starts MacWrite. If this is an older version of MacWrite, the exchange document will open as "Untitled". If this is a newer version, you will need to respond to **Paragraphs to Should a Carriage return signify a new paragraph or a line break**?, and acknowledge **OK** to **This document is being converted and will open as Untitled**.

Note: When the conversion to MacWrite internal format is complete, you will need to set the tab stops so that you can see where fields begin.

## How to import data from Omnis 3

Omnis 3 provides for importing and exporting data in ASCII, DIF and SYLK formats. We will describe exchanging delimited ASCII files here; the processes for the other formats are similar.

- Start the Omnis 3 Utilities application; click **Select Library**; select the library containing the data you want to import into Filevision IV and click Open.

- Choose **Export data** from the **Utilities** menu and click **Delimited**.

- If you do not remember the field names, choose **List Field names** from the **Utilities** menu and note the names of the fields you want to exchange. When you are done, click the **Close Box**.

- Using the **Tab** key or mouse to select fields, enter the field names in the order you want them to appear in the exchange file; click **Start**; type a name for the exchange file and click **OK**.

- When the process ins complete, click **OK**; then choose **Quit** from the **File** menu.

- Start the Filevision IV file that you want to import into; select **Import/Export Text...** from the **File** menu, select **Import** from the Import/Export **File** menu, select the Type that you want to import into from the **Types** menu, choose **ASCII** from the **Import** menu; click **Omnis 3**; click **Done**.

- Choose **Select Fields...** from the Import menu; double-click the fields you included in the exchange file, in the order you placed them above; click **Done**.

- Choose **Start...** from the Import menu; select the exchange file you created in Omnis 3 and click **Open**.

- When the process is complete, choose **Return to Filevision** from the **File** menu.

## How to export data to Omnis 3

- From the Filevision IV file that you are going to export data from, select **Import/Export Text...** from the **File** menu; choose **Export** from the **File** menu; choose **ASCII** from the **Export** menu; click **Omnis 3**; click **Done**.

- Choose **Select Fields...** from the **Export** menu; double-click the fields you want to include in the exchange file, in the order you want them to appear. They will be appended to the list of fields in the exchange file in the order you double-click them; click **Done**.

- Choose **Start...** from the **Export** menu; type in a name for the exchange file and click **Save**.

- When the process is complete, choose **Quit** from the **File** menu

- Start the Omnis 3 Utilities application; click **Select Library**; select the library containing the data you want to add and click **Open**.

- Choose **Import data** from the **Utilities** menu; click **Select File**; select the exchange file you just created and click **Open**. The display should indicate that the file is "Delimited".

- Using the **Tab** key or mouse to select fields, enter the field names in the order they appear in the exchange file; click **Start** to begin the process.

- When the process is complete, click **OK** then choose **Quit** from the **File** menu.

## How to import data from OverVUE 2.0

OverVUE 2.0 provides a full set of tools for receiving data from other programs and a single tool for sending data back to them. To import data from OverVUE, you need to use its Print Report to Disk function. Here's how to do it:

- Select the OverVUE document that has the data you wish to import into Filevision IV and choose **Open** from the Finder's **File** menu. This starts OverVUE.

- Choose a **Blank Report** format from the **Print** menu and choose **Edit Report Template** from the **Print** menu; choose **Microsoft File** from the **Special** menu. (This specifies the correct set of field and record separators and field delimiter options.)

- Use the size box to expand the work area and then drag the fields you don't want to appear in the exchange file down toward the bottom. Drag the other fields around in the window to reflect the order you want in the exchange file. Use **Cut, Copy**, and **Paste** on the **EditText** menu to place tab characters (shown as "~" by OverVUE) between adjacent fields. Use the size box to shorten the report to one line, hiding those fields that you don't want to appear in the exchange file.

- Choose **Page Length** from the **Layout** menu; type in a length of **0** lines and click **OK**; choose **Report Title** from the **Template** menu; type in a title for the format and click **OK**; choose **Quit** from the **Template** menu and click **Yes** to **Do you want to save changes to 'ReportName'?**.

- Choose **Print Report On Disk** from the **Print** menu. OverVUE will create a file with a name that is the same as the OverVUE document with the word "report" appended to the end.

- When the process is complete, choose **Quit** from the **File** menu.

- Start the Filevision IV file that you want to import into; select **Import/Export Text...** from the **File** menu, select **Import** from the Import/Export **File** menu, select the Type that you want to import into from the **Types** menu, choose **ASCII** from the **Import** menu; click **OverVUE**; click **Done**.

- Choose **Select Fields...** from the **Import** menu; double-click the fields you included in the exchange file, in the order you placed them in the report above; click **Done**.

- Choose **Start...** from the Import menu; select the exchange file you created in OverVUE and click **Open**.

- When the process is complete, choose **Return to Filevision** from the **File** menu.

**How to export data to OverVUE 2.0**

- From the Filevision IV file that you are going to export data from, select **Import/Export Text...** from the **File** menu; choose **Export** from the **File** menu; choose **ASCII** from the **Export** menu; click **OverVUE**; click **Done**.

- Choose **Select Fields...** from the **Export** menu; double-click the fields you want to include in the exchange file, in the order you want them to appear. They will be appended to the list of fields in the exchange file in the order you double-click them; click **Done**.

- Choose **Start...** from the **Export** menu; type in a name for the exchange file and click **Save**.

- When the process is complete, choose **Quit** from the **File** menu.

- Start OverVUE; choose **Close** from the **File** menu; choose **Import...** from the **File** menu; select the file you just created in Import/Export Text...; click **Text**; click **Tab between fields**; click **Open** and wait for the process to complete.

# Appendix G:
# How to enter Character Codes in Import/Export Text

In several of the Import/Export Text... dialogs you enter ASCII character codes to set parameters for processing your data. Here's how to do it.

- Enter the decimal value equivalent to the ASCII character. These values are shown in the following, ASCII Character Codes, next page. For instance, to enter the character code for Tab, enter 9. You can always use this method to enter character codes.

- If the decimal value of the character code is between 1 and 26, enter caret ("^") followed by letter "A" through "Z" or "a" through "z" respectively. For instance, to enter the character code for Tab, enter ^I or ^i. This is an alternative to entering the decimal value.

- If the character is a normal, printable character, except one of the digits 0 through 9, just enter the single character itself. For instance, to enter a comma (","), enter the character ",". You can't enter a single digit this way because it would be interpreted as a decimal value of a character code. You can't enter either Space or Option - Space because you can't see these characters. And you can't enter those characters that are shown as "boxes" when you type them because they all look the same.

Appendix G shows all options for each character that you can enter and shows which one is the preferred form. You can enter a code using any of the optional forms available for it. When Import/Export Text... shows you the value of a character code, it uses the "preferred" form.

# ASCII Character Codes

**Enter as (column 1)** is the preferred method of entering the character code. Columns 2 and 3, if shown, are also accepted.

| Decimal Code | Character | Enter as 1 | 2 | 3 | Decimal Code | Character | Enter as 1 | 2 |
|---|---|---|---|---|---|---|---|---|
| 0 | Null | 0 | | | 32 | Space | 32 | |
| 1 | SOH | ^a | ^A | 1 | 33 | ! | ! | 33 |
| 2 | STX | ^b | ^B | 2 | 34 | " | " | 34 |
| 3 | ETX | ^c | ^C | 3 | 35 | # | # | 35 |
| 4 | EOT | ^d | ^D | 4 | 36 | $ | $ | 36 |
| 5 | ENQ | ^e | ^E | 5 | 37 | % | % | 37 |
| 6 | ACK | ^f | ^F | 6 | 38 | & | & | 38 |
| 7 | BEL | ^g | ^G | 7 | 39 | ' | ' | 39 |
| 8 | BS | ^h | ^H | 8 | 40 | ( | ( | 40 |
| 9 | Tab | ^i | ^I | 9 | 41 | ) | ) | 41 |
| 10 | Line-feed | ^j | ^J | 10 | 42 | * | * | 42 |
| 11 | VT | ^k | ^K | 11 | 43 | + | + | 43 |
| 12 | Form-feed | ^l | ^L | 12 | 44 | , | , | 44* |
| 13 | Return | ^m | ^M | 13 | 45 | - | - | 45* |
| 14 | SO | ^n | ^N | 14 | 46 | . | . | 46 |
| 15 | SI | ^o | ^O | 15 | 47 | / | / | 47 |
| 16 | DLE | ^p | ^P | 16 | 48 | 0 | 48 | |
| 17 | DC1 | ^q | ^Q | 17 | 49 | 1 | 49 | |
| 18 | DC2 | ^r | ^R | 18 | 50 | 2 | 50 | |
| 19 | DC3 | ^s | ^S | 19 | 51 | 3 | 51 | |
| 20 | DC4 | ^t | ^T | 20 | 52 | 4 | 52 | |
| 21 | NAK | ^u | ^U | 21 | 53 | 5 | 53 | |
| 22 | SYN | ^v | ^V | 22 | 54 | 6 | 54 | |
| 23 | ETB | ^w | ^W | 23 | 55 | 7 | 55 | |
| 24 | CAN | ^x | ^X | 24 | 56 | 8 | 56 | |
| 25 | EM | ^y | ^Y | 25 | 57 | 9 | 57 | |
| 26 | SUB | ^z | ^Z | 26 | 58 | : | : | 58 |
| 27 | Escape | 27 | | | 59 | ; | ; | 59 |
| 28 | FS | 28 | | | 60 | < | < | 60 |
| 29 | GS | 29 | | | 61 | = | = | 61 |
| 30 | RS | 30 | | | 62 | > | > | 62 |
| 31 | US | 31 | | | 63 | ? | ? | 63 |

*NOTE: Comma ("," ) and minus ("-") have special meaning when entering **Ignore these characters** on the secondary ASCII dialog. Use **44** or **45**, respectively, for these codes there.

| Decimal Code | Character | Enter as 1 | 2 | 3 | Decimal Code | Character | Enter as 1 | 2 |
|---|---|---|---|---|---|---|---|---|
| 64 | @ | @ | 64 | | 96 | ` | ` | 96 |
| 65 | A | **A** | 65 | | 97 | a | **a** | 97 |
| 66 | B | **B** | 66 | | 98 | b | **b** | 98 |
| 67 | C | **C** | 67 | | 99 | c | **c** | 99 |
| 68 | D | **D** | 68 | | 100 | d | **d** | 100 |
| 69 | E | **E** | 69 | | 101 | e | **e** | 101 |
| 70 | F | **F** | 70 | | 102 | f | **f** | 102 |
| 71 | G | **G** | 71 | | 103 | g | **g** | 103 |
| 72 | H | **H** | 72 | | 104 | h | **h** | 104 |
| 73 | I | **I** | 73 | | 105 | i | **i** | 105 |
| 74 | J | **J** | 74 | | 106 | j | **j** | 106 |
| 75 | K | **K** | 75 | | 107 | k | **k** | 107 |
| 76 | L | **L** | 76 | | 108 | l | **l** | 108 |
| 77 | M | **M** | 77 | | 109 | m | **m** | 109 |
| 78 | N | **N** | 78 | | 110 | n | **n** | 110 |
| 79 | O | **O** | 79 | | 111 | o | **o** | 111 |
| 80 | P | **P** | 80 | | 112 | p | **p** | 112 |
| 81 | Q | **Q** | 81 | | 113 | q | **q** | 113 |
| 82 | R | **R** | 82 | | 114 | r | **r** | 114 |
| 83 | S | **S** | 83 | | 115 | s | **s** | 115 |
| 84 | T | **T** | 84 | | 116 | t | **t** | 116 |
| 85 | U | **U** | 85 | | 117 | u | **u** | 117 |
| 86 | V | **V** | 86 | | 118 | v | **v** | 118 |
| 87 | W | **W** | 87 | | 119 | w | **w** | 119 |
| 88 | X | **X** | 88 | | 120 | x | **x** | 120 |
| 89 | Y | **Y** | 89 | | 121 | y | **y** | 121 |
| 90 | Z | **Z** | 90 | | 122 | z | **z** | 122 |
| 91 | [ | **[** | 91 | | 123 | { | **{** | 123 |
| 92 | \ | \ | 92 | | 124 | | | | | 124 |
| 93 | ] | **]** | 93 | | 125 | } | **}** | 125 |
| 94 | ^ | **^** | 94 | | 126 | ~ | ~ | 126 |
| 95 | _ | _ | 95 | | 127 | Delete | **127** | |

| Decimal Code | Character | Enter as 1 | 2 | 3 |   | Decimal Code | Character | Enter as 1 | 2 |
|---|---|---|---|---|---|---|---|---|---|
| 128 | Ä | Ä | 128 |   |   | 160 | † | † | 160 |
| 129 | Å | Å | 129 |   |   | 161 | ° | ° | 161 |
| 130 | Ç | Ç | 130 |   |   | 162 | ¢ | ¢ | 162 |
| 131 | É | É | 131 |   |   | 163 | £ | £ | 163 |
| 132 | Ñ | Ñ | 132 |   |   | 164 | § | § | 164 |
| 133 | Ö | Ö | 133 |   |   | 165 | • | • | 165 |
| 134 | Ü | Ü | 134 |   |   | 166 | ¶ | ¶ | 166 |
| 135 | á | á | 135 |   |   | 167 | ß | ß | 167 |
| 136 | à | à | 136 |   |   | 168 | ® | ® | 168 |
| 137 | â | â | 137 |   |   | 169 | © | © | 169 |
| 138 | ä | ä | 138 |   |   | 170 | TM | TM | 170 |
| 139 | ã | ã | 139 |   |   | 171 | ´ | ´ | 171 |
| 140 | å | å | 140 |   |   | 172 | ¨ | ¨ | 172 |
| 141 | ç | ç | 141 |   |   | 173 | ≠ | ≠ | 173 |
| 142 | é | é | 142 |   |   | 174 | Æ | Æ | 174 |
| 143 | è | è | 143 |   |   | 175 | Ø | Ø | 175 |
| 144 | ê | ê | 144 |   |   | 176 | ∞ | ∞ | 176 |
| 145 | ë | ë | 145 |   |   | 177 | ± | ± | 177 |
| 146 | ì | ì | 146 |   |   | 178 | ≤ | ≤ | 178 |
| 147 | í | í | 147 |   |   | 179 | ≥ | ≥ | 179 |
| 148 | î | î | 148 |   |   | 180 | ¥ | ¥ | 180 |
| 149 | ï | ï | 149 |   |   | 181 | μ | μ | 181 |
| 150 | ñ | ñ | 150 |   |   | 182 | ∂ | ∂ | 182 |
| 151 | ò | ò | 151 |   |   | 183 | Σ | Σ | 183 |
| 152 | ó | ó | 152 |   |   | 184 | Π | Π | 184 |
| 153 | ô | ô | 153 |   |   | 185 | π | π | 185 |
| 154 | ö | ö | 154 |   |   | 186 | ∫ | ∫ | 186 |
| 155 | õ | õ | 155 |   |   | 187 | ª | ª | 187 |
| 156 | ù | ù | 156 |   |   | 188 | º | º | 188 |
| 157 | ú | ú | 157 |   |   | 189 | Ω | Ω | 189 |
| 158 | û | û | 158 |   |   | 190 | æ | æ | 190 |
| 159 | ü | ü | 159 |   |   | 191 | ø | ø | 191 |

| Decimal Code | Character | Enter as 1 | 2 | 3 | | Decimal Code | Character | Enter as 1 | 2 |
|---|---|---|---|---|---|---|---|---|---|
| 192 | ¿ | ¿ | 192 | | | 224 | None | 224 | |
| 193 | ¡ | ¡ | 193 | | | 225 | None | 225 | |
| 194 | ¬ | ¬ | 194 | | | 226 | None | 226 | |
| 195 | √ | √ | 195 | | | 227 | None | 227 | |
| 196 | ƒ | ƒ | 196 | | | 228 | None | 228 | |
| 197 | ≈ | ≈ | 197 | | | 229 | None | 229 | |
| 198 | ∆ | ∆ | 198 | | | 230 | None | 230 | |
| 199 | « | « | 199 | | | 231 | None | 231 | |
| 200 | » | » | 200 | | | 232 | None | 232 | |
| 201 | … | … | 201 | | | 233 | None | 233 | |
| 202 | Option-space | | 202 | | | 234 | None | 234 | |
| 203 | À | À | 203 | | | 235 | None | 235 | |
| 204 | Ã | Ã | 204 | | | 236 | None | 236 | |
| 205 | Õ | Õ | 205 | | | 237 | None | 237 | |
| 206 | Œ | Œ | 206 | | | 238 | None | 238 | |
| 207 | œ | œ | 207 | | | 239 | None | 239 | |
| 208 | – | – | 208 | | | 240 | None | 240 | |
| 209 | — | — | 209 | | | 241 | None | 241 | |
| 210 | " | " | 210 | | | 242 | None | 242 | |
| 211 | " | " | 211 | | | 243 | None | 243 | |
| 212 | ' | ' | 212 | | | 244 | None | 244 | |
| 213 | ' | ' | 213 | | | 245 | None | 245 | |
| 214 | ÷ | ÷ | 214 | | | 246 | None | 246 | |
| 215 | ◊ | ◊ | 215 | | | 247 | None | 247 | |
| 216 | ÿ | ÿ | 216 | | | 248 | None | 248 | |
| 217 | None | 217 | | | | 249 | None | 249 | |
| 218 | None | 218 | | | | 250 | None | 250 | |
| 219 | None | 219 | | | | 251 | None | 251 | |
| 220 | None | 220 | | | | 252 | None | 252 | |
| 221 | None | 221 | | | | 253 | None | 253 | |
| 222 | None | 222 | | | | 254 | None | 254 | |
| 223 | None | 223 | | | | 255 | None | 255 | |

# Glossary

**=**
equal to

**<=** ≤
less than or equal to

**>=** ≥
greater than or equal to

**- -**
between

**^**
Look for exact match at beginning of field.

**..** (two periods)
Matches any characters.

**@**
Matches any single character.

**&p**
Prints the page number of a Report or Form.

**&D**
Prints the system date in long form (Thursday, February 12, 1989).

**&d**
Prints the system date in short form yy/mm/dd (89/02/12).

**&T**
Prints the system time as 07:25:17 (with seconds).

**&t**
Prints the system time as 07:25 (no seconds).

**&&**
Prints an ampersand character.

**Access**
The menu that describes Filevision's most comprehensive manipulation of files: sorting, finding, highlighting, hiding, showing, ignoring and activating.

**activate**
To make ignored objects selectable, and to make hidden objects visible and selectable.

**align left**
**align middle**
**align right**
Settings to center, right-justify or left-justify text in fields.

**annotation field**
An annotation field on the type layout shows in every record whatever is typed
or pasted into it when the type layout is designed or changed (with Change
layout ... on the Types menu). You can't change the contents of an annotation
field from the Info display. On a print format, an annotation field has the same
properties and others. It can print the system time or date, the page number, or
the contents of a data field.

**arc tool**
A drawing tool used to draw filled and unfilled pie shapes and arcs.

**arrow**
The selection tool—its technical name is the pointer.

**Background**
The name of the type that all Filevision files start out with. You can eliminate or
rename it; it has no special qualities.

**bit map**
a term used to describe the method used to represent a picture in MacPaint type
programs. Usually containing one level of information per bit, i.e. a black
screen bit or a white screen bit. See pixel map.

**black**
A drawing page display mode selected from the Preferences dialog that shows
selected objects by drawing a black frame around the object.

**body**
The part of a pop-up that's visible only when the button has been clicked.

**button**
1.  A picture of a push button used in Macintosh dialog boxes to initiate or
    cancel an action.
2.  The part of a pop-up that's always visible.

**Cancel**
A button that always lets you exit a function without carrying it out. It usually
undoes any portion of the chosen action up to the time Cancel was clicked.

**caret**
1.  The character used to limit "finds" to the first word in the field.
2.  The character that's printed when you type Shift/6 (^).

**character**
Anything that can be typed, including tabs, carriage returns, spaces, and odd
characters typed using the Option key.

### clear

To delete a selected object without copying it onto the Clipboard. It leaves whatever is on the Clipboard intact.

### Clipboard

A temporary holding place. Any selected object that's cut disappears but is copied onto the Clipboard. Any selected object that's copied doesn't disappear but is also copied onto the Clipboard. The object on the Clipboard is replaced by the next object that's cut or copied.

### Command (⌘) key

The key just to the left of the space bar. It has a cloverleaf pattern on it.

### comparison operator

The equal to (=), less than or equal to ( ≤ ), greater than or equal to ( ≥ ), or between (- -) signs used in Highlight...

### condition

The specified highlighting condition.

### constrain

Another name for the Option key when it's used in conjunction with drawing tools to keep angles perpendicular, ovals circle, etc.

### data field

A placeholder for information. It's always the same size and in the same place in each record: for instance, the Name field. A data field performs the same purpose as a place, for example, on a patient record for the patient's last name or Social Security number. Data fields have names, which can only be changed while a Type layout is being designed (with Add Type ... on the Types menu or changed (with Change Layout ... on the Types menu), and a place for information. Fields can hold text, numbers, or pictures.

### default

A preset choice that can be replaced by one of your own. For instance, Background is a default type that a new Filevision file begins with.

### deselect

To indicate that an item is no longer subject to the current action. For instance, clicking on a new tool deselects the old one you were using. You can always deselect on the Drawing display by clicking the pointer tool.

### display

What you see on the Macintosh screen.

### Done

A button used to initiate or confirm an action.

### drag

To point to an item, press the mouse button, and pull the item while continuing to hold the mouse button down. You release the mouse button only when the object is where you want it.

**Drawing**
The display that shows the graphic objects in a file (if it has any graphic objects).

**edit**
1. To cut, copy, paste, or clear an object.
2. To create a new symbol or shade.
3. To change a Print Layout.

**editor, shade** — see **shade editor**

**editor, symbol** — see **symbol editor**

**Encapsulated PostScript Format (EPSF)**
A high resolution graphic format generated from a PostScript illustration program or scanner.

**enter**
To type in information.

**Enter**
The Enter key on the Macintosh keyboard

**error message**
A dialog box that notifies you if Filevision is unable to fulfill an action you've requested. For instance, you'll get an error message if you try to add information to a file when the disk is full.

**export**
1. The act of saving a graphic object(s) via Export Graphics to a separate file.
2. The act of creating an intermediate text file with Import/Export Text.

**field**
See **annotation field** or **data field**.

**field name**
The name of an area where information is entered in a record.

**file**
The place on a disk where Filevision keeps the information you work with.

**font**
The shape of the letters in an alphabet.

**footer**
Information that appears on the bottom of each page of printed output.

**Form**
A print format that provides printed output that is formatted similarly to the way that the Info page is laid out.

**freehand tool**
The drawing tool that works like a pen.

**glass**(on the shade editor)
A shade that's invisible, but can be clicked. It differs from the None shade in that None can't be clicked; you must click the surrounding line.

**graphic**
An object drawn on the Filevision Drawing page.

**grid**
A reference for drawing and placement of drawing page objects.

**group**
1.  To cause the selected graphics to behave as if they were a single object.
2.  When chosen from the Edit menu while the Command and Shift keys are pressed, Group turns the selected objects into a pop-up.

**grouped graphic**
A number of graphics that can be selected, and generally behave, as if they were a single graphic.

**guidelines**
Vertical and horizontal single lines that are dragged from the rulers for aligning objects on the Drawing page.

**handles**
The tiny black squares that appear around an object or field when it's selected. Handles are used to move or stretch objects or fields.

**header**
Information that appears at the top of each page of printed output in the Print Layout window.

**Hide**
To make an object invisible on the Drawing page.

**highlight**
To create a subset of objects using conditional operators. Graphic objects are emphasized on the display.

**I-beam**
The pointer that shows where text can be entered.

**ignore**
To make a graphic object unselectable.

**import**
1.  The act of loading a graphic object(s) via Import Graphics from a separate file.
2.  The act of reading text data from an intermediate text file with Import/ Export Text.

**Info page**
The view of an object's record.

**Label**
A print layout used to produce mailing or similar labels.

**link**
A file that's opened automatically, taking the place of the file you're currently using. Links are handy to organize large amounts of information and an especially convenient way to move among frequently-used files.

**link field**
The field in which you enter a name for the link file. It is always named Link; you cannot rename it.

**lock**
To make a part or all of a file unalterable. A file is locked under these conditions:
1. If any method of emphasis other than handles is chosen from the Preferences... dialog in the Edit menu. This only removes the drawing tools; records can still be edited.
2. If the file is locked from the Finder using Get Info.
3. If the disk is locked using the write-protect tab.

**page miniature** (mini page)
The icon at the lower left of the Drawing page window. The page miniature represents the the current drawing area on which a Filevision drawing is situated. The white square within it is called the "page scroller" (see below).

**page scroller** (mini page scroller)
The white square within the page miniature. It shows your current viewing window of the drawing area. You can drag the scroller to reveal any area on your drawing page.

**palette, symbol** — see **symbol palette**

**paste**
To copy the contents of the Clipboard onto the selected area.

**PICT**
A graphic format that represents all elements of the graphic as separately defined objects.

**pixel map**
The multi level graphic representation of screen pixels with grey scale or extended color capability. See also bit map.

**point size**
The size of text in 1/72s of an inch.

**pointer**
The tool used for selection in Macintosh applications. You can choose it explicitly anytime by selecting it from the toolbox.

## polygon tool
A drawing tool used for shapes that have straight but not necessarily perpendicular sides.

## pop-up
A grouped graphic whose body appears only while the button is selected. The button is the part of the graphic that's always visible.

## print format
The arrangement of fields in a format used to print either forms, reports, or labels. It does not affect the type layout, but all data fields come from the Type layout. Annotation fields can be added to the print format. A print format must be created before Reports, Forms, or Labels can be printed.

## Print Library
The list of existing print formats. It allows you to design or edit print formats.

## proportional stretch
To constrain horizontal and vertical stretching so that they occur proportionately.

## rank
A range of relative, rather than specified, values—for example, the top 9 states in population, as opposed to the states with populations between 30 million and 8 million.

## record
The place where information about an object is kept. All records of a Type have the same layout of fields.

## Report
A printed listing of information from any single Type's data in columnar format.

## Return To...
Automatically closes the current file and reopens the last one.

## Revert
1.  To restore a record to the information it contained before you began editing it.
2.  To restore a symbol or shade to its state before you began editing it.

## rounded rectangle tool
A drawing implement that produces rectangles and squares with rounded corners.

## Save
Saves the current file under the current file name.

## Save As...
Copies the current file under a different name.

**screen**
The Macintosh monitor.

**scroll**
To move up or down a list of field names, or to move the visible portion of a record up and down.

**scroll bar**
The rectangular bar along the right or bottom of a display that lets you move the visible portion vertically or horizontally.

**scroller**
A pair of up and down arrows you click in order to choose a condition from a list of possible ones. Be careful not to confuse scroller with page scroller, above.

**select**
To indicate that an item is the one that's currently being used.

**selection information area**
Information at bottom of the Drawing window that identifies the currently selected Type and the contents of its sort field.

**Shade Editor**
A tool used to create new shades for use in the backgrounds of arcs, rectangles, ovals, polygons and the Info page.

**shade palette**
The selection of 40 currently available shades on the Shade Editor and Shades menu.

**Show**
To render an object visible on the Drawing display.

**sort**
To order records according to the contents of fields. The default sort field is Name, or whatever you've labeled the first field in a Type layout.

**sort column**
A field used to sort records for printed output.

**sort field**
Filevision orders objects according to the contents of a field called a sort field. The default sort field is Name, or whatever you've labeled the first field in a Type layout. The object named Abel would be the first in a file that consisted of only the objects Abel, Baker and Charlie. But if you changed the sort field (using Sort By... from the Access menu) to Zip code, then the records would be reordered according to the numeric values in the Zip code fields.

**Symbol Editor**
A tool used to alter the symbols used in a Filevision file.

**symbol palette**
The selection of 40 currently available symbols on the Symbol Editor and Symbol menu.

**system disk**
A disk with the system files "Finder" and "System" on it.

**toolbox**
The floating window on the Drawing page containing all of the tools necessary for drawing objects, entering text and symbols.

**tracking**
Tracks the pointer or current toolbox tool's current screen position in horizontal and vertical increments of one screen pixel. Also refers to the "ghost" image produced in the rulers to indicate the current position of the cursor.

**Type**
The classification by which objects are grouped on both the Drawing page and the Info page. Type also defines the layers of the Drawing page.

**Type layout**
The arrangement of fields shared by all records of a Type.

**ungroup**
To return the individual identities to the selected objects. Any group of objects can be ungrouped.

**version 1 PICT**
The graphic format used in pre Macintosh II. Colors are limited to 8. Uses QuickDraw in drawing the PICT graphic.

**version 2 PICT**
The graphic format used for the Macintosh II defining colors with a palette of 256. Uses the newer Color QuickDraw in drawing the PICT graphic.

**work area**
The portion of a Filevision display that can be typed or drawn on.

**working copy**
A copy of any of the distribution disks.

# Index