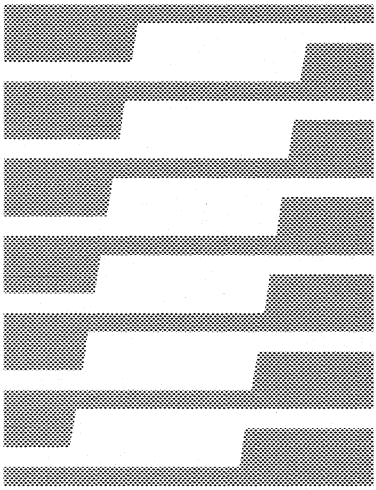

Interleaf Publishing System

Training Manual

Sun / Release 2.5

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About This Book

This is the *Training Manual* for the Interleaf publishing software, produced by Interleaf, Inc. of Cambridge, Massachusetts. The manual itself was produced using this software. It should be read by anyone requiring a step-by-step introduction to the Interleaf publishing software.

The Interleaf Publishing Software

The Interleaf publishing software gives you control over how your documents look when they are printed. Using a powerful structured editing system, you can create documents that use multiple type fonts, have complex formats, and contain data-driven charts and intricate diagrams.

Furthermore, you will not have to print your documents repeatedly to know what the finished copy will look like, because as you work, you see them on the screen as they will look when printed.

The Manual

The laminated tabs divide this manual into 5 sections and an index. Each of the first five sections contains conceptually related chapters.

The first section, **Getting Started** (chapters 1 through 5), introduces you to the publishing software. While editing the sample document provided, you become familiar with the environment of the publishing software and the tools and methods you need to create and edit text, graphics, and data-driven charts.

In the second section, **Creating Documents** (chapters 6 through 8), you apply the basics toward creating your own document. You learn to take advantage of the software's "building block" document structure and shape your documents with ease.

Keyboard Control (chapters 9 and 10) shows you ways to use the keyboard to make your work easier, including "shortcuts" for some of the procedures you learned in previous sections and searching for and replacing text in documents.

In the **Page Layout** section (chapters 11 through 13), you learn techniques for making sure the pages of your documents are consistently eye-pleasing. You will use software features that al-

low you to set tabs, control page breaks, divide a document into multiple columns, and create headers and footers.

Once you know how to create and edit documents, you will need to know how to organize them. You will learn to use the software's visually oriented document storage and retrieval system in the **Desktop Manager** section (Chapters 14 and 15).

The last chapter in this section provides exercises to let you practice with your own document—a sample you choose from the type of documents you will be creating and editing with the publishing software—to learn some advanced techniques for using the publishing software.

How to Use the Manual

You should proceed through the manual chapter by chapter. Most of the information is presented cumulatively. Since the exercises generally alter the sample documents, some will not work if previous exercises were not done according to the instructions.

As you work through the manual, you may find it helpful to read through an entire exercise first. This way you will know what you want to accomplish overall, before starting the individual steps.

Take your time becoming familiar with the software. When you are ready for additional information that will make the software even more useful to you, turn to the *Reference Manual* where every feature is presented in detail.

Graphic Aids in the Training Manual

Graphics are used throughout this manual. Instead of numbering the instruction steps, we have put graphics in the margin that show you what you are going to be doing as you execute each instruction. For example, the usual instructions might look like this:

1. Move the mouse cursor.
2. Click the left mouse button.
3. Hold down the middle mouse button.
4. Release the button.
5. Type no.

In our instructions for the same operation, the graphics reinforce the meaning of the words:

 Move the mouse cursor.

 Click the **left** mouse button.

 Hold down the **middle** mouse button.

 Release the button.

 Type **no**.

Some of the graphic aids represent objects you can see on your screen. For example,  represents a *document* on your **desktop**. Others represent actions you perform using the mouse or the keyboard. These symbols are explained below.

 click the **left** mouse button.

 click the **middle** mouse button.

 click the **right** mouse button.

 hold down the **left** mouse button.

 hold down the **middle** mouse button.

 hold down the **right** mouse button.

 release whichever mouse button you are holding down.

 represents the mouse.

 indicates that you should move either the mouse—as in —or the mouse cursor— as in .

 indicates that you need to use the keyboard, rather than the mouse, for this action.

 means that you are being asked to do something that involves a series of actions you have already learned.

The Binder

The *Training Manual* is in a small easel binder designed to conserve space. *Figure A* shows the binder opened out flat. *Figure B* shows it with the spine folded back. *Figure C* shows the binder with its spine folded back and the cover used as an easel so that the binder will stand up on your work surface.

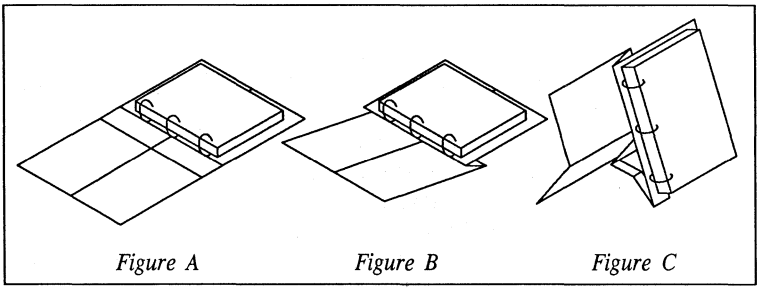

Figure A *Figure B* *Figure C*

Related Publications

For additional information on using the Interleaf publishing software, see the following Interleaf manuals:

- *The Reference Manual, Vol. 1* provides detailed instructions for document preparation and desktop management aspects of the publishing software. The Appendix contains essential information about selected features of the Release 2.5 publishing software.
- *The Reference Manual, Vol. 2* contains information about the graphics capabilities of the publishing software, including information about the optional features for image handling and typesetting.
- *Installation and Administration* is a reference guide for system administrators. It provides instructions for installation of the publishing software. It also gives information about UNIX and about maintaining and troubleshooting the system.
- *Data Transfer* gives information about transferring external files, both text and plotter files, into the publishing software. It also provides information about filters available for the software.

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Chapter 1

Getting Started

This chapter introduces the environment of the publishing system—the workstation, UNIX, and the Interleaf desktop—and some of the tools and methods you will be using, including the mouse, selection, and menus.

As part of the introduction, you will gain access to the publishing software and use it to print a document called *pingo*.

The Workstation

The part of the Interleaf publishing system you see first is your **workstation**. The workstation consists of the monitor, the keyboard, the mouse, and the mousepad. It is capable of running a wide range of application programs, and it may be a standalone computer or it may be connected to other similar workstations in a **network**.

UNIX

Every computer has an **operating system**, which is a program that helps the computer run other programs. The name of your workstation's operating system is UNIX. To complete the exercises in the *Training Manual,* you need only know how to display a UNIX prompt, as described in the following section.

Gaining Access to the Publishing Software

Right now, the screen on your workstation probably displays a moving pattern, called a **screen saver**. Before you can gain access to the publishing software, you must display the UNIX prompt by interrupting the screen saver and entering your login name at the UNIX login prompt.

The login prompt consists of the name of your workstation, followed by the word "login:". For instance, if your workstation is named *roscoe*, your login prompt would be:

```
roscoe login:
```

The UNIX prompt is normally your workstation's name followed by a percent sign. For instance:

```
roscoe%
```

To display a UNIX prompt:

- Hold down the CTRL key and press **c**.
  You will see a login prompt.
- Type your login name.
- Press the **RETURN** key.
  You will see the UNIX prompt.

To gain access to the publishing software:

- Type **ops** and then press the **RETURN** key.
  You will see a copyright notice on your screen.
- Press the **RETURN** key again to continue.

In a few seconds, you will see your Interleaf **desktop**, the starting place for all your document creating and editing sessions.

The Interleaf Desktop

The **desktop**, shown in miniature in Figure 1-1, is your interface to all of the Interleaf document preparation features.

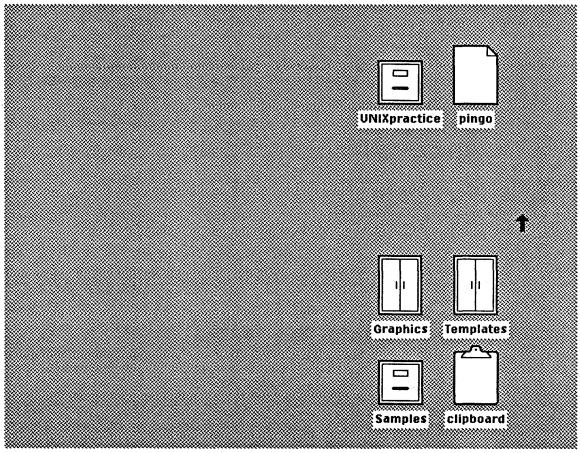


Figure 1-1. The Interleaf publishing software desktop

On the right side of the desktop are six **icons**, graphic representations of objects. Each **desktop icon** provides access to a document or a collection of documents (except for the *clipboard*, which is explained later).

For instance, as you may have guessed, the icon in the top corner represents the practice document *pingo*. To access *pingo* (or any document) you point at the icon and click a button.

Eventually, you will organize the documents on your desktop using these and other icons, including the ones shown in Figure 1-2.

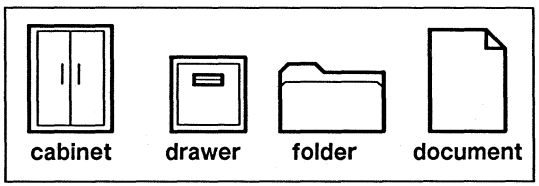


Figure 1-2. Icons on the desktop

Each of these icons is part of an ordered system for storing your documents. For example, you may want to store several related documents in a folder 🗀. When you have many documents in several categories, you may want to create a folder for each

category of documents, and then file all of the folders in a drawer.

The Mouse and the Mouse Cursor

The arrow you see on your desktop (↑) is called the **mouse cursor**. You may have discovered already that the mouse cursor moves when you move the 3-button optical **mouse** on its pad (Figure 1-3).

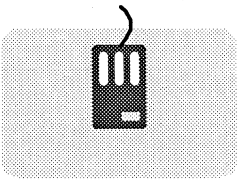


Figure 1-3. The mouse and the mouse pad

If you turn the mouse over, you will see a red light shining from inside. This red light must shine directly on the pad. The mouse works properly only when positioned flat on the pad, with the sides of the mouse approximately parallel to the sides of the pad, as shown in Figure 1-3.

To practice using the mouse:

- Move the mouse in a circular pattern on the mouse pad.
  You will notice that the mouse cursor follows a similar pattern on your desktop.
- Take the mouse off its pad, and circle it in the air.
  Notice that the mouse cursor on your desktop *does not move.*
- Move the mouse on the pad so that the cursor ↑ goes to the top left-hand corner of the *desktop.*
- Move the mouse on the pad so that the cursor goes onto the clipboard icon.

Notice that the mouse cursor blinks after remaining still for ten seconds. This makes it easier for you to find the cursor when you want to use it.

Selection and the Mouse

To access anything in the publishing software you must first **select** the object, be it a document, a paragraph, or a line. Most actions that you can perform on an object in the system require that you select the object first. **Selection** is a way of using the mouse to effectively tell the system, "I want *that one.*"

To select a document icon:

- Move the mouse cursor onto the *pingo* document icon on your desktop.
- Click the **left** mouse button to select the icon.

When you select an object, it appears in **reverse video**. That is, the object is highlighted in the color opposite its pre-selection color. When you selected *pingo*, for instance, it became black with a white outline.

To deselect the icon:

- With the cursor on the selected icon, click the **right** mouse button.
  The icon is no longer in reverse video.

You click the left mouse button to select the object the mouse cursor is on. Clicking the right mouse button deselects that same object.

Multiple Selection

Using the left and right mouse buttons, you can also select several objects at once.

To make a multiple selection:

- Move the mouse cursor onto the *pingo* icon.
- Click the **left** mouse button to select *pingo*.
- Move the mouse cursor onto the *Templates* icon.
- Click the **right** mouse button.
  The templates *icon is selected. Notice that the* pingo *icon remains selected as well.*

 Move the mouse cursor onto the *Samples* icon.

 Click the **right** mouse button again.
Samples *is selected, and the previously selected icons remain selected.*

You click the left mouse button to select an object. You *extend* your selection by pointing the mouse cursor at additional objects and clicking the *right* mouse button.

Now three icons are selected. If you change your mind after selecting a number of objects, you have two choices.

To make a new single selection:

 Move the mouse cursor onto the *UNIXpractice* icon.

 Click the **left** mouse button.
UNIXpractice *is selected, and all previously selected icons are deselected.*

To deselect all icons with the left mouse button:

 With *UNIXpractice* still selected, move the mouse cursor to an empty (gray) area of the desktop.

 Click the **left** mouse button.
UNIXpractice *is deselected. You have, in effect, selected "nothing," and, as in the last exercise, the left-button selection caused selected objects to be deselected.*

Using the Mouse for Selection

The general rules of mouse action demonstrated in these selection exercises are summarized below:

Left mouse button	selects any object under the mouse cursor (including "nothing"), deselecting any previously selected objects.
Right mouse button	reverses the selection state of an object. Adds to or subtracts from a multiple selection.

Once an object is selected, you use one of the publishing software's menus to choose an action to perform on that object.

Introducing Menus

There are three types of **menus**: popup, pulldown, and stickup. When you display a popup or pulldown menu, you can select from a list of available actions, or you can cancel the menu. Stickups, on the other hand, require a response.

To see a popup menu:

Select *pingo*.

Hold down—do not click—the **middle** mouse button.
The Desktop Icon Selected *popup menu appears or "pops up" (Figure 1-4).*

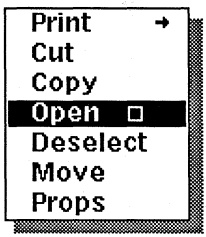


Figure 1-4. Desktop Icon Selected menu

Notice that in the menu, the mouse cursor takes the form of a small box □.

If you accidentally click the button, pingo *will open. In that case, just point the tip of the mouse cursor into the box that reads* pingo *at the top left of the document and hold down the middle mouse button.*

Close *will be in reverse video. Release the middle button and repeat the steps above to see the popup menu.*

To cancel a popup or pulldown menu:

Without releasing the **middle** mouse button, move the mouse on the pad, so you can see the mouse cursor □ moving up and down the menu.
The choices in reverse video will change in response to this movement.

Without releasing the **middle** mouse button, slide the mouse cursor off the popup until none of the choices is in reverse video.

Release the **middle** mouse button.
The popup disappears.

You can always cancel a menu if it is the wrong one. Just slide off the menu *before* releasing the middle mouse button.

To see another popup menu:

- Deselect any selected icons on the desktop.
- Hold down—do not click—the **middle** mouse button.

  Another menu appears. This is the Desktop Nothing Selected *popup menu (Figure 1-5).*

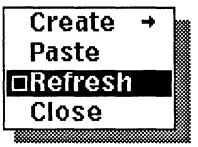


Figure 1-5. Desktop Nothing Selected menu

- Cancel the menu without using it.

Whether or not an object is selected determines *which* popup menu appears when you hold down the middle mouse button. In fact, the name of any popup menu in the publishing system, such as the *Desktop Icon Selected* menu, indicates which type of object must be selected for the menu to appear.

As you use the publishing software you will see that other factors, such as whether the mouse cursor is located on the desktop or in an open document, also affect which menu appears.

To see a stickup menu:

- Hold down the **middle** mouse button to display the Desktop Nothing Selected menu.
- Slide the mouse cursor on the menu until **Close** is in reverse video.
- Release the **middle** mouse button.

  The Close Desktop stickup appears (Figure 1-6).

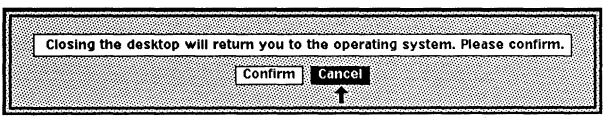


Figure 1-6. Close Desktop stickup

- Click the **left** mouse button to **Cancel** the stickup.

To move an icon:

- Select *pingo.*
- Hold down the **middle** mouse button.
  The Desktop Icon Selected popup menu appears.
- Slide the mouse cursor down until **Move** is in reverse video.
- Release the **middle** mouse button to choose the option.
  The pingo *icon becomes an outline of itself.*
- Slide the mouse to the left.
  The outline of pingo *moves as you move the mouse.*
- Hold down the **middle** mouse button without moving the mouse.
  Notice that **Deselect** *is in reverse video.*
- Release the **middle** mouse button to **Deselect** *pingo.*
  The pingo *icon has been moved and deselected.*

Submenus

On some of the menus you'll see an arrow pointing to the right. This arrow shows that a **submenu**—a set of additional, related options—is available.

To see a submenu:

- Display the Desktop Nothing Selected popup menu.
- Slide the mouse cursor until **Create** is in reverse video.
- Slide the mouse cursor in the direction of the arrow.
  The Create submenu appears (Figure 1-7).

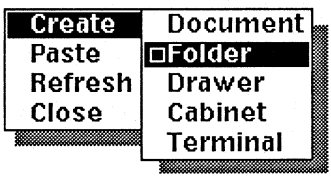


Figure 1-7. Create submenu

- Cancel the menu and submenu by moving the mouse cursor off both menus, and releasing the middle button.

Menu Defaults

Whenever you display a menu by pressing the middle mouse button, one of the choices on it is already in reverse video. This is the menu's **default** option.

For some menus, the default is always the same. For instance, on the Desktop Nothing Selected menu, **Refresh** is always the default option (Figure 1-5). Other menus have dynamic defaults which change according to the menu option you used last.

Printing a Document

Before beginning the next chapter, it will be helpful to have a printed copy of *pingo* to refer to. Printing the document will also help you review this chapter, combining what you have learned about:

the desktop
selection
menus
default menu options
submenus

To print a document:

- Select the *pingo* icon.
- With *pingo* still selected, display the Desktop Icon Selected popup menu.
- Slide the mouse cursor on the menu until **Print** is in reverse video.

- Slide the mouse cursor in the direction of the arrow onto the Print submenu.

  The print submenu contains a list of available printers(Figure 1-8). The submenu may look different, depending on the number, types, and names of printers at your installation.

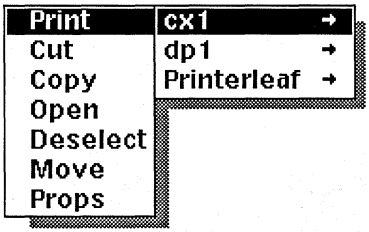


Figure 1-8. Print submenu

- Slide the mouse cursor onto the next submenu.

  This submenu lets you control what part of the document gets printed, and how many copies (Figure 1-9).

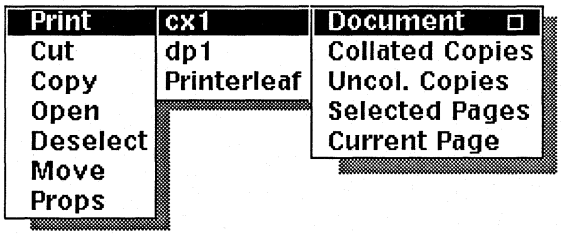


Figure 1-9. Print menu and submenu

The default option is **Document**, *which lets you print one copy of the entire document.*

- Release the **middle** mouse button to select the default option, **Document**.

  Pingo *is automatically deselected after the document is sent to the printer.*

At this time, you may wish to take a break. If you share your workstation with others and plan to leave for more than a few minutes, you should close the desktop according to the instructions on the next page.

To close the desktop:


Display the Desktop Nothing Selected popup menu.


Move the mouse cursor until **Close** is in reverse video.


Release the **middle** mouse button to select **Close**.

The Close stickup menu appears.


Move the mouse cursor until **Confirm** is in reverse video.

Click the **left** mouse button to confirm.

The desktop will be closed, and a UNIX prompt will appear.

If you are leaving your workstation for the day, you should also logout from the UNIX operating system.

To logout from UNIX:


At the UNIX prompt, type **logout.**


Press the <**RETURN**> key.

The screensaver pattern will appear.

Chapter 2

Editing a Document

You have already seen at least two examples of printed documents created on the Interleaf publishing system: this manual and *pingo*.

In this chapter, you will see what *pingo* looks like on the display screen, and you will use *pingo* to perform some basic editing procedures. You begin by **opening** the document—that is, displaying it on the screen to make it accessible for viewing and editing.

To open a document:

- Select *pingo*.
- Hold down the **middle** button to gain access to the Desktop Icon Selected popup menu.
- **Open** is the default, highlighted in reverse video.
- Release the button.

The Document Window

The area of your desktop in which a document appears is called a **document window.** *Pingo* should now be displayed on your desktop in its window, as shown in Figure 2-1 on the next page.

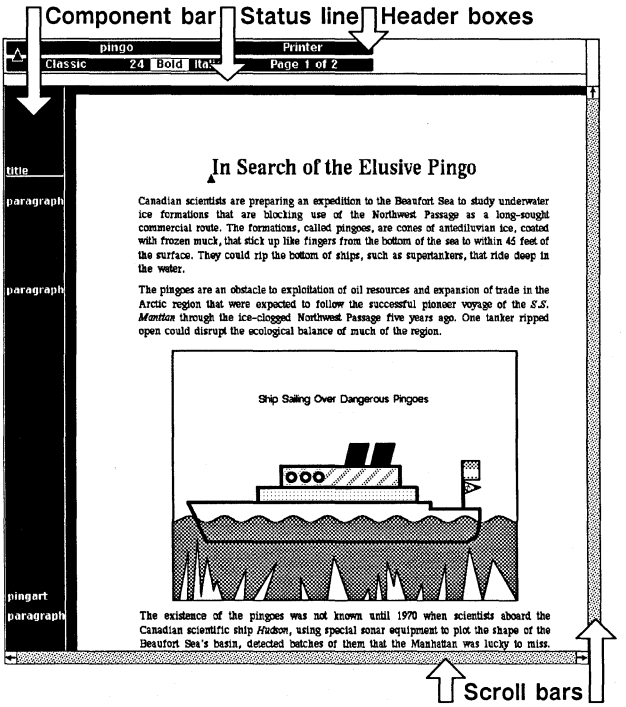


Figure 2-1. First page of pingo in a window

In addition to the document itself, a document window contains the following editing aids: the mouse cursor, a component bar, a status line, header boxes, scroll bars, and the editing cursor.

The Mouse Cursor

You have already seen the mouse cursor in two forms: as it appears on the desktop or a stickup menu ↑, and as it appears in a popup or pulldown menu □. In a window, the mouse cursor can take three additional forms:

- ⮝ In the body of a document, it is a chevron.
- ◆ In the component bar, to the left of the document, it is a diamond.
- ▲ In the header of a document window and in the scroll bars, it is a triangle.

In a document window, as in any other location on the desktop, the mouse cursor is used for *selection*.

You will use the mouse cursor while exploring various parts of the document window. Then you will use it, along with the editing cursor, to perform some editing operations on *pingo*.

Header Boxes

The area across the top of the window is called the **document header**, and it contains rectangles called **header boxes** (Figure 2-2).

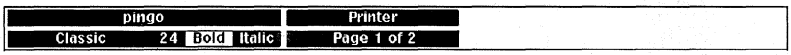


Figure 2-2. Document Header

Header boxes give you information about your document and provide access to menus. For example, by looking at the **Page box,** you can see the number of pages contained in the document, and the number of the page currently displayed on the screen.

The Page box also provides access to the Page pulldown menu. A **pulldown menu**, unlike the popup menus you've seen, appears only when the tip of the mouse cursor is in an exact location—such as the Page box.

In the next exercise, you will use the Page pulldown menu to move the pages of the document through the window.

To page through a document:

- Move the mouse cursor so that the *tip* is in the Page box in the document header.
- Hold down the **middle** button.
  You will see the Page pulldown menu (Figure 2-3).

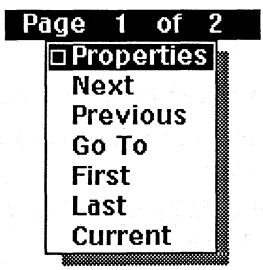


Figure 2-3. Page pulldown menu

With the **middle** button still held down, move the mouse cursor until **Next** is in reverse video.

Release the button.
The next page of pingo *appears.*

Hold down the **middle** button to redisplay the Page pulldown menu.
Next *is now the default.*

Move the mouse cursor to **Previous**, and release the button.
The first page of pingo *reappears.*

In the document header you can access a *popup* menu in the white space between the header boxes and to the right of the Printer and Page boxes.

To use the Window popup menu:

Move the mouse cursor into the white space to the right of the Printer and Page boxes in the document header.

Hold down the **middle** button.
You will see the Window popup menu (Figure 2-4).

Slide the mouse cursor to **Move**, if necessary, and release the button.

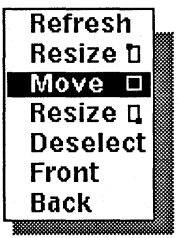


Figure 2-4. Window popup menu

Move the mouse on its pad to the right. Then move the mouse back and forth a few times.
You will see a box, the size of your window, moving back and forth in response to your mouse movements.

When you like the position of your window, hold down the **middle** button again.
You will see the Window popup menu again. **Deselect** *is the default.*

Release the button to **Deselect** the window.
Your window is now positioned where its outline was located when you issued the **Deselect** *command.*

The Status Line

Below the header boxes is a white horizontal bar. This is called the **status line**, and it displays the status of a feature of the system or other messages concerning your document.

To see a message appear in the status line:

- Place the mouse cursor anywhere in the text of *pingo*. (Make sure the mouse cursor is in a text area, not on the diagram or chart.)
- Hold down the **middle** button.
  Paste *will be the default.*
- Release the button.
  A message will appear in the status line.
- Click the **left** button to delete the message.

Be sure to check the status line periodically. It will display a variety of important messages to keep you informed as you create and edit documents with the publishing software.

The Scroll Bars

At the right and bottom edges of the document window are **scroll bars** (see Figure 2-1). Scroll bars provide another method of moving pages of a document through the window.

To use a Scroll Bar:

- Move the mouse cursor into the scroll bar at the right of the document.
  When the cursor enters the scroll bar, it will change from a chevron ⮜ *to a triangle* ▲.
- Click the **right** button.
  You will see the first page of pingo *move upwards. Page 2 of* pingo *will begin to come into view.*
- With the mouse cursor still in the scroll bar, click the **left** button.
  The beginning of pingo *will appear again.*

The position of the cursor in the scroll bar determines how much scrolling will take place. The amount of scrolling is equal to the distance from the top of the scroll bar to the cursor.

To scroll to the end of pingo:

▲ Position the mouse cursor half way down the right scroll bar.

Click the **right** button two or three times.

To scroll back to the beginning of pingo:

▲ With the mouse cursor in the same position, click the **left** button two or three times.

Clicking the *left* button scrolls the document *down* through the window, bringing into view pages that are closer to the beginning of the document. Clicking the *right* button scrolls the document *up* through the window. If you want a particular line to move to the top of a window, place the mouse cursor in the scroll bar directly opposite that line, and click the right button.

The scroll bar at the bottom of the window works in essentially the same way as the one to the right of your document. It is used to scroll your document horizontally, *if your document is wider than the window in which it appears.*

The *right* button scrolls the document toward the left-most boundary of the document, and the *left* button scrolls the document toward the right-most boundary.

The Component Bar

To the left of the document is a vertical panel called the **component bar,** showing the names of the *components* in this document (*paragraph* and *pingart* are both component names). Components are the basic elements or *building blocks* of documents in the publishing software. They are described in the next chapter, *Components.*

Some Text Editing Operations

Now that you know your way around a document, it is time to do some editing of *pingo.* The editing operations you will perform each require the same two basic steps: *selecting* text or a location in text, then performing the editing operation, either with the mouse and a popup menu or with the keyboard.

You select text and locations in a document using the mouse cursor and the editing cursor; so first you should know more about the editing cursor.

The Editing Cursor

The editing cursor is a filled triangle. Like the mouse cursor, the editing cursor can be moved and takes on different forms.

Here are the forms the editing cursor takes:

- when the font at the cursor location is roman
- when the font is **bold**
- when the font is *italic*
- when merged with the mouse cursor

The exercises that follow demonstrate two methods of moving the editing cursor. The first is called the **drag technique**.

To move the editing cursor using the drag technique:

Slide the mouse until the mouse cursor appears as a chevron somewhere on the body of the document.

Press and hold the **left** button.

The mouse cursor seems to disappear; actually, it has merged with the editing cursor.

Holding the **left** button, slide the mouse back and forth on the pad.

The merged cursors move together as you move the mouse.

Move the cursors until they appear at the right end of the title of *pingo*.

Release the button.

The editing cursor has been repositioned and the mouse cursor reappears.

You can also move the editing cursor from one location to any other in a single jump.

To move the editing cursor using the jump technique:

Move the mouse cursor left until the tip points to the space in front of "Elusive" in the title.

Click the **left** button.

The editing cursor jumps to the new position.

Move the mouse cursor all the way to the beginning of the title.

Click the **left** button.

The editing cursor moves again.

Both methods of moving the editing cursor achieve the same result. As you use the publishing software, you will discover which method works best for you in a given situation.

Selecting and Editing Text

In *pingo*, the letters *ha* are missing from the word *Manhattan* in the second paragraph—which makes this a useful destination for the cursor.

To position the editing cursor:

- Make sure the mouse cursor is in the text.
- Move the mouse cursor until the tip points between the *n* and the *t* of *Manttan.*
- Click the **left** button.
  The editing cursor jumps to the location.

The pingoes are an obstacle to exploitation of oil resources and expansion of trade in the Arctic region that were expected to follow the successful pioneer voyage of the *S.S. Manttan* through the ice-clogged Northwest Passage five years ago. One tanker ripped open could disrupt the ecological balance of much of the region.

Figure 2-5. Editing cursor in text

- Type **ha**

Notice that the publishing software makes room for the letters you insert and that *ha* is inserted in the correct type font. You can insert any amount of text anywhere you like in a component just this easily.

In the next two exercises, you will select an entire word in the text, and change its font. The word "Manhattan," in the third paragraph, should be italicized.

To select a section of text:

- Hold down the **left** button, and move the mouse until the editing cursor is positioned at either end of the word "Manhattan."
- Release the **left** button.
- Hold down the **right** button, and move the mouse cursor to the other end of the word.
  Manhattan *will be highlighted.*
- Release the **right** button.

You can now perform editing operations on the selected text.

To change the font of selected text:

With the word "Manhattan" still selected, hold down the **middle** button.
You will see the Text Selected popup menu (Figure 2-6).

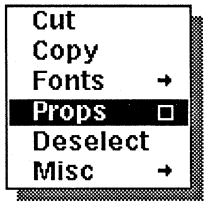


Figure 2-6. Text Selected popup menu

Move the mouse cursor to **Fonts,** and slide onto the Fonts submenu.

Move the mouse cursor down the menu until **Italic** is in reverse video and slide onto the Italic submenu.

Release the button when **On** is in reverse video (Figure 2-7).
"Manhattan" *is changed to "Manhattan."*

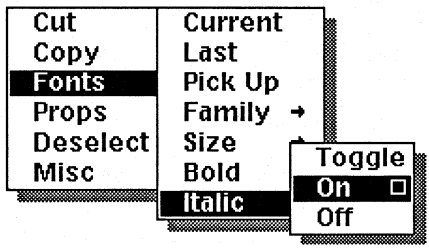


Figure 2-7. Italic submenu

The **Font box** in the document header always shows what the font is at the editing cursor position. Right now, the Font box in your document window will read **Classic 12**, and **Italic** will be highlighted.

Another basic editing procedure is to move blocks of text around by **cutting** them from one location and **pasting** them in another.

To cut a selected block of text:

- Use the **left** and **right** buttons, as in the last exercise, to select the first word of the first *paragraph,* "Canadian."
- With the word selected, hold down the **middle** button to display the Text Selected popup menu.
- Release the button when **Cut** is in reverse video.
  The word disappears.

To paste the text you cut:

- Using either the drag technique or the jump technique, position the editing cursor at the beginning of the second *paragraph,* before the word "The."
- Hold down the **middle** button to display the Text Selected popup menu.
- Release the button when **Paste** is in reverse video.
  The word you just cut from the first paragraph appears at the beginning of the second paragraph. It is still selected.

Next, move the word back to its original position in the first paragraph.

- Using the techniques you just learned, cut the word from the second *paragraph* and move it back into the first.

Scrolling and Text Selection

While editing *pingo,* you learned several methods of selecting text and text locations. Earlier in this chapter, you learned to scroll pages of the document through the window. In the next exercise, you will learn another method of scrolling and a method of selecting text while scrolling.

To select text by scrolling:

- Using either the scroll bar or the Page pulldown menu, make sure you are on the first page of *pingo.*
- Hold down the **left** button while you move the mouse cursor horizontally in the text of *pingo.*
  The editing cursor moves with the mouse cursor when you move the mouse horizontally in text.

- Without releasing the **left** button, move the cursor to the very bottom of the page.

  Notice that the document automatically scrolls to the beginning of the next page.

- Release the **left** button when the editing cursor reaches the beginning of the last paragraph on page 1.

  The editing cursor will be anchored wherever it was when you released the mouse button.

- Hold down the **right** button while you move the mouse cursor in the text of *pingo*.

  You will notice that sections of text change to reverse video and back again. You can scroll to another page using the right button as you used the left button above.

- Without releasing the **right** button, move the mouse cursor to the *top* of the document window.

  The document scrolls back so that the beginning of pingo *is again in view. The text from the editing cursor to the beginning of* pingo *is in reverse video. The editing cursor becomes an anchor point, and you can select the text for an operation by moving the mouse in any direction.*

- Release the **right** button.

- Position the mouse cursor anywhere in text (but not in the top or bottom margin, the diagram, or the chart).

- Click the **left** button to deselect the text.

Notice that when you scroll or select by holding down the left or right button, your document automatically scrolls when the mouse cursor reaches the bottom window boundary. This feature makes it easy to position the editing cursor precisely on any page.

Saving Changes and Closing a Document

If you wish to continue with the next chapter, you do not have to close your document now; just skip the procedure below.

If you would like to take a break, you should close the document. There are two ways to close a document. You will use the one that first saves any changes you made while the document was open.

Whenever you modify an open document, the publishing software will remind you that you have made changes and give you the choice to save them or discard them. You will usually want to save your changes.

To save and close your edited document:

Move the mouse cursor to the box labeled *pingo* in the document header.

Hold down the **middle** button to display the Name pulldown menu (Figure 2-8).

Figure 2-8. Name pulldown menu

Release the **middle** button to **Close.**
A stickup menu will appear (Figure 2-9), asking you whether you want to save the changes you have made to pingo.

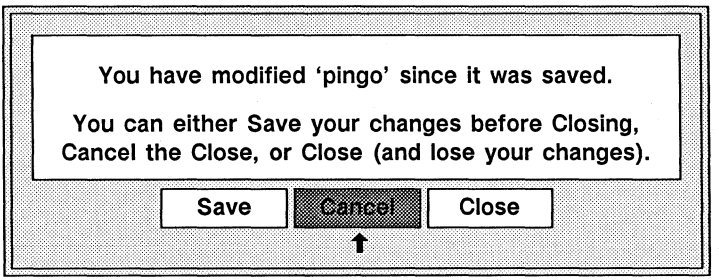


Figure 2-9. Document Closing stickup menu

Move the mouse cursor to **Save**, and click the **left** button.
The document window closes.

On occasion you may decide that you prefer to keep your document as it was, before you began editing it. In that case, you would choose to **Close** the document without saving your changes.

Chapter 3

Components

In the last chapter, you were introduced to the idea that a document is constructed from *building blocks* called *components*. In this chapter, you will learn more about components. You will move them around by cutting and pasting them; you will also modify them.

In doing so, you will begin to see the advantages of the Interleaf software's component-based document construction.

Begin by reopening *pingo,* if necessary.

To reopen pingo:

- Select the *pingo* icon.
- Hold down the **middle** button, and then release it to **Open** *pingo.*

Components in Pingo

Pingo, or any document you create with the publishing software, is a collection of components. Later, you will see that each component has properties you can examine and alter. The properties of individual components or of groups of components are what gives a particular document its individual structure.

Notice that the title of *pingo* is a component named, aptly enough, *title.* Each paragraph of *pingo* is a separate component, and each is named *paragraph.* The diagram, chart, and acknowledgement are each another unique component.

Before you use component properties to design and name your own components, you should get used to moving these building blocks around in a document by cutting and pasting them.

Cutting and Pasting Components

You can cut an entire component out of a document. You may then leave it out, or you can paste it into another location in the document.

In keeping with a convention that should now be familiar to you, you must *select* a component before you can cut it, and you must *select* a location before you can paste a component into it.

Selecting Components

This procedure demonstrates one way to select components.

To select a component:

- Move the mouse cursor into the component bar to the left of the *pingo* document window, where the component names are listed.
  The mouse cursor will change its shape to a diamond when it enters the component bar.
- Place the mouse cursor on top of the word **title**.
- Click the **left** button to select this component.
  The title *component is now highlighted in reverse video (Figure 3-1).*

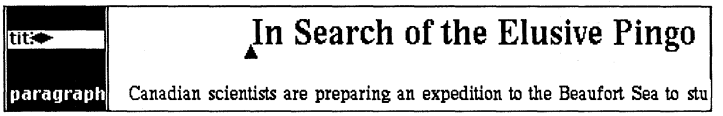


Figure 3-1. Selected title component

Cutting a Component

As you may have guessed, cutting a component requires using a *menu*. The menu you will always use to perform the cut operation on a selected component is the Component Selected popup menu.

To cut a component:

With the title component still selected, hold down the **middle** button.

The Component Selected popup menu appears (Figure 3-2).

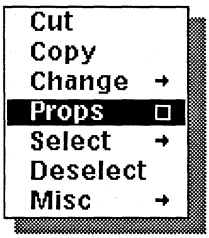


Figure 3-2. Component Selected popup menu

Release the button when **Cut** is in reverse video.

The title of pingo *disappears.*

Selecting Component Locations

A component location is selected using a cursor-like tool called the **component caret**. The caret marks the place where component operations, such as pasting, can occur. Right now the component caret is located above the word paragraph (Figure 3-3).

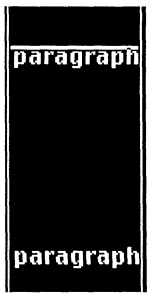


Figure 3-3. Component caret above the paragraph component

Pasting a Component

Like cutting, pasting also requires using a menu. Now you will restore the *title* component to its original position, using the Component Location Selected popup menu. Since the component caret is marking the space above the first *paragraph* component, when you execute **Paste**, the *title* component will be pasted above the *paragraph* component.

To restore the title of pingo to its original position:

Hold down the **middle** button.
The Component Location Selected popup menu appears (Figure 3-4).

Figure 3-4. Component Location Selected popup menu

Release the button. (**Paste** is the default.)
The pingo *title reappears. The* title *component is still selected.*

To move the component caret:

Make sure the mouse cursor is located above the *title* component.

Click the **left** button.
The component caret is now positioned *above the* title *component (Figure 3-5), and the* title *component is no longer selected.*

Figure 3-5. Component caret positioned above the title component

The Role of the Clipboard

As stated in Chapter 2, when you **Cut** something from a document it is put on the clipboard. From there, it may be pasted back into the document, into another document, folder, drawer, or cabinet, or onto the desktop. To see how the clipboard works, you will open it and leave it open while you **Cut** and **Paste.**

To open the clipboard:

- Select the *clipboard* icon.
- Use the Icon Selected menu to **Open** it.
  A window with the name clipboard *opens on the desktop.*

In Chapter 2, you used the *drag technique* to select text locations and text. You can also use a form of this technique to select component locations and components. The drag technique makes it easy to select either a component or a location between two components.

To use the drag technique in the component bar:

- Make sure the mouse cursor is located above the *title* component.
- Holding down the **left** button, slowly slide the mouse cursor first down, then back up the component bar.
  Sometimes you will see the caret appear between two component names. At other times, a component name will be highlighted.
- Release the button when the component caret is below the *title* component.

Cutting and Pasting Multiple Components

You can perform certain operations on two or more components simultaneously. For example, instead of cutting and pasting several components one at a time, you can cut them all at once and then paste them all at once. The drag technique is especially useful when you want to select a group of components.

To select several components using the drag technique:

- Make sure the mouse cursor is below the *title* component and above the *paragraph* component.
- Click the **left** button.
  The caret should now be positioned below the title *component or above the first* paragraph *component. This way you are sure that no other components are selected.*
- Hold down the **right** button.
- Slide the mouse cursor down the component bar.
- Release the button when the next two components are in reverse video.
  The second and third components on Page 1 of pingo *are now selected.*

To see how the clipboard functions:

Hold down the **middle** button.

Slide the mouse cursor up the menu to **Cut**.

Before releasing the button, fix your eyes on the clipboard.

Release the button.

A document called from'pingo' *appears in reverse video on the clipboard. The first and second paragraphs of* pingo *have disappeared.*

The document *from'pingo'* contains the two paragraphs you have just **Cut**. The document on the clipboard is still selected; this means that when you execute the **Paste** command in the component bar, the paragraphs will be pasted back into a document at the place where the component caret is located. You will paste the paragraphs in a new location.

Holding down the **left** button, slide the mouse cursor down the component bar until the caret is between the *pingart* component and the *paragraph* component that follows the diagram (Figure 3-6).

Release the button to position the component caret.

It does not matter whether the caret is below the pingart *component or above the* paragraph *component that follows it. Your text will be inserted between these two components when you apply the command* **Paste**.

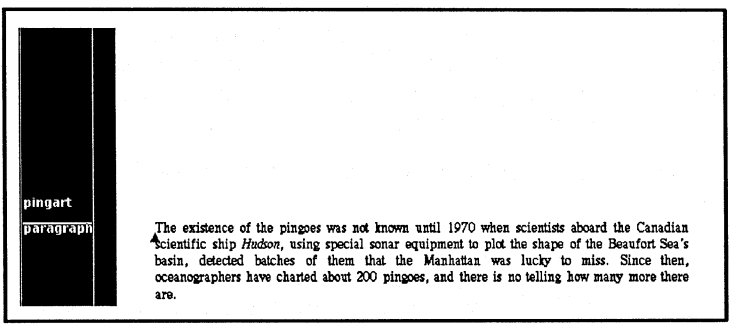


Figure 3-6. Component caret located between two components

With the mouse cursor still in the component bar, hold down the **middle** button to see the Location Selected popup menu.

Since **Paste** is the default on this menu, just release the **middle** button.

The components you cut appear below the diagram in pingo.

Notice that the components are pasted in the same order they were in originally. Whenever you cut and paste multiple components, they always remain in the same relation to one another.

When you create your own documents, you will use these same principles to copy and cut components from one document and paste them in another.

But now, just to give you some more practice cutting and pasting components within a single document, you can replace the two paragraphs in their original location right under the title of the document.

The paragraphs should still be selected (highlighted). If not, simply hold down the **right** button and *drag* select them again.

To restore pingo's components to their original positions:

- **Cut** the two paragraphs again.
- Position the component caret under the *title* component.

  Remember, the components will be pasted wherever the component caret is positioned.
- **Paste** the two paragraphs.

  The paragraphs you cut reappear in their original places.

You have seen that once a component is created, it can be moved around to effect major changes in the structure of a document. Now, by modifying individual components and groups of components, you will see that each of these building blocks has a structure of its own.

So that the clipboard will not distract you as you continue, you can close it.

To close the clipboard:

- Move the mouse cursor onto the open clipboard.
- Hold down the **middle** button.

  The Clipboard Close popup will appear (Figure 3-7).

Figure 3-7. Clipboard Close popup menu

- Release the button to **Close** the clipboard.

Modifying Components

Every component is obviously unique in that the actual information in its text area is different. For instance, all of the paragraphs in *pingo* have the same component name, but these paragraphs by no means contain the same text.

However, all the components named *paragraph* do share certain general properties. For instance, the text in each paragraph starts at the left margin and fills a line to the right margin—as opposed to the text in the title, which is centered on the page. All of the paragraphs also have the same right and left margins and the same spacing between lines of text.

You change these and other component properties using the appropriate **Component property sheet.**

The Component Property Sheets

Each component in a document has three property sheets associated with it:

- the Format sheet
- the Tab sheet
- the Page sheet

In this chapter, we will concentrate on the **Format sheet.** The Tab sheet is discussed in Chapter 11, and the Page sheet in Chapters 12 and 13.

To see the Format Sheet:

- Select the *title* component.
- Hold down the **middle** button to see the popup menu (Figure 3-8).

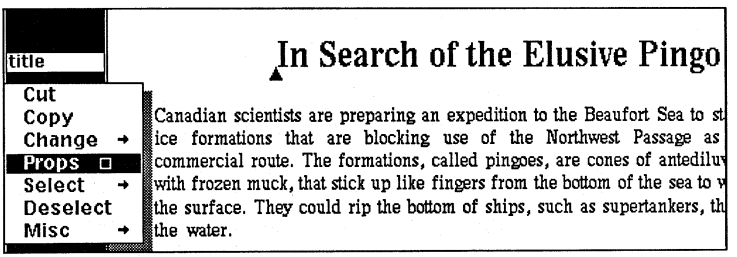


Figure 3-8. Selected title component and the Component Selected popup menu

Release the **middle** button to choose **Props.**
The Format sheet appears in the upper right-hand corner of your screen.

The Format Sheet

Figure 3-9 shows the Format sheet for the *title* component. On it you can make changes that affect only this one component or all the components named *title* in your document.

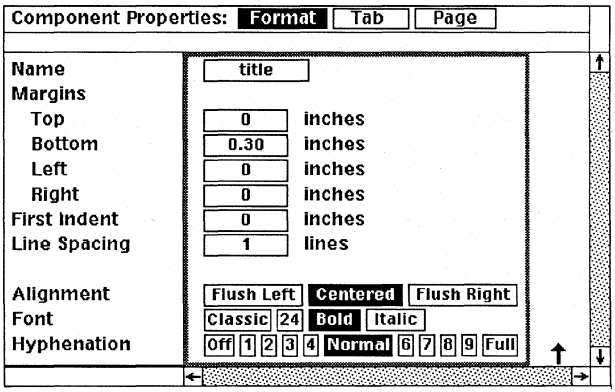


Figure 3-9. Component Property Format Sheet

To change the alignment of a component:

Point the mouse cursor at the box labeled **Flush Left** and click the **left** button.
Notice that **Centered** *is turned off automatically because a component cannot be flush right or flush left and centered at the same time.*

The current font of the title is **Classic 24 point Bold.** On the line labeled **Font**, it is possible to change the typeface, the size, and the style.

To change the font of a component:

Move the mouse cursor into the first box on the **Font** line. (Currently labeled **Classic.**)

Click the **left** button to go through the available typeface families until the entry reads **Modern.**
If you accidentally went past **Modern**, *you can either continue clicking the left button until you come to* **Modern** *again, or reverse direction by clicking the right button.*

- Move the mouse cursor into the second box and click the **left** button until the entry reads **18.**
  If you go past **18**, *use either the left or the right button to reach the correct font size.*
- Turn on italic by pointing at the box labeled **Italic** and clicking the **left** button.
  Bold *is automatically turned off.*

Selecting the properties alone does not change the document. To see the changes you specified on the property sheet appear in the document, you must **Apply** those changes. The next section explains the popup menus used for this purpose.

The Component Property Sheet Popup Menus

There are two popup menus that can appear on an open Component property sheet when you hold down the middle button.

If you have made changes on any of the sheets since last pressing the button, the menu you will see is the Component Property Sheet Apply popup menu.

To apply the changes:

- With the cursor in the Format sheet, hold down the **middle** button.
  The Apply menu appears (Figure 3-10).

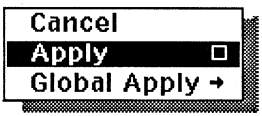


Figure 3-10. Component Property Sheet Apply menu

- Release the button.
  You will see the changes applied to the title *component.*

Because **Apply** is always the default on this menu, you could have applied the *title* alignment and font changes by merely *clicking* the *middle* button.

Normally, you would now close the property sheet if you were satisfied with your changes. This time, do not close the property sheet yet, so that you can perform a few more operations with these popup menus.

Assume that you do not like the title in its new position with its new typeface. In that case, you can return the component to its original state using the other property sheet menu, called the Component Property Sheet Close popup menu.

To reset properties:

Hold down the **middle** button.
The menu appears (Figure 3-11).

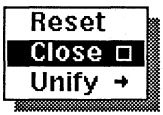


Figure 3-11. Component Property Sheet Close menu

Release the button when **Reset** is in reverse video.
The settings on the Property Sheet will return to their original values, and the status line under the Property Sheet header will display the message: "Please apply to reset the component."

Click the **middle** button to **Apply**.
The component will return to its original format.

To close the property sheet:

Hold down the **middle** button.
All changes have been applied since the middle button was last pressed, so the Close menu appears.

Release the button to **Close**.

Closing a Document

If you wish to take a break, or review what you have learned in this chapter, follow the procedure below for closing *pingo*.

Even though you reversed all the changes you made in *pingo* the software cannot tell that you reversed precisely those changes. Thus you will still see the stickup asking if you want to save your changes.

However, since there is no need to save a new version of the document, close it without saving your changes.

To close a document without saving changes:


Point the tip of the mouse cursor into the header box that reads *pingo*.


Press the **middle** button.
Close *will be in reverse video.*

Release the button.
A stickup menu appears, asking whether you want to save your changes.

Move the mouse cursor to **Close**.


Click the **left** button.
The open window of pingo *will disappear from the screen.*

Chapter 4

Introduction to Diagramming

If you look at the diagram on the first page of *pingo,* you will see that it is composed of simple graphic objects, including lines, ovals, polygons, and some text.

In this chapter, you get a chance to modify the *pingo* diagram. You will perform various editing operations in the diagram, including those which let you:

- move objects around
- change their sizes
- duplicate them
- rotate them
- change their fills

In doing so, you will learn about basic features and tools of the diagramming system.

The graph on the second page of *pingo* is also a diagram. In fact, a single diagram can contain both graphic objects like those shown in the ship diagram, and a data-driven chart, like the graph in *pingo*. However, discussion of diagrams containing data-driven charts is saved for Chapter 5.

Entering the Diagramming System

Diagrams are contained in special areas called **frames**. To gain access to the diagramming system, you first select, then open, the frame containing the diagram you wish to modify.

To select a frame:

Position the mouse cursor anywhere inside the diagram on the first page of *pingo* (Figure 4-1).

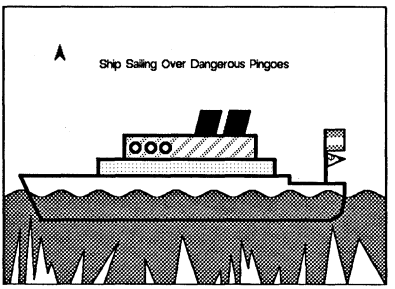


Figure 4-1. Pingo diagram

Click the **left** button.

The entire area containing the diagram turns black, and the editing cursor appears in the bottom left-hand corner of the component.

This means the frame is now selected.

With the frame selected, you must still open it to enter the diagramming system.

To open a selected frame:

With the mouse cursor still in the black square, click the **left** button again.

As soon as the frame is opened, its borders become visible as gray bars. Unlike the black box surrounding the diagram, the frame borders are *not* part of the diagram itself. They are never printed with the document, and appear on the screen only to indicate that the frame has been selected and opened.

In Chapter 6, you will learn to change the size (and other properties) of a frame, and about the different types of frames in the publishing software.

Modifying a Diagram

A diagram is a collection of objects. You modify a diagram by modifying one or more of the objects in it, individually or collectively. The first step in modifying an object is to *select* it.

To select an object:

Point the mouse cursor at the striped square of the flag and click the **left** button.
The flag blinks to show that it is selected.

To deselect an object:

Point the mouse cursor at the striped square of the flag and click the **right** button.
The flag stops blinking.

Using the Object Selected Menu

In this diagram, there is a variety of objects—rectangles, circles, lines, a triangle, and text—on which you can practice some elementary actions before moving on to more challenging diagramming operations.

To change the properties of an object:

Select the flag again.

Hold down the **middle** button to see the Diagramming Object Selected popup menu (Figure 4-2).

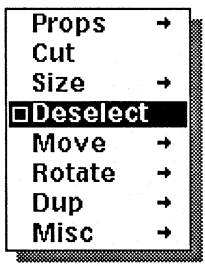


Figure 4-2. Diagramming Object Selected popup menu

Move the mouse cursor to **Props**.

Slide onto the Props submenu and from there onto the Fill submenu (Figure 4-3).

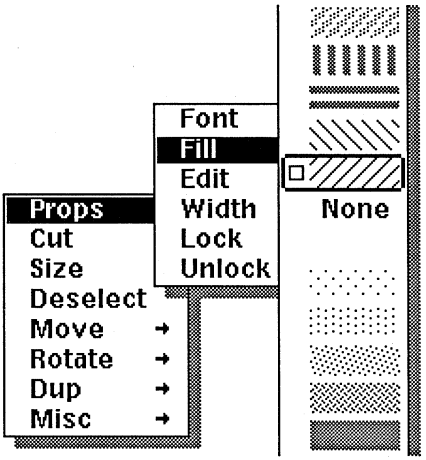


Figure 4-3. Fill submenu

- Choose a new texture for the flag, and release the button.

  The flag now has the **Fill** *you assigned it, and it is no longer selected.*

Besides altering the appearance of objects in your diagram by changing the *fill*, you can change the *width* of the lines that surround them. You can also move, size, and duplicate graphic objects in the diagramming system.

To use the diagramming system Move feature:

- Point the mouse cursor at one of the smokestacks in the diagram; click the **left** button to select it.
- Hold down the **middle** button to see the Object Selected menu again.

  The default you see is the **Fill** *you previously selected as the texture for the box.*
- Move the mouse cursor on the menu until **Move** is in reverse video, then slide onto the submenu (Figure 4-4).

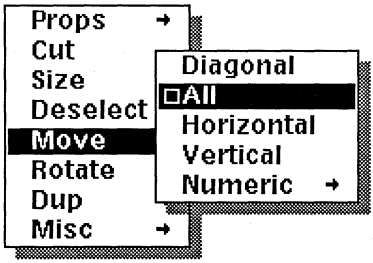


Figure 4-4. Move submenu

With **All** in reverse video, release the button.
The smoke stack becomes an outline of itself.

Move the mouse around on the mouse pad.
You will see the smokestack move around in the diagram.

Move the mouse around on the mouse pad until you have returned the smokestack to its approximate original position.

Hold down the **middle** button to see the Object Selected menu again.

Slide the mouse cursor until **Move** is in reverse video.

Slide onto the submenu and move the cursor until **Diagonal** is in reverse video.

Release the button and move the mouse around on its pad.
Notice that no matter how you move the mouse on its pad, the smokestack in the diagram will move only diagonally.

When the smokestack is where you want it, hold down the **middle** button again and release it on the default, **Deselect**.

To size an object in the diagramming system:

Use the **left** button to select the diagonally striped uppermost level of the ship.

Hold down the **middle** button and move the mouse cursor until **Size** is in reverse video.

Slide the cursor onto the submenu (Figure 4-5). Release the button when **All** is in reverse video.

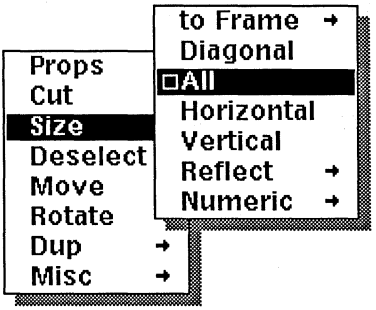


Figure 4-5. Size submenu

Move the mouse around on its pad.
You will notice that by moving the mouse, you can size all the sides of the rectangle.

Continue to move the mouse around on its pad until the rectangle is the size you want it.

Press the **middle** button and release to **Deselect**.

By using the **Dup** command on the Diagramming Object Selected menu, you can duplicate any object in a diagram, including a text object.

To duplicate an object in the diagramming system:

Point the mouse cursor at the text at the top of the diagram and click the **left** button.
The text blinks to show that it is selected.

Hold down the **middle** button and move the mouse cursor until **Dup** is in reverse video. Slide onto the submenu and release on **Move.**
A small square will appear in place of the text.

Move the mouse to see the original text and to see how the duplicate text moves in the diagram.

Press the **middle** button to deselect the duplicate text.

To delete an object in a diagram:

Select the duplicate text.
The text will flash to show it is selected.

Hold down the **middle** button and move the mouse cursor until **Cut** is in reverse video.

Release the button.

You can use the method described on the previous page to cut any object in a diagram.

Reversing Changes to Objects

In the diagramming system, it is possible to reverse certain changes. For example, if you change the size of an object and then decide you do not like the change, you can cancel the change, using the **Undo** command on the Nothing Selected popup menu.

The changes you can reverse (or cancel) are those you made most recently to an object, before you have deselected another object.

Try the following exercise to see how the **Undo** command works.

To reverse two commands, Rotate and Move:

- Select one of the smokestacks.
- Hold down the **middle** button to see the Object Selected popup menu.
- Move the mouse cursor until **Rotate** is in reverse video; then slide onto the submenu (Figure 4-6).

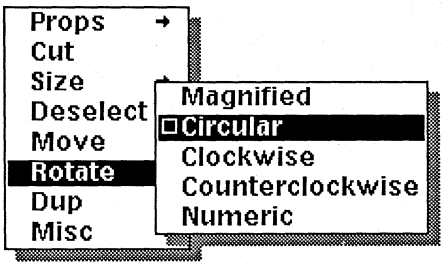


Figure 4-6. Rotate submenu

- Release the **middle** button and move the mouse in circles.
  The smokestack remains selected and rotates as you move the mouse.
- Hold down the **middle** button again to see the Object Selected popup menu.

Slide the mouse cursor until **Move** is in reverse video; then slide onto the submenu.

Note that **All** *is the default choice, so you need not have displayed the submenu. As you use the publishing software, you will become familiar with the various defaults and thus be able to eliminate steps by simply clicking the middle button.*

Release the **middle** button when **All** is in reverse video, and move the object into a corner of the diagram.

The smokestack is still selected and appears as an outline of itself.

Hold down the **middle** button to see the Object Selected menu.

Deselect *is the default.*

Release the button.

The smokestack is now deselected.

Hold down the **middle** button to see the Nothing Selected popup menu.

Move the mouse cursor until **Undo** is in reverse video, and release the button.

The smokestack appears in its original position.

To continue using Undo:

Select the middle level (the polka dot rectangle) of the ship.

Hold down the **middle** button and move the mouse cursor to **Size.**

Slide onto the Size submenu and release the **middle** button when **Horizontal** is in reverse video.

Move the mouse on its pad to size the object.

No matter what direction you move the mouse in, you can only size the object horizontally.

Hold down the **middle** button and move the mouse cursor to **Props.**

Slide onto the Props submenu and from there onto the Fill submenu.

Choose a new **Fill** for the rectangle and release the button.

Now the object has a new size and fill.

Releasing the middle button on any of the choices on the Fill submenu automatically deselects the object.

Hold down the **middle** button to see the Nothing Selected menu.

Undo *is now the default.*

Release the button.

The rectangle returns to its original size and contains its original fill.

You can **Undo** only the changes you made to a diagram during the most recent selection of an object or objects.

Performing Multiple Actions on an Object

When you create, size, or move an object, the object remains selected until you deliberately deselect it by clicking one of the mouse buttons. However, when you choose a *fill* for an object and release the middle button, the object is automatically deselected.

Sometimes, you can perform *multiple* actions on an object without deselecting it. It is possible to do this as long as you do not choose a command, such as **Fill**, which automatically deselects the object after you release the middle button to execute the command.

To perform multiple actions on an object without deselecting it:

Select the rectangular flag.

Hold down the **middle** button.

When **Size** is in reverse video, follow the arrow onto the submenu.

Release the button when **All** is in reverse video.

Resize the object as you choose.

Hold down the **middle** button again.

When **Move** is in reverse video, follow the arrow onto the submenu.

Release when **Vertical** is in reverse video.

Move the mouse around on the pad.

Notice that the object will move only up and down in the diagram.

When you like the position of the object, hold down the **middle** button again and select **Dup**.

Move the mouse and you will see a copy of the object.

You can put the copy down wherever you like or **Cut** it.

If you cut the box and want it back in your diagram, you can hold down the **middle** button again and select **Paste**. The box may not be exactly where it was when you cut it, but it will be selected and ready to move. When you have it where you want it, click the **middle** button to **Deselect** it.

Groups of Objects

Grouping is a diagramming feature that lets you perform operations on several objects simultaneously without having to select and deselect the objects individually. Grouping also allows you to preserve spatial relationships among objects. When two or more objects have been grouped, they respond to commands as though they were a single object.

The objects in a group may be graphic objects, text objects, or a combination of the two. These objects may be, but need not be, adjacent or overlapping. In fact, they may be located anywhere in a diagram.

In the *pingo* diagram the three portholes are grouped.

To select grouped objects:

Point the mouse cursor at any of the circles and click the **left** button.

All three portholes flash to indicate that the group is selected.

Deselect the group.

Point at another porthole and select it.

Again, all the portholes flash.

Because the portholes in the pingo *diagram are already grouped, when you select one, you select them all.*

Deselect the group.

Select the group again.

Use the **middle** button to choose actions (**Move**, **Size**, etc.) to perform on the group.

Deselect the group.

To ungroup objects:

- Select the group of circles (portholes).
- Hold down the **middle** button to see the Object Selected menu.
- Slide the mouse cursor on the menu until **Misc** is in reverse video; then slide onto the submenu (Figure 4-7).

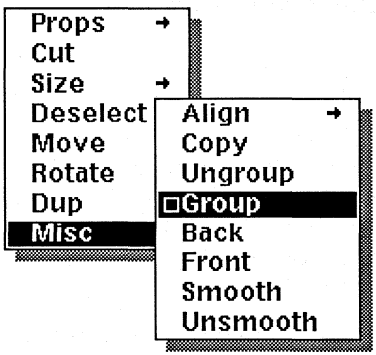


Figure 4-7. Misc submenu

- Slide the mouse cursor to **Ungroup** and release the button.
- To see that the circles are no longer grouped, select one of them.
  Only that circle will flash.
- Deselect the circle.

To group objects:

- Point the mouse cursor at an object in the diagram and click the **left** button.
- Point the mouse cursor at another object in the diagram and click the **right** button.
  Both objects will flash to show that they are selected.
- Hold down the **middle** button and move the mouse cursor on the menu to **Misc**.
- Slide onto the submenu and move the mouse cursor to **Group**.
- Release the button.
  Now you can perform the actions of your choice on the group.

Polygons

In the Interleaf diagramming system, a **polygon** is a shape made up of two or more connected and grouped lines. At least one end of each line must meet an end of another line. Such a meeting point is called a **vertex.** No more than two lines can meet at each vertex.

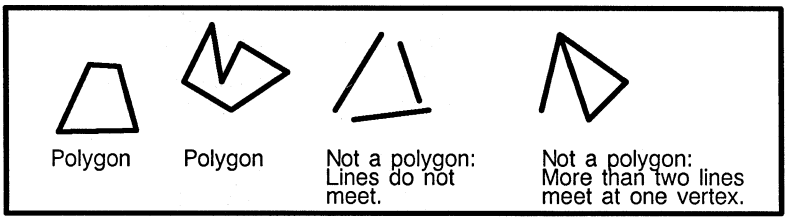


Figure 4-8. Polygons and non-polygons

If a shape is made up of at least two connected and grouped lines, but two of the end points are not connected to a second line, the system "pretends" there is a straight line closing the open end to make the shape a true polygon.

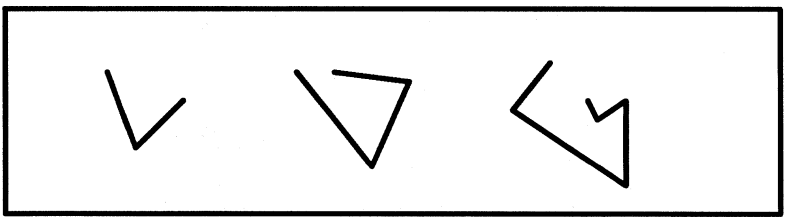


Figure 4-9. Some open-ended polygons

In the diagram on page 1 of *pingo*, the triangle on the flagpole is a polygon (Figure 4-10).

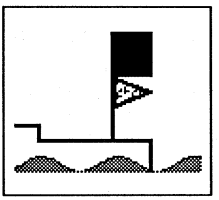


Figure 4-10. Triangle flag (in pingo diagram)

One of the requirements of a polygon is that the lines forming it must be grouped. If you ungroup the lines that form a polygon the resulting shape can no longer be filled. If you ungroup the

lines of a polygon that is filled, it will lose its fill, as illustrated in the next exercise.

To ungroup a polygon:

- Select the triangle.
- Hold down the **middle** button.
- Slide onto the Misc submenu and release the button when **Ungroup** is in reverse video.

  The triangle loses its fill, or texture, because the ungrouped lines no longer make up a polygon.

To group the lines and fill the triangle again:

- Select one of the lines of the triangle by pointing at it and clicking the **left** button.
- Add to the selection by pointing at each of the other lines and clicking the **right** button.

  All three of the lines should now be flashing.
- Hold down the **middle** button and slide onto the Misc submenu.
- Release the button when **Group** is in reverse video.
- Select the grouped lines again.
- Hold down the **middle** button and slide onto the Props submenu.
- Slide onto the Fill submenu and choose a fill.
- Release the button.

Text in a Diagram

The operations you can perform on text in a diagram are similar to those you can perform on graphic objects. However, there are some commands (such as those related to fonts) that apply only to text objects and some (like **Fill** and **Width**) that apply only to graphic objects.

To cut text from a diagram:

- Select the text at the top of the *pingo* diagram.

  The text will flash because it is selected.

Hold down the **middle** button and move the cursor on the menu until **Cut** is in reverse video.

Release the button.
The text disappears.

If you wanted to restore the cut text, you could just hold down the middle button and choose the **Paste** command. Instead, in the next exercise you are going to create new text and change the type font.

Since the text you cut was centered, the text you enter will also be centered unless you change the setting. Flush left text is best for the rest of this exercise.

To set the text alignment at flush left:

While holding down the CTRL key, type **l** (for left).
The message in the status line below the document header will tell you the alignment of the text currently being entered.

If you wanted to change to flush right text, you would hold down the CTRL key and type **r**. If you wanted to change back to centered text, you would hold down the CTRL key and type **c**.

To enter text in a diagram:

Position the diagramming cursor near the top of the diagram.

Type your name.
Although your name is selected, it will not flash unless you move the mouse cursor.

You can go on with the following step, however, without actually seeing the text flash. The publishing software is prepared to show the Object Selected menu, since a text object is selected.

Hold down the **middle** button and slide onto the Props submenu.

Move the cursor until **Font** is in reverse video and slide onto the Font submenu.

Slide onto the Family submenu and move the cursor until **Modern** is in reverse video.

Slide onto the Modern submenu and choose **18** (Figure 4-11).

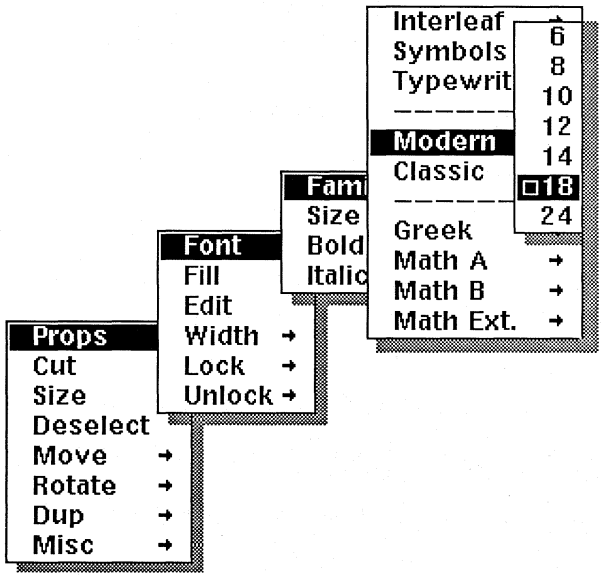


Figure 4-11. Modern submenu

Release the button.
Your name appears in the type font you chose.

Select your name again.

Hold down the **middle** button and slide onto the Props submenu.

Slide onto the Font submenu and choose **Italic**.

Release the button.

To practice editing text in a diagram:

Select your name again.

Press **RETURN**.
Notice that your name is no longer selected and that the cursor has moved down a line.

Type your street address.

Hold down the **middle** button and slide onto the Font submenu and then onto the Size submenu.

Release the button when **12** is in reverse video.

To make room for the name of your city, select your street address again.

Hold down the **middle** button.

- Using the **Horizontal** command on the Move submenu, move this text so that it is near the left edge of the diagram.
- Hold down the **middle** button to **Deselect** the text.
- Select your street address again.
- Press the **TAB** key twice.
  Your street address is no longer selected, and the cursor moves to the right.
- Type the rest of your address.
- Press **RETURN**, or click the **middle** button to deselect this text.

Exiting From a Diagram

Follow the steps below to exit from the diagram.

To exit from a diagram:

- Hold down the **middle** button and release it on **Close**.
  The frame in its selected state (black square) will reappear.
- With the mouse cursor in the frame, click the **right** button.
  The frame is no longer selected, and you are outside the diagramming system.

It is possible to close (or close and save) a document without exiting from the diagramming system first. If you close the document with the frame open, the frame will still be open when you re-open your document.

Chapter 5

Introduction to Charts

At first glance, the *pingo* sample chart, shown in Figure 5-1, looks like a collection of diagramming objects.

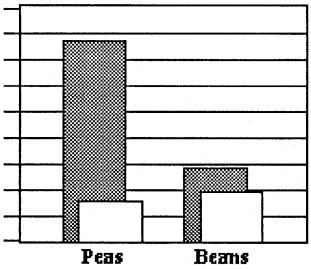


Figure 5-1. Sample Chart

Indeed, you could make a similar looking chart by creating some lines and boxes like the ones you edited in Chapter 4. But in the Interleaf publishing software, a chart is itself a single diagramming object. Its construction is performed automatically by the software in response to information you enter about the chart's content and style.

In this chapter, you will edit the sample chart in *pingo* by entering data about a third item: alfalfa. You will also make some style changes. By the time you are finished, the chart shown in Figure 5-1 will look like the one shown in Figure 5-2.

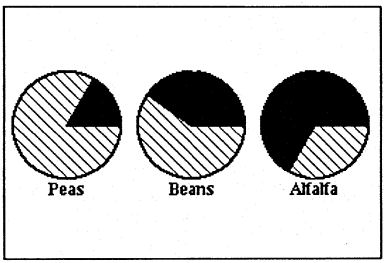


Figure 5-2. Sample Chart

Editing a Chart

The first steps in editing a chart are to select and open the frame containing the chart.

To select and open a frame:

- Open *pingo,* if necessary.
- Point the mouse cursor anywhere in the *Sample Chart* (Figure 5-3).

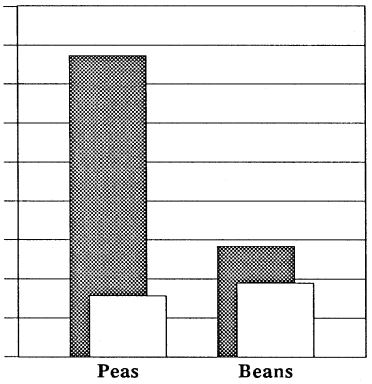


Figure 5-3. Sample Chart

- Click the **left** button once to select the frame.
  The editing cursor appears at the lower left of the chart, and the chart is in reverse video.
- With the mouse cursor still in the chart, click the **left** button a second time to open the frame.

Now you need to select the chart itself.

To select a chart:

- Point the diagramming cursor at the chart, and click the **left** button to select the chart.

Once the chart is selected, you edit it using one or more of the three **Edit Chart Sheets.**

To access the Edit Chart Sheets:

- Hold down the **middle** button to see the Diagramming Object Selected popup menu.

Slide onto the Props submenu.
Edit *is the default and is in reverse video (Figure 5-4).*

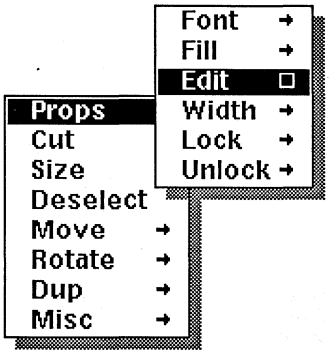


Figure 5-4. Props submenu

Release the button.
The **Edit Chart Data sheet** *appears in a window in the upper right-hand corner of your screen (Figure 5-5).*

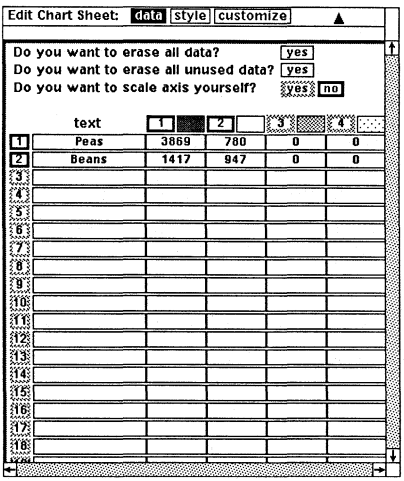


Figure 5-5. Edit Chart Data sheet

There are three Edit Chart Sheets. They are the

- Data sheet (shown above)
- Style sheet
- Customize sheet

The Data sheet is used to edit the contents of a chart. The Style sheet controls how that information is displayed. (The Customize sheet allows finer style adjustments. It is discussed in the chapter *Making Charts* in the *Reference Manual,* Volume II.)

Entering Chart Data

In the following exercise, you will enter data about alfalfa to create a third bar on the sample chart.

To enter data on a chart:

- Point the mouse cursor at **3** in the column of numbers going down the left edge of the sheet. Click the **left** button to turn it on.
  Now the box surrounding the **3** *is black to show it is on.*
- Move the mouse cursor into the *text* column (below *Beans),* and click the **left** button to position the Data sheet cursor.
- Type **Alfalfa** and press the **TAB** key.
  The entry is confirmed, and the cursor moves to the next field. You can also use the **RETURN** *key to confirm an entry. However, when you do so, the cursor stays in the same box. Use the* **RETURN** *key when you expect to change what you have just typed in the current box.*
- Type any 3- or 4-digit number in column *1*. Confirm your entry with the **TAB** key.
- Type a different 3- or 4-digit number in column *2* and confirm it with the **TAB** key.

Since you will be making additional changes to this chart in the next exercise, you could apply all your changes at that time. However, you might want to see what the chart looks like now, with only the changes you have made on the Data sheet.

- Hold down the **middle** button to see the Data Sheet Apply popup menu (Figure 5-6).

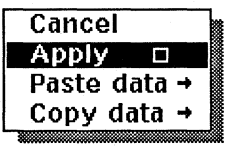


Figure 5-6. Data Sheet Apply popup menu

Release the **middle** button.
Your chart now contains two additional vertical bars, which correspond to the data you entered for alfalfa.

Making Style Changes

On the Style sheet, you can make choices that range from something as general as the type of chart to something as specific as the texture of the bars in a bar chart.

In the following exercises, you will change the chart from a vertical to a horizontal bar chart, add labels, and make other style changes. Finally, you will change the bar chart to a pie chart.

To change the chart type:

Move the mouse cursor into the box labeled **style** in the Edit Chart Sheet window header and click the **left** button.
The **Style sheet** *(Figure 5-7) appears.*

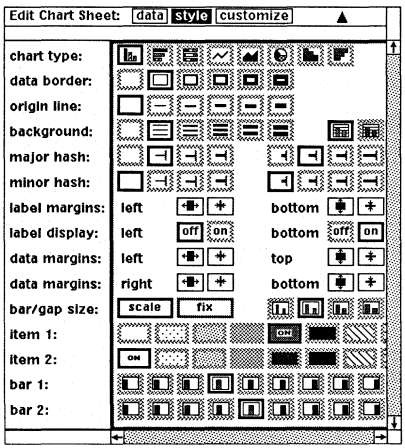


Figure 5-7. Style sheet

Point the mouse cursor at the horizontal bar chart icon (second from left) in the row labeled *chart type*.

Click the **left** button to turn on the horizontal bar chart icon.
The vertical bar chart icon is turned off.

Hold down the **middle** button to see the Style Sheet Apply popup menu (Figure 5-8).

Figure 5-8. Style Sheet Apply popup menu

Release the button.
The chart is now a horizontal bar chart (Figure 5-9).

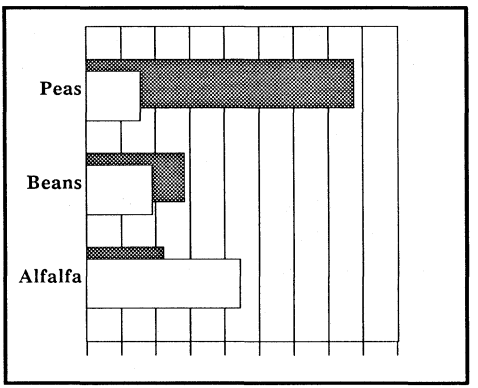


Figure 5-9. Horizontal bar chart

To enter labels along the bottom margin of the chart:

Move the mouse cursor down the sheet to *label display: bottom.*

Move the mouse cursor across to **on.**

Click the **left** button.

Click the **middle** button to **Apply** the change.
Numbers corresponding to those entered on the Data sheet appear at the bottom of the chart.

Now the chart has numbers displayed across the bottom. If you look at them closely, you will notice that the figures are cut off at the base and on the far right-hand edge.

To bring the numbers into full view, you must make the margins outside the chart larger. These margins are called **data margins.**

To adjust the margins of the chart:

Move the mouse cursor down the Style sheet to *data margins: right* and across to [↔].

Click the **left** button.

Each click increases the size of the margin, though the changes will not show until you apply them.

Move the mouse cursor over to *data margins: bottom* and across to [ ].

Click the **left** button.

Use the **middle** button to **Apply** the changes.

To change the texture of the bars on the chart:

Move the mouse cursor down the sheet to *item 1* and *item 2*.

The gray texture is turned on for item 1, *and the white texture is turned on for* item 2.

Use the **left** button to change these textures to striped and black.

Click the **middle** button.

Your chart now reflects the style changes you just made (Figure 5-10).

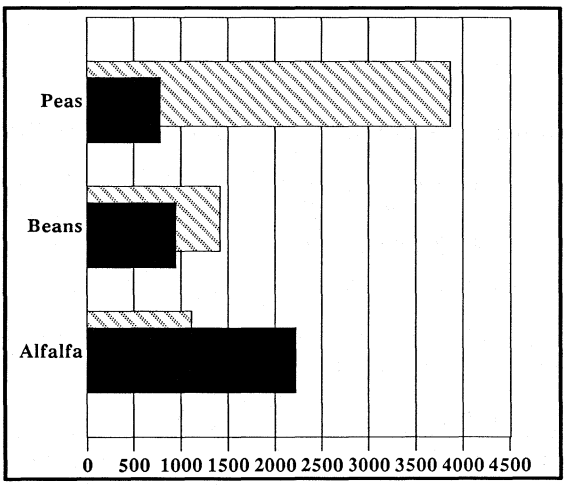


Figure 5-10. Pingo chart with data and style changes

To change the chart type again:

Point the mouse cursor at the pie chart icon (sixth from the left) in the row labeled *chart type*.

Click the **left** button to turn on the pie chart icon.

The horizontal bar chart icon is turned off.

- Hold down the **middle** button to see the Style Sheet Apply popup menu.
- Release the button.
  The chart is now a pie chart, with one pie for each column of data.
- Hold down the **middle** button to see the Style Sheet Close popup menu (Figure 5-11).

Figure 5-11. Style Sheet Close popup menu

- Release the **middle** button to close the Edit Chart Sheets.

You have now completed all the exercises related to *pingo*. Chapter 6 begins the next major section of the manual, *Creating Documents*. You may want to go on to Chapter 6 right now, or you may want to close and save your document and take a break before continuing.

Chapter 6

Structuring Your Own Document

In Chapter 3, you saw that a document is made up of building blocks called components. You learned to change the shape of an existing document by moving components around and changing their properties.

In this chapter, following a strategy you can use for any document, you will set up a structure for a new document by creating new components. Finally, you will enter and edit the text of the document in multiple type fonts.

Remember that you can interrupt your at work any time. Just **Save** and **Close** your document, and exit from your desktop, as you learned to do in Chapter 1.

To begin these exercises, bring up your desktop. Next, you will create a new document and name it.

To create a document:

- Position the mouse cursor anywhere on your desktop.
- Hold down the **middle** button to see the Desktop Nothing Selected popup menu.
- Move the mouse cursor to **Create**.
- Move onto the Create submenu (Figure 6-1).

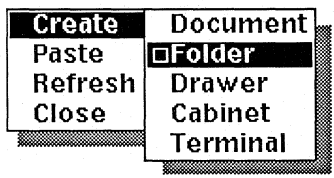


Figure 6-1. Create submenu

This is a list of the objects you can create.

- Move the mouse cursor to **Document.**
- Release the button.

In a couple of seconds, the outline of a **document icon** *appears on your desktop.*

- Move the *icon* anywhere you like.
- Hold down the **middle** button to see the Desktop Icon Selected popup menu.
- Release the button to **Deselect** the icon.

Naming the Document

The first thing to do to your newly created document is to change the name so that you can distinguish this *document* from any other on your desktop. You change the name of the objects that you create on your desktop using the **Object Property sheet**.

To open the Object Property Sheet:

- Select the newly created *document* icon.
- Hold down the **middle** button, and slide the mouse cursor on the menu to **Props**.
- Release the button.

The Object Property sheet (Figure 6-2) appears in a window at the upper right-hand corner of your screen.

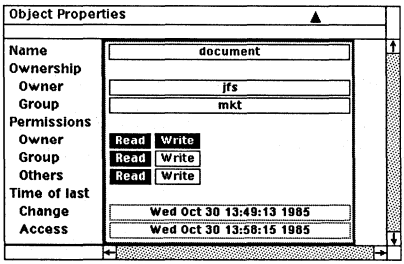


Figure 6-2. Object Property sheet

Document Names

You can name documents and other desktop objects you create with any combination of up to 32 printable characters. However, it is best to use only numbers and upper- and lower-case letters, because other characters may have special meanings in the UNIX operating system.

Figure 6-3 lists some suitable object names and some problematic ones.

Names that work best

ralph
Ralph
Ralphletter2
4LettersToRalph

Names that could cause complications in Unix

ralph's folder
Ralph/1
Ralph/April 14 letter

Figure 6-3. Sample desktop object names

Give each object a name that tells you essential information about the object without your having to open it.

To name a document:

- Move the mouse cursor into the *Name* field (the box to the right of *Name*) at the top of the Object Property sheet.
- Click the **left** button to position the editing cursor there.
- Type **Defense**.
- Press the **RETURN** key to confirm the name.

There are two popup menus available from this property sheet, and they are similar to the popups you used on chart property sheets in Chapter 5.

To apply your changes and close the Object Property Sheet:

- Hold down the **middle** button to see the Object Property Apply popup menu (Figure 6-4).

Figure 6-4. Object Property Apply popup menu

- Release to **Apply.**
  Note the change on the desktop icon.
- Hold down the **middle** button to see the Object Property Close popup menu (Figure 6-5).

Figure 6-5. Object Property Close popup menu

- Release the button.

The icon for *Defense* is still selected. You are now ready to open this document.

To open "Defense":

- Hold down the **middle** button.
- Release the button with **Open**, the default, in reverse video.

What you see in the document window on your desktop now is a blank document named *Defense,* containing only the default component, named *paragraph* (Figure 6-6).

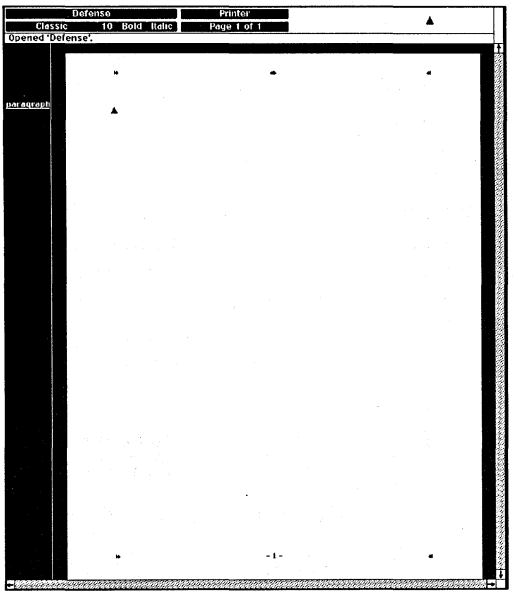


Figure 6-6. New document

Soon, you will use the default component to create the structure for a complete document. First, however, you will set the page margins of the document.

Setting Page Margins

When you create a new document, usually you will want to assign its **page margin sizes** first. Sometimes you will want to change the page size also. The default page size for a document is 8.5 x 11 inches. You will not change that in this document.

To assign page margin sizes to a document:

Move the mouse cursor into the Page box in the document header. Click the **middle** button to display the Page Property sheet.

You will change the bottom page margin to 1 inch.

Move the mouse cursor into the box to the right of the label *Bottom*, and click the **left** button to *position* the editing cursor in the box.

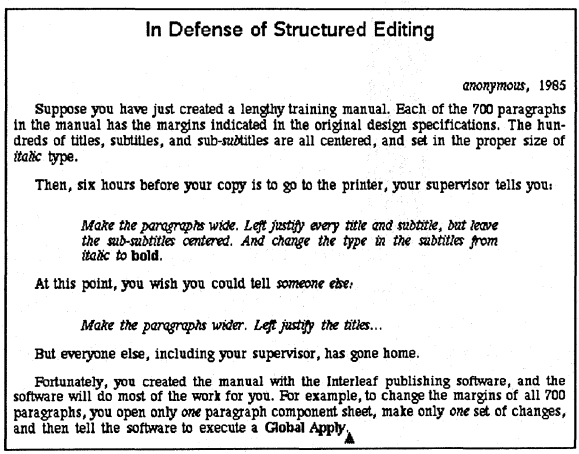
Type **1** and press the **RETURN** key. Hold down the **middle** button. Release it.

Apply *is the default so you could just click the button.*

Close is the default on the next menu. Click the **middle** button to close the Page Property sheet.

Structuring the Document

In this chapter, you will use some of the techniques that you learned in Chapter 3 to modify components, along with some new techniques, to structure the empty *Defense* document into a multi-component document like the one shown in Figure 6-7.



In Defense of Structured Editing

anonymous, 1985

Suppose you have just created a lengthy training manual. Each of the 700 paragraphs in the manual has the margins indicated in the original design specifications. The hundreds of titles, subtitles, and sub-*sub*titles are all centered, and set in the proper size of *italic* type.

Then, six hours before your copy is to go to the printer, your supervisor tells you:

Make the paragraphs wide. Left justify every title and subtitle, but leave the sub-subtitles centered. And change the type in the subtitles from italic to **bold**.

At this point, you wish you could tell *someone else:*

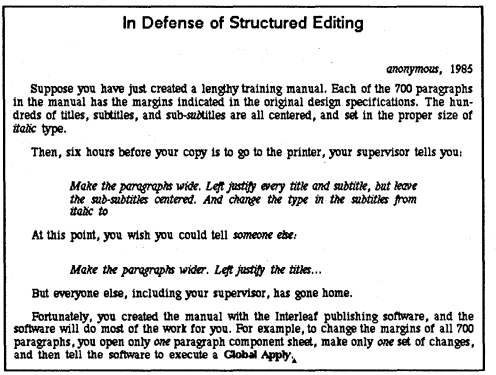
Make the paragraphs wider. Left justify the titles...

But everyone else, including your supervisor, has gone home.

Fortunately, you created the manual with the Interleaf publishing software, and the software will do most of the work for you. For example, to change the margins of all 700 paragraphs, you open only *one* paragraph component sheet, make only *one* set of changes, and then tell the software to execute a **Global Apply**.

Figure 6-7. Sample document

The Interleaf software is flexible enough to allow dozens of approaches to constructing a document, but there is a general procedure for structuring documents with the software. Using the software without following this procedure is comparable to using a power chain saw to cut wood—without starting the engine.



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anonymous, 1985

Suppose you have just created a lengthy training manual. Each of the 700 paragraphs in the manual has the margins indicated in the original design specifications. The hundreds of titles, subtitles, and sub-*sub*titles are all centered, and set in the proper size of *italic* type.

Then, six hours before your copy is to go to the printer, your supervisor tells you:

Make the paragraphs wide. Left justify every title and subtitle, but leave the sub-subtitles centered. And change the type in the subtitles from italic to

At this point, you wish you could tell *someone else:*

Make the paragraphs wider. Left justify the titles...

But everyone else, including your supervisor, has gone home.

Fortunately, you created the manual with the Interleaf publishing software, and the software will do most of the work for you. For example, to change the margins of all 700 paragraphs, you open only *one* paragraph component sheet, make only *one* set of changes, and then tell the software to execute a **Global Apply**.

The procedure is:

1 Forecast the types of components needed.
2 Create a master component for each type.
3 Enter text and graphics that comprise the document, creating new copies of masters as needed.

In most cases, the following step will also be necessary:

4 Modify existing component types, and/or create new types as needed.

Forecasting Types of Components Needed

You determine the names and other properties of the component types in your Interleaf document by analyzing the source document, if possible. For instance, a scan of the text in Figure 6-7 indicates that structuring *Defense* will require four types of components: one for the title, one for the author's line, one for the 5 paragraphs of text, and one for the two long quotes.

We will name the component types *title, author, paragraph* and *quote*. In most cases, components with the same name—that is, components of the same *type*—should share all other properties as well.

Creating Master Components

The *first* component of a particular type in a document is the **master component.** All other components you create with the same name initially have the same properties as the master, and retain those properties, until you change them.

To create a master component for a new type, you change the name and other properties of an existing component. For instance, to create the master *title, author* and *quote* components in *Defense,* you will create three exact duplicates of the default *paragraph* component (which is the master component for the component type *paragraph*), then modify them.

The method used for creating duplicate components is only one of several. You will learn the others soon.

To create duplicate components using LINE FEED:

- Make sure the component caret is below the *paragraph* component in *Defense.*
- Press the **LINE FEED** key.
  A new paragraph component appears below the original.
- Using the **LINE FEED** key, create two more components, so that you have four components named *paragraph.*

You now have the master *paragraph* component and three duplicates. Next, you will modify properties of each duplicate to create masters for the types of components we have decided to call *title, author,* and *quote.*

- Use the **left** button to select the first *paragraph* in the component bar.

You will begin by turning this *paragraph* into a *title.* (In your own work, you can name components anything you like, but for the moment it will be easier if your component names match the ones referred to in this exercise.) You will change the component name using the **Component Property sheet.**

To change a component name:

With the mouse cursor in the component bar, hold down the **middle** button.

You will see the Component Selected popup menu (Figure 6-8).

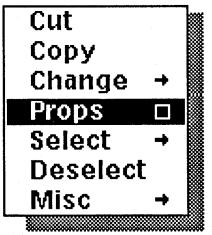


Figure 6-8. Component Selected popup menu

Select **Props** on the popup menu.

Release the button.

The Component Property Sheet is displayed in the upper right-hand corner of the screen (Figure 6-9).

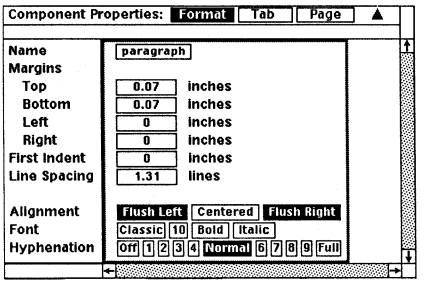


Figure 6-9. Component Property Sheet

Move the mouse cursor into the *Name* field on the Component Property sheet, and click the **left** button to *position* the editing cursor in that field.

Type **title**.

"Paragraph" is automatically erased as you start typing in the new entry.

Confirm the new name by pressing the **TAB** key.

The message "Creating a new component name: title" appears in the status line on the Component Property sheet.

The editing cursor moves to the next field.

You need to change only four additional items on the *title* component sheet: the *Top* margin, the *Bottom* margin, the *Alignment*, and the *Font*.

To set the margins for a component:

- To change the top margin of *title*, *position* the editing cursor in the *Top* margin field if necessary.
- Type **.02** and confirm the entry by pressing **TAB**.
  The editing cursor moves into the Bottom *margin field.*
- Type **.02** and confirm the entry by pressing **TAB** or **RETURN**.

To change the alignment of a component:

- Move the mouse cursor to the box labeled **Centered.**
- Click the **left** button.
  Centered *is turned on.* **Left** *and* **Right** *are turned off automatically.*

To change the font of a component:

- Move the mouse cursor into the left-hand box that reads **Classic** in the *Font* field.
- Click the **left** button until **Modern** is displayed in the box.
- Move the mouse cursor to the second *Font* field box and click the **left** button until **18** is displayed.
- Hold down the **middle** button, and release to **Apply** the changes.
  The name of the first component is now "title."

  Figure 6-10 shows how the Component property sheet looks after you apply the changes.

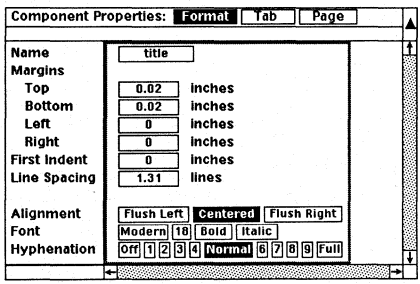


Figure 6-10. Component property sheet for "title"

- Click the **middle** button to close the property sheet.

In the next exercise, you will change the name and other properties of the next *paragraph* to create a component called *author.*

To create the author master component:

- Select the second component, and display its property sheet.

In the remaining exercises, when you are told to make a property change, it is assumed you now know the basic procedure for making the change.

- First, change the *Name* of the component from *paragraph* to *author.*
- Change the *Top* margin to **.30** inches.
- Change the *Bottom* margin to **.30** inches.
- Change the *Alignment* to **Flush Right** by turning off **Flush Left.**
- Change the font to **Classic 12.**
- Use the mouse to **Apply** the changes and **Close** the Component Property sheet.

Next, create the *quote* master component.

To create the quote master component:

- Select the next component, and display its property sheet.
- Change the *Name* to **quote.**
- Change the *Top* margin to **.15** inches.
- Change the *Bottom* margin to **.15** inches.
- Change the *Left* and *Right* margins to **.8** inches.
- Change the *Line Spacing* to **1.1** lines.
- Turn on the **Italic** box.
- Finally, change the font size to **12.**
- Use the mouse to **Apply** the changes and **Close** the Component Property sheet.

You just created master components for three component types, and the document still contains a master *paragraph* component. Each of the components you add to *Defense* will be in one of these types, and share the properties of one of these masters.

Notice that the remaining *paragraph* component is not the original default *paragraph,* but a copy of it. This copy is now the master *paragraph* component. The master component of a type is *always* the first component of that type to appear in the document, regardless of when the component was created.

Entering the Text

Now you are going to begin entering text into *Defense,* one component at a time. Type only the portions you are instructed to, when you are instructed to. The exercises in this chapter are designed to show you features of the publishing software that you might not learn about otherwise.

If you make a mistake while you are typing, use **Cut** on the Text Selected menu to remove a large text block, or use the DEL(ETE) key to remove a few characters.

To enter text in a document:

- Select the *title* component in *Defense*, or position the component caret just above or below the word "title" in the component bar.

  This positions the editing cursor in the first text location in the component.

- Type **In Defense of Structured Editing**. Do not press RETURN.

Note: When you enter text in a document, it is not necessary to hit the RETURN key at the end of a *line*. After you type enough text to fill one line, the cursor automatically moves to the beginning of the next line.

Nor should you press RETURN when you have finished entering all the text you want in a given *component*. When you want to move on to a new component, just select that component using the *left* button, and begin typing.

Should you accidentally hit the RETURN key, you will create an extra line space between the present component and the next one, and you will see a curved arrow. The arrow will not appear on your printed document.

To remove a RETURN symbol:

- Position the cursor at the beginning of the line *below* the line with the return symbol you wish to remove.

Press the **DEL** key.

In the next exercise you will enter "*anonymous*, 1985" in the *author* component. Before you type the text, change from roman to *italic*. After typing the text, change back to roman. You have done this before, but here is a refresher.

To change the font of a succeeding text block:

Move the editing cursor to the first text position in the *author* component.

Hold down the **middle** button and slide onto the Fonts submenu.

Move the cursor on the menu until **Italic** is in reverse video.

Release the button.

The font style of any existing text will not change but the shape of the editing cursor will change to indicate that the next text that you type will be in italic.

Italic *will be highlighted in the document header.*

Type **anonymous.**

Hold down the **middle** button to see the **Italic** submenu.

Release the button.

Italic Off *is now the default so the next text you enter will be in roman rather than italic.*

Type a comma, a space, and **1985.**

Creating Components With the Component Popup Menu

Up to now, you have used **LINE FEED** to create a new component because you wanted the new component to be identical to the component immediately above it.

Now you will use the Component Location Selected popup menu to create a new *paragraph* component right below the author component.

To create a component using the Component popup menu:

Make sure the component caret is positioned beneath the *author* component or above the *quote* component.

With the mouse cursor in the component bar, hold down the **middle** button.

Slide onto the Create submenu (Figure 6-11).

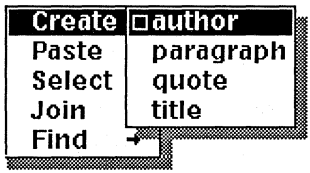


Figure 6-11. The component Create submenu for "Defense"

Figure 6-11 shows a **dynamic popup menu**. *A dynamic popup changes its contents to reflect currently available actions or options. Here it reflects the components present in the document.*

Release the button when **paragraph** is in reverse video.

A paragraph *component is created after* author.

This new *paragraph* is now the master *paragraph* component, because it is now the first of the type to appear in the document. Any new *paragraph* components created will have the properties of this one unless you modify them.

More Ways to Change Fonts

In the next exercises, you will enter the rest of *Defense*. In doing so, you will demonstrate methods for changing fonts. The first new method is called **Pick Up**. The Pick Up method is useful *only* when there is an example on the screen of the font you want to use.

To use the Pick Up command to change fonts:

Position the editing cursor in the *paragraph* component.

Type the following text, changing from roman to *italic* using the method you already know. (For your convenience, the copy shown here is larger than the text that actually appears on your screen.)

Note that only one space follows a period. To create the hyphen in sub-*sub, press the* ESC *key first then the hyphen key.*

Suppose you have just created a lengthy training manual. Each of the 700 paragraphs in the manual has the margins indicated in the original design specifications. The hundreds of titles, subtitles, and sub-*sub*

 Without moving the editing cursor, point the *mouse* cursor at a word that is in 12 point roman type ("Each," for example).

 Hold down the **middle** button, and slide onto the Fonts submenu.

 Release the button when **Pick Up** is in reverse video.

Italic *is turned off in the document header.*

 Type the following:

---

titles are all centered, and set in the proper size of

The software knows that the font you used before switching to Classic 12 point roman to type through "size of" was Classic 12 point *italic*. Classic 12 point *italic* is now the **Last Font,** and you have another way to change fonts.

To use the Last Font method for changing fonts:

 Hold down the **middle** button, and slide onto the Fonts submenu.

 Release the button when **Last** is in reverse video.

Italic *is turned on in the document header.*

 Type **italic**.

 Change the current font from italic to roman, using either of the methods you just learned.

 Type the last word in the paragraph: **type**

 Type a period.

To create another component and to enter text:

 Create another *paragraph* component by pressing **LINE FEED.**

 Type the next paragraph of *Defense:*

> Then, six hours before your copy is to go to the printer, your supervisor tells you:

Since the next paragraph of text to enter is a long quote and the next empty component in *Defense* is a *quote,* you need not create a new component.

To enter text in the next component:

- Position the editing cursor at the beginning of the empty *quote* component.
- Type the long quote:

> *Make the paragraphs wider. Left justify every title and subtitle, but leave the sub-subtitles centered. And change the type in the subtitles from italic to*

Before typing the last word, you must change the font to bold.

To change the font of succeeding text to bold:

- Hold down the **middle** button and slide onto the Fonts submenu.
- Move the cursor on the menu to **Bold.**
- Release the button.

  Bold *will be highlighted in the document header.*
- Type the last word of the quote: **bold**
- Hold down the **middle** button to see the Bold submenu.

  Bold Off *is now the default.*
- Release the button.
- Type a period.

Making Global Changes

By now, you have probably noticed that the paragraph components need some adjustments, most obviously the type size and indentation. It is not necessary to change the properties of each *paragraph* component individually.

To make global changes:

- Select any one of the three *paragraph* components in *Defense*.
- Click the **middle** button to open the property sheet of this component.

On the property sheet, make the following changes, making sure to confirm each entry by pressing either **TAB** or **RETURN**:

- Change the *Top* margin to **0** inches.
- Change the *Bottom* margin to **.15** inches.
- Set the *First Indent* at **.25** inches.
- Change the *Line Spacing* to **1.1** lines.
- Change the *Font* size to **12.**
- Hold down the **middle** button to see the Apply menu.
- Slide onto the Global Apply submenu (Figure 6-12).

Figure 6-12. Global Apply Submenu

- Move the cursor to **Confirm.**

Look at the document as you perform the next step.

- Release the **middle** button.
- **Close** the property sheet.

Both of the paragraphs you entered reflect the changes you just applied. Note that only the *paragraph* components are affected. When you globally apply changes to a component's properties, those changes are applied to *all* other components of the type—that is, all other components with the same name.

Since the changes are applied to the master component as well, you will see the changes reflected in all subsequently created components with the same name (unless, of course, the master is later modified).

In the next exercise, you will learn a new way to toggle **Italic** (turn it on and off) using the keyboard instead of the mouse.

To toggle Italic using the keyboard:

- ✓ Position the editing cursor at the beginning of the empty *paragraph* component.
- ☐ Enter the following text from the next paragraph:

At this point, you wish you could tell

The next step depends on the type of workstation you are using.

- ☐ If you are using a SUN120 or a SUN50, press **F5**. If you are using a SUN100, press **PF3**.

  Notice that **Italic** *is turned on in the header box.*

- ☐ Type **someone else**

  The text appears in italics.

- ☐ If you are using a SUN120 or a SUN50, press **F5** again. If you are using a SUN100, press **PF3** again.

  Notice that **Italic** *is turned off in the header box.*

- ☐ Type a colon.

To enter the remaining text:

- ✓ Create a new *quote* component after the last *paragraph,* using the Create submenu of the Component Location Selected popup menu.
- ☐ Enter the text of the next long quote:

Make the paragraphs wider. Left justify the titles...

- ✓ Create a new *paragraph* component after the *quote* you just created, using the Create submenu of the Component Location Selected popup menu.
- ☐ Enter the following text:

But everyone else, including your supervisor, has gone home.

- ☐ Press **LINE FEED** to create a new *paragraph* after the one you just created.

☐ Enter the following text:

Fortunately, you created the manual with the Interleaf publishing software, and the software will do most of the work for you. For example, to change the margins of all 700 paragraphs, you open only *one* paragraph component property sheet, make only *one* set of changes, and then tell the software to execute a

---

In the next procedure, you will learn to toggle **Bold** using the keyboard instead of the mouse. As with using the keyboard to toggle **Italic**, the key you press depends on the type of workstation you are using.

To toggle Bold using the keyboard:

☐ If you are using a SUN120 or a SUN50, press **F4**. If you are using a SUN100, press **PF2**.

Notice that **Bold** *is turned on in the header box.*

☐ Type **Global Apply.**

The text appears in bold.

☐ If you are using a SUN120 or a SUN50, press **F4** again. If you are using a SUN100, press **PF2** again.

Notice that **Bold** *is turned off in the header box.*

☐ Type a period.

Changing the Type of a Component

The next exercise shows you how to create a new component by *changing* a component to one of a different type.

To change a component from one type to another:

Select a *paragraph.*

Remember, to be selected, a component must be fully highlighted.

With the mouse cursor in the component bar, hold down the **middle** button, and slide onto the Change submenu (Figure 6-13).

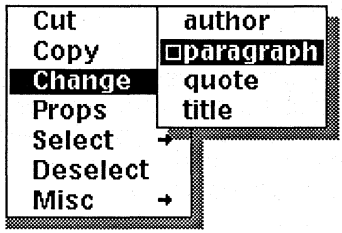


Figure 6-13. Change submenu

- Release the **middle** button when *quote* is in reverse video.
  Notice how the component changes.
- Hold down the **middle** button again, and change the *quote* back to a *paragraph.*

Which Method to Use

You now know two methods for creating new components: using the LINE FEED key; and using the Create submenu on the Component Location Selected popup menu.

You have also seen that it is possible to *change* a component from one type to another using the Change submenu on the Component Selected popup menu.

Each of these options is valuable in different circumstances.

LINE FEED is useful when you want the new component to be of the same type as the component immediately before it.

This is particularly convenient when you are typing text and want to follow a text component with another text component of the same name (a *paragraph* with a *paragraph,* for example). As soon as you press LINE FEED, you are ready to type text into a component with the identical properties as those of the previous component.

Create is useful when you want the new component to be different from the one immediately before it. You would use this popup submenu, for example, when you want to follow a *paragraph* with a *quote.*

Change is useful when you want to change a component that already exists to a component of another type. For example:

- When you use the **LINE FEED** key to create a new component, you can then use **Change** to make the new component into another kind of component.
- When you decide that you want a different kind of component in a particular place. You would then use **Change** to make a *paragraph* into a *quote,* for example.

Note: When you use the Create or Change submenu to create a component, the component takes on all of the properties of the *first* or *master* component of that name in the document.

Maintaining Consistency in Document Structure

Generally, we recommend that if you make a property change to a component, you globally apply the change, to ensure that all components with the same name have the same properties.

It is possible for components of the same type to have no properties in common but their name. As you become more experienced with the software, you may encounter situations where you can take advantage of this flexibility.

If you need a particular component to have slightly different properties than the other components of the same type, it is best to create a new type.

For instance, suppose you wanted one of the paragraphs in *Defense* to be like the other *paragraphs* in all ways except that the font was bold instead of roman. You could open the property sheet for that paragraph, turn bold on, change the name to something appropriate, like *boldpara,* and apply the change (not globally).

In this manner, you would not only ensure that all *paragraph* components have the same properties, but you would also have a new component type at your disposal.

Chapter 7

Creating a Diagram

In this chapter, you will construct your own diagram. Since all diagrams are contained in frames, you will start by creating and then modifying a frame for the diagram.

There are many types of frames. The exercises in this chapter will not demonstrate all of their features, but you will learn enough about frames to launch your own study later.

You will add the diagram to *Defense,* the document you created in Chapter 6. Start by opening *Defense* if it is not already open.

Creating a Frame

The location of any frame in the publishing system is determined by two things: the location of a special marker called the frame's **anchor**, and the frame's relationship to the anchor.

An anchor is automatically placed at the location of the editing cursor when you create a frame. During the frame creation procedure, you define the relationship of a frame to its anchor by assigning the frame one of six basic types:

At Anchor
Following Anchor
Following Text
Top of Page
Bottom of Page
Footnote

You can change the type of frame at any time. In the next exercise, you will create an **At Anchor** frame, and then change the frame type.

To create an at anchor frame:

- Position the editing cursor before the first word of the first paragraph of *Defense.*
- Hold down the **middle** button to display the Text Location Selected popup menu.
- Move the mouse cursor until **Frame** is in reverse video.

Move the mouse cursor in the direction of the arrow.

The Frame submenu appears (Figure 7-1).

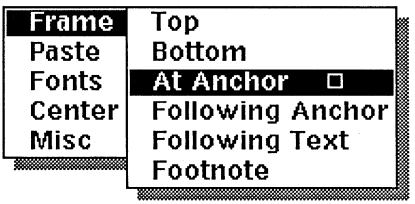


Figure 7-1. Frame submenu

This submenu lets you choose the frame type.

Release the button with the cursor on **At Anchor**, the default.

The frame appears at the editing cursor (Figure 7-2).

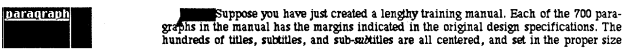


Figure 7-2 At Anchor frame

The frame appears in reverse video because it is selected. It is also smaller than any frame you've seen so far. The default size of an **At Anchor** frame is the character size of the text in which the frame anchor is located.

You cannot see the anchor itself, because At Anchor frames always sit on their anchors. (The two diagrams you saw in *pingo* were also in At Anchor frames.)

You will see a frame anchor after you change this *At Anchor* frame to a **Following Anchor** frame.

To change the type of a frame:

With the frame still selected, hold down the **middle** button.

The Text Selected Popup Menu appears.

Release the button when **Props**, the default option, is in reverse video.

In the upper right-hand corner of your screen, you will see the Frame property sheet (Figure 7-3).

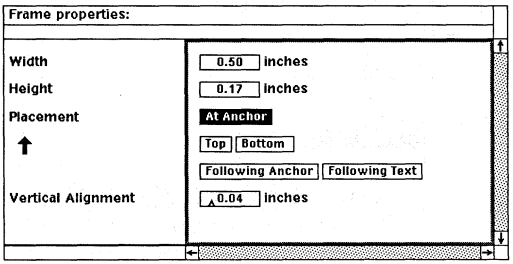


Figure 7-3. Frame property sheet

Point the mouse cursor at the box labeled **Following Anchor**.

Click the left button.

The **Following Anchor** *box appears in reverse video.*

Apply the change, but leave the property sheet open.

The type of the frame is changed to **Following Anchor** *(Figure 7-4).*

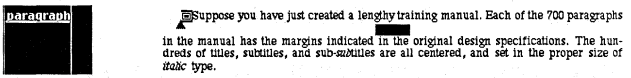


Figure 7-4. Following Anchor frame

Notice the relative positions of the frame and the frame anchor. A **Following Anchor** *frame always appears as close as possible to the end of the line of text containing the anchor.*

Change the frame to **Following Text** and **Apply** the change.

Following Text *frames appear after the last line of text on the page containing the anchor, if, as in this case, there is room for the frame between the anchor and the bottom margin of the page (Figure 7-5).*

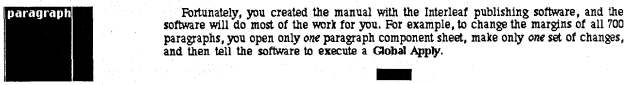


Figure 7-5. Following Text frame

Change the frame to **Bottom** and **Apply** the change.

Bottom frames *appear just above the bottom margin of the page on which the anchor appears.*

- Change the frame to **Top** and **Apply** the change.
  Top frames *appear just above the Top margin of the page on which the anchor appears.*
- Change the frame back to **At Anchor. Apply** the change, and **Close** the property sheet.

Deciding Which Frame to Use

Frames may be created and anchored anywhere in a document, including, as you have seen, in a component already containing text.

What type of frame you use, and where you anchor the frame, depends on how you want the frame to relate to other objects in the document. For instance, if you wanted to insert a small piece of artwork, the height of the surrounding type, between the words "Interleaf" and "publishing" in *Defense,* you would create an *At Anchor* frame in that spot.

Since the diagram you will create in *Defense* bears no special relationship to text in any of the components in *Defense,* you will put the frame in its own component.

To create a component for the diagram:

- Create a new *quote* component below the first paragraph in *Defense.*
- Open the property sheet for the new component and change its name to *diagram.*
- **Apply** the change to this component only (not globally) and **Close** the property sheet.

Instead of creating a new frame, you will move the frame you created in the last exercises by cutting and pasting it.

To cut and paste a frame:

- Point the mouse cursor at the beginning of the first paragraph of *Defense.*
  You can no longer see the frame, because it is not selected. It is, nonetheless, located at the beginning of the first paragraph. If you look there, you will notice a blank space the size of the frame.
- Click the **left** button.
  The frame appears in reverse video.
- **Cut** the frame, using the Text Selected popup menu.

- Move the editing cursor to the beginning of the empty *diagram* component.
- Since **Paste** is the default on the Text Location Selected menu, just click the **middle** button.

  The frame should appear in the new location. It should still be selected.

Now you need to enlarge this frame.

To resize a frame:

- Click the **middle** button to display the Frame property sheet.
- Make the *Width* **5.5** inches and the *Height* **4** inches.
- **Apply** the changes and **Close** the property sheet.

You now know enough about frames and frame anchors to complete the exercises in this manual. For more information on frames and anchors, see the chapter on *Page Makeup* in the *Reference Manual*, Volume 1.

Creating a Diagram

Because the diagramming system lets you control the locations and sizes of objects, it is not possible to take you step by step through the creation of a *particular* diagram the way it is possible to take you through the creation of text.

The various processes within the diagramming system will be described and you will be given instructions for using these processes to create a diagram resembling the one in Figure 7-6.

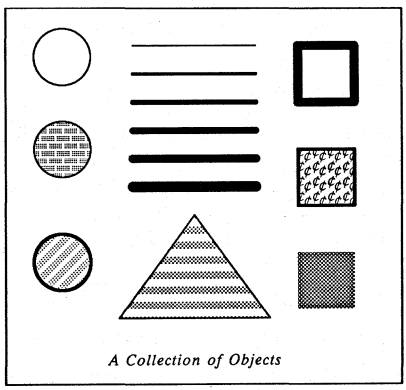


Figure 7-6. Collection of objects in a diagram

Note: You may find it easier to follow the instructions if you read through each section before trying the operations.

To open the frame and enter the diagramming system:

With the mouse cursor in the frame, click the **left** button.

As you saw in Chapter 4, an open frame is surrounded by a thick grey border.

Using the Grid and Gravity

The diagramming system has three features—**Grid**, **GridAlign** and **Gravity**—which help you to accurately position objects within a diagram. Each of these features can be switched on and off at any time.

To understand how Grid and GridAlign work, you will display the grid in the frame you just created.

To turn the grid on:

Hold down the **middle** button and slide onto the Misc Grid submenu.

Release the button when **On/off** is in reverse video.

A grid appears over the frame (Figure 7-7).

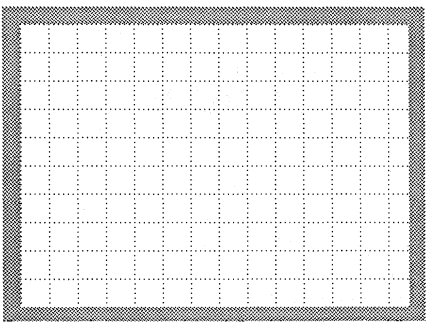


Figure 7-7. Frame with Grid on

There are more points to the grid than you can see; in fact, the grid on your screen now actually displays only every sixth row and column of grid points. (You can adjust the number and spacing of grid points, but that will not be necessary for these exercises.)

By itself, the grid can be used as a visual aid for aligning objects. The **GridAlign** feature, when you turn it *on*, uses the grid to further help you align objects. With GridAlign on, the mouse cursor—or any object you are moving or resizing—moves in discrete increments, aligning with a grid point each time it moves.

Gravity helps you align objects by forcing two objects that are very near each other to connect with each other.

For instance, if you wanted to place the ends of two lines very near each other without connecting them, you would turn Gravity *off*. When you want to ensure that the closely placed ends of two lines connect, you turn gravity *on* before placing them.

✓ Check the status line to make sure **GridAlign** and **Gravity** are *on*.

If they are not on, hold down the middle button and slide onto the Misc Grid submenu. Release the button when **GridAlign** *is in reverse video. Then hold down the middle button again and release it when* **Gravity** *is in reverse video.*

For more information on Grid Align and Gravity, see the *Diagramming* section of the *Reference Manual*, Volume 2.

Creating Lines, Boxes, and Ovals

First, you need some graphic objects and text objects in your diagram. You will create the graphic objects using the Nothing Selected Create submenu (Figure 7-8).

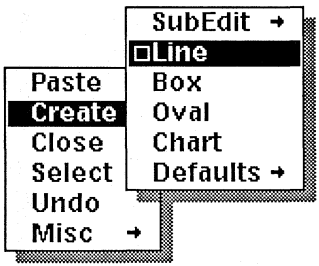


Figure 7-8. Create submenu

Though there are four choices on the submenu, for now, you are interested only in *lines, boxes,* and *ovals.*

Following is the general procedure for creating objects. Use it to create a circle, a line, and a box, positioned across the top of the document as shown in Figure 7-9.

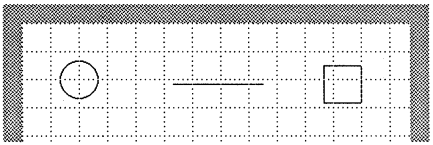


Figure 7-9. Objects near top of frame

To create an object:

- Point the diagramming cursor at the place where you want the object.
- Hold down the **middle** button, and slide onto the Create submenu.
- When **Line, Box** or **Oval** is in reverse video, release the button.

When you first create objects, they appear in their simplest form, and they are still selected. To deselect an object, either use the Object Selected menu, or point the diagramming arrow at an unoccupied area of the frame and click the left button.

Duplicating Objects

One way to create the rest of the circles, lines, and boxes in the diagram is to duplicate the ones you just created. Follow the general procedure given below for duplicating objects to make the diagram resemble the one in Figure 7-10.

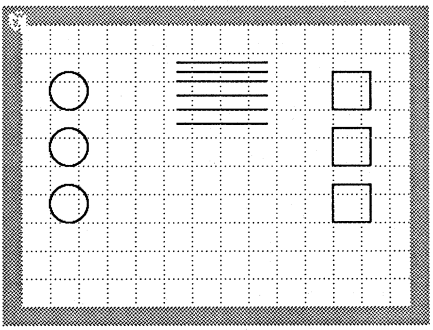


Figure 7-10. Duplicated objects

To duplicate objects:

- Select the object you want to duplicate.
- Display the **Dup** submenu (Figure 7-11).

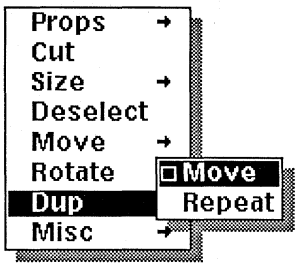


Figure 7-11. Dup submenu

Release the **middle** button when **Move** is in reverse video.

A copy of the object has been created. This copy moves as you move the cursor until deselected.

When the object appears where you want it, **Deselect** it.

Changing Fills and Widths

Follow the general procedures below to change the fills and border widths of the objects you created to make them resemble the objects in Figure 7-6.

To use the Fill feature:

Point the cursor at the object you want to fill.

Click the **left** button to select it.

Hold down the **middle** button, and slide onto the Props submenu.

Slide onto the Fill submenu, and select a texture.

Release the **middle** button.

To change the border of a box or oval:

Select the object.

Hold down the **middle** button, and slide onto the Props submenu again.

Slide onto the Width submenu.

One of the choices on the Width submenu is **none**. *That is the width of the border of the grey box in Figure 7-6.*

Release the **middle** button when the *black* line width you want is in reverse video.

Entering Text in a Diagram

In the exercise below, you will be entering text in your diagram. For instructions on aligning the text, review the section called *Text in a Diagram* in Chapter 4.

To enter text in a diagram:

- Set the text alignment you want.
- Point the cursor where you want to enter text.
- Type *A Collection of Objects*.

The text will be entered relative to the cursor position according to the alignment you chose, in the font that is currently specified in the document header. When you move the mouse cursor, the text blinks to show that it is selected.

You can deselect the text you just entered by holding down the middle button and choosing **Deselect** on the Object Selected menu, or by pointing the mouse cursor anywhere in the diagram (*except* at the text) and clicking the *left* button. Yet another way to deselect the text is described below.

To deselect text:

- With the cursor anywhere in the diagram, press **RETURN**.

Creating a Polygon

From Chapter 4, you will remember that polygons are objects made up of two or more grouped lines; the end of one line meets the beginning of the next, and no more than two lines meet at one vertex.

A triangle can be a polygon.

To create a triangle:

- Point the mouse cursor below the thick line in your diagram.
- Create a **Line**.
- Move the mouse to angle this *line* down and to the right to form the right leg of the triangle.

- Hold down the **middle** button, and **Deselect** it. Do not move the mouse.
  You want **Gravity** *on so the next line you create attaches to this one.*
- Create another line parallel to the bottom of the page to form the base of the triangle.
- Click the **middle** button to deselect this line. Again, do not move the mouse.
- Create another line to form the left leg of the triangle. Connect it to the beginning of the first line.
- Click the **middle** button to deselect the line.

You now have a triangle that appears to match the definition of a polygon. But the triangle is not an actual polygon, because the lines that make up its legs and base are not *grouped.*

In Chapter 4, you grouped the lines that made up the flag in *pingo,* then filled the resultant polygon. In the exercise below, you will see that it is possible to fill a polygon-like object comprised of lines which are not grouped.

If the object meets all other requirements of the polygon definition—as does the triangle you just created—the software will automatically group the lines when you fill the shape. This makes the shape a polygon.

To group the lines and fill the polygon:

- Using the **left** and **right** buttons, select the three lines.
- Hold down the **middle** button to see the Object Selected popup menu.
- Slide onto the Props submenu and then the Fill submenu.
- Select the texture you like, and release the button.
  The lines are now grouped and the triangle is a polygon.

Multiple Selection in a Diagram

There are several methods for selecting multiple objects (including text objects) in the diagramming system. In the next exercise, you will learn three of these methods.

Method 1: Selecting Objects One by One

This method of selection can be used in all circumstances, since it involves pointing at individual objects or groups.

To select objects one by one:

- Point the cursor at the first object you want to select.
- Click the **left** button.
- If you want to add objects to this selection, point at each additional object and click the **right** button.

You can also use the **right** button to *deselect* individual objects.

Method 1 is most useful in the following cases:

- when you want to select a single object
- when you want to select several objects that are separated from each other in space
- when you want to select several objects that are mixed in with objects you do not want to select.

To practice Method 1:

- Point the cursor at a *box*.
- Click the **left** button.
- Point the cursor at an *oval*.
- Click the **right** button.
- Point at the top *line*.
- Click the **right** button.
- Now, deselect each of these objects one by one by pointing at it with the cursor and clicking the **right** button.

Method 2: Selecting Several Objects at a Time

When you hold down the *left* button, the cursor becomes a black triangle. If you point at an object, hold down the left button, and keep the mouse stationary, when you release the button, the object is selected.

If you move the mouse when the cursor is a black triangle, the triangle becomes a **selection box** ⬚. The box is anchored where you were originally pointing, but it can be sized in any direction around the anchor point.

Every object that is completely inside this box when you release the left button is selected. The selection box is useful when you want to select a number of objects that are close to each other in a diagram.

Method 3: Selecting Everything

Method 3 is useful if you want to perform the same action on every object (including text objects) in your diagram.

To use this method:

Hold down the **middle** button and follow the arrow from **Select** onto the submenu (Figure 7-12).

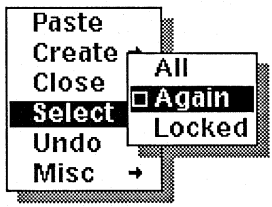


Figure 7-12. Select submenu

Release the button when **All** is in reverse video.
Each object in the diagram blinks to show that it is selected.

To deselect some, but not all of the selected objects:

Point the mouse cursor at one of the selected objects.

Click the **right** button.

To deselect *all* the objects, you can use **Deselect** on the Object Selected menu or you can use the method below.

To cancel a selection command:


Keep the cursor within the diagram, but do not point at any of the objects.


Click the **left** button.
All the objects are now deselected.

Exiting From the Diagram

To close the diagram and the frame:

With nothing in the diagram selected, hold down the **middle** button.

Release when **Close** is in reverse video.
The frame is now closed (in reverse video).

Click the **right** button to deselect the frame.

At this point, you may wish to close and save the document and take a rest. If you wish to continue with the next chapter, however, do not close the document.

Chapter 8

Creating Your Own Chart

In this chapter, you will create the line chart shown in Figure 8-1.

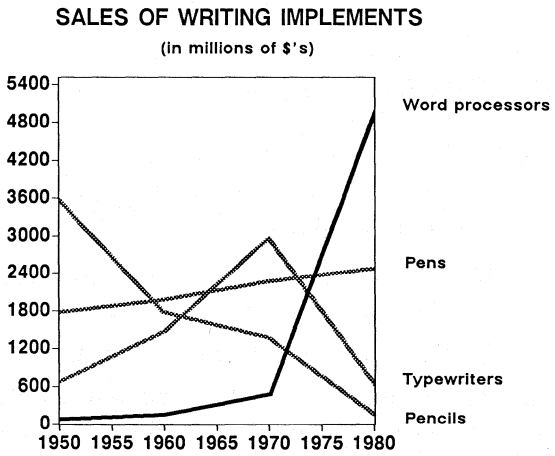


Figure 8-1. Completed line chart

The first step will be to create a frame for the chart. For convenience, you will create that frame in the *Defense* document by copying the *diagram* component, which contains a frame of the size and type you need.

Once you have a frame, there are two basic methods for creating a chart: executing the **Chart** command on the Create submenu of the Diagramming Nothing Selected popup menu, and editing the default chart which results; or copying a chart similar to the one you want and editing it.

Since the *Graphics* cabinet on your desktop already contains a chart similar to the one in Figure 8-1, you will use the second method. In the process, you will begin to see how easily the system lets you move graphics objects and text from one document on your desktop to another.

Creating A Chart

First, you must copy the *diagram* component in *Defense,* rename the component to *chart*, and clear the frame in the new component. Open *Defense* now, if necessary.

To copy a diagram component:

- Select the *diagram* component in *Defense.*
- Make sure the mouse cursor is in the component bar.
- Hold down the **middle** button to see the Component Selected popup menu.
- Release the button when **Copy** is in reverse video.
  The component now has the component caret beneath it.
  You will see a message in the Status Line that reads, Note: The region contains frame(s).
- Move the component caret to below the last *paragraph* component.
- Hold down the **middle** button again.
  Paste *is the default.*
- Release the button.
  A copy of diagram *is pasted after the original.*
  It appears on the second page because it will not fit on the first page.
- Use the component's property sheet to change the name from *diagram* to *chart.* **Apply** the change—do *not* globally apply—and **Close** the property sheet.

Follow the procedure below to select, open, and clear the new frame.

To clear the frame:

- Point the mouse cursor into the diagram area, and click the **left** button twice.
  By clicking the left button twice, you first selected the frame, and then opened it.
- Using the **Select** and **All** commands on the Nothing Selected popups, select the objects in the diagram.
  All the objects in the diagram flash to show that they are selected.
- **Cut** them.

✓ Turn the Grid off.

Now you have a clear *chart* frame, into which you will copy the sample chart.

Copying a Sample Chart

In the *Graphics* cabinet on your desktop there is a folder called *Charts* that contains a collection of chart styles. You can look through these Chart samples and choose the chart that is similar to the one you want to produce.

To gain access to the Charts folder:

✓ Use the **left** button to select the *Graphics* cabinet on your desktop.

Hold down the **middle** button and release it when **Open** is in reverse video.

The open Graphics cabinet appears on your screen (Figure 8-2).

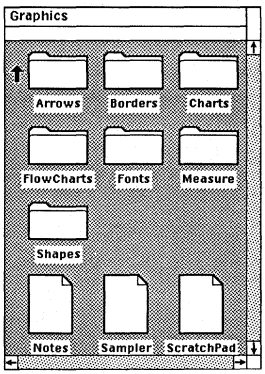


Figure 8-2. Open Graphics cabinet

✓ Select the *Charts* folder, and open it.

The open Charts *folder appears on your desktop.*

The *Charts* folder contains four documents:

- Bars
- Lines
- Pies
- AllCharts

Since you will be creating a line chart, you will need to open the *Lines* document.

- Select and open *Lines* in the *Charts* folder.
  The open Lines *document appears on your screen.*

You will cut a chart from the diagram called *Line Charts,* and paste it into the empty frame in your document. Since the charts in *Line Charts* are "cutting-locked," you can cut them without affecting the originals in *Line Charts*.

The chart you will use in your document is *L3* (Figure 8-3).

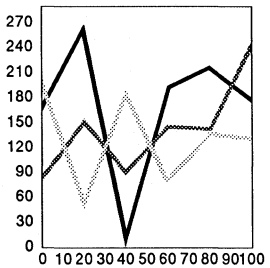


Figure 8-3. Sample line chart, L3

To cut and paste a line chart into your document:

- Using the **left** button, select *L3*.
  The chart flashes to show that it is selected.
- Hold down the **middle** button and release it on **Cut.**
- Move the mouse cursor into your open frame and hold down the **middle** button.
- Release the button when **Paste** is in reverse video.
  An outline of the chart appears.
- Move the mouse until you have approximately centered the outline of the chart in your diagram.
- Click the **middle** button to deselect the chart.

To close "Lines," "Charts," and the "Graphics" cabinet:

- Point the mouse cursor into the Name Box in the document header of *Lines* and hold down the **middle** button.

Release the button on **Close.**

The mouse cursor is now in the Charts *folder.*

With the mouse cursor in the *Charts* folder, click the **middle** button.

The Charts *folder disappears, and the mouse cursor appears in the* Graphics *cabinet.*

With the mouse cursor in the *Graphics* cabinet, click the **middle** button to close the cabinet.

Editing a Sample Chart

So that you will be able to see all the details of the chart while you are editing it, it is best that you **Size** the chart now. You will make it 50% larger than its present size.

To increase the size of your chart:

Use the **left** button to select the chart.

Hold down the **middle** button, and move the mouse cursor to **Size.**

Slide onto the submenu and move the cursor down to **Numeric.**

Slide the mouse cursor in the direction of the arrow and release the button on **Diagonal.**

A stickup appears, asking you to specify a decimal scaling factor (Figure 8-4).

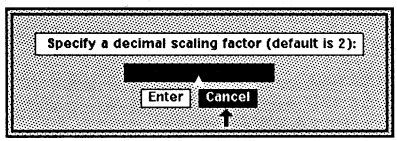


Figure 8-4. Size scaling stickup

Type **1.5**

Move the cursor over to **Enter**, and click the **left** button.

Your chart is now 1.5 times larger than before.

You are ready to edit this chart now. To do this, you will need to gain access to the Edit Chart Sheet.

To gain access to the Edit Chart Sheet:

Select the chart.

Hold down the **middle** button.

Slide onto the Props submenu.
Edit *is the default.*

Release the button.
The last Edit Chart Sheet that you gained access to is the one that will appear. If it is not the Data sheet, *point the mouse cursor into the* Data *box in the sheet header, and click the left button.*
The Data sheet appears (Figure 8-5).

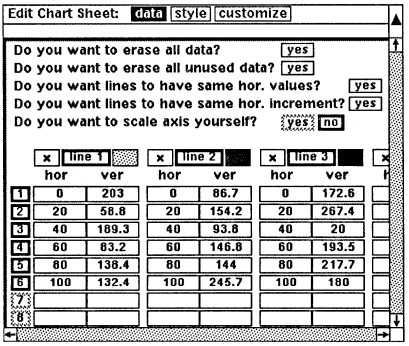


Figure 8-5. Data sheet

Resizing a Window

It will be easier to enter the data for your chart if you widen the window the Data sheet is in, so that you can see the horizontal and vertical data columns for line 4.

You can resize the Data sheet by using the Window popup menu. This menu lets you resize the window from either the top left or the bottom right by releasing the middle button when the appropriate **Resize** command is in reverse video.

To resize a window using the top left Resize command:

Move the mouse cursor into either of the scroll bars or into the white space in the Data sheet header.

Hold down the **middle** button to see the Window popup menu (Figure 8-6).

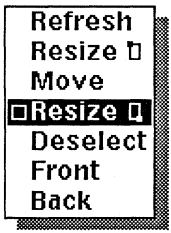


Figure 8-6. Window popup menu

Release the button when the top left **Resize** is in reverse video.

Slowly move the mouse to the left about 2 inches.
You will see an outline of the window moving to the left. The outline is anchored in the lower right-hand corner of the window.

Click the **middle** button to deselect the window.

If the window is obscuring any part of your chart, you can use the **Resize** and/or the **Move** command on the Window popup to place the window anywhere you want it on your desktop.

To move a window on your desktop:

With the mouse cursor in either of the scroll bars or in the white space in the document header, hold down the **middle** button.

Move the mouse cursor on the menu until **Move** is in reverse video, and release the button.

Move the mouse until the outline of the window is where you want the window to be.

Click the **middle** button to deselect the window.

Entering Data on a Chart

Before entering data on your chart, you must make certain changes on the Edit Chart Data sheet to accommodate the new data.

Preparing the Data sheet

Your chart will have four lines, so the horizontal and vertical data *columns* for the fourth line should be turned on. Since each of the chart lines will have only four data points (points for which you enter the x, y coordinates), the fifth and sixth data *rows* on the Edit Chart sheet should be turned off.

To turn rows and columns on or off:

- Click the **left** button to turn on the **line 4** box at the *top* of the fourth column.
- Move the mouse cursor to the vertical column on the far left and click the **left** button to turn off boxes *5* and *6*.

  Figure 8-7 shows how this column looks after you have turned off the boxes you will not be using.

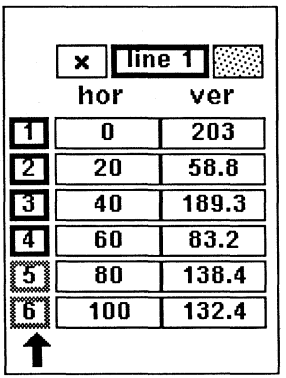


Figure 8-7. Number column with 5 and 6 turned off

You want to enter completely new data on the Data sheet. You could do this without erasing the old data, but the results might look confusing. Therefore, before entering any new data, answer **yes** to the question "Do you want to erase all data?"

To erase all data:

Point the mouse cursor at the confirmation box and click the **left** button.

The data in all the fields are cleared from the Data sheet (but the chart itself is not altered until you apply the changes).

Click the **middle** button to **Apply** these changes.

The chart now appears as an empty box.

Making Entries on the Data sheet

Before you begin typing data for your chart on the Data sheet, you should know what to do if you make a mistake or if you want to change or delete a numerical entry. There are several things you can do.

To delete an entry before you have confirmed it:

Before you have used the **TAB** key to confirm an entry, use the **DEL** key to delete one or more digits from a number.

To erase an entire entry after you have confirmed it:

Move the mouse cursor into the field where you want to erase an entry, and click the **left** button.

Now the Data sheet cursor is positioned in the field.

Press the space bar and then the **TAB** key.

To replace an entry after you have confirmed it:

Move the mouse cursor into the field where you want to replace an entry and click the **left** button to position the Data sheet cursor.

Type the new data.

Here are the data you are going to enter for your chart:

	1950	**1960**	**1970**	**1980**
word processors *(line1)*	100	175	500	5000
pencils *(line2)*	3600	1800	1400	200
pens *(line3)*	1800	2000	2300	2500
typewriters *(line4)*	700	1500	3000	700

Because the **hor**(izontal) values, the years, are the same for all four lines, you need to enter them only in the first column. The

system will automatically enter the values in the other three columns.

To enter the horizontal values:

- Point the mouse cursor into the first **hor** box (Figure 8-8).

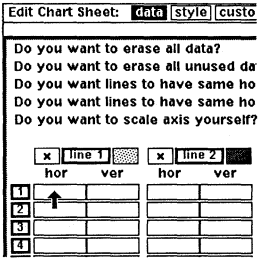


Figure 8-8. Cursor in first **hor** *box*

- Click the **left** button to position the editing cursor in this box.
- Type **1950**.
- Press the **RETURN** key to confirm the entry.
- Point the mouse cursor into the box below the one in which you typed **1950**.
- Click the **left** button to position the editing cursor.
- Type **1960**, and press **RETURN**.

There is no need to type in the rest of the time intervals. Because they are all the same (10 years) the software will enter them for you.

To assign lines the same horizontal values and increments:

- Use the **left** button to answer **yes** to the third and fourth questions at the top of the sheet ("Do you want lines to have same hor. values?" and "Do you want lines to have same hor. increment?").

  The rest of the horizontal boxes are filled in automatically.

The **ver**(tical) values can be entered in several different ways and in combinations of ways. Only one combination is described here, but you will find others that work better in other circumstances. Please see the *Making Charts* chapter of the *Reference*

Manual, Volume 2, for information on other methods of entering data on your chart.

To enter the vertical values:

Point the mouse cursor into the first box under **ver** in the column labeled **line 1** (Figure 8-9).

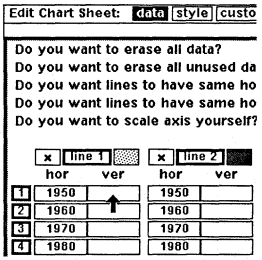


Figure 8-9. Cursor in first **ver** *box*

Click the **left** button.
The editing cursor moves to this box.

Type **100** (the number of word processors sold in 1950).

Press the TAB key twice to move the editing cursor into the first **ver** box under **line 2**.

Type **3600** (the number of pencils sold in 1950).

Press the TAB key twice to move the editing cursor into the first **ver** box under **line 3**.

Type **1800** (the number of pens sold in 1950).

Press the TAB key twice and type **700** (the number of typewriters sold in 1950) as the vertical value for **row 1** under **line 4**.

Press RETURN.

Move the mouse cursor down to the first **ver** box in the next row (under **100**).

Click the **left** button to move the editing cursor to this box.

Continue entering the rest of the vertical values (the columns of numbers lined up under the years on page 8-9), using the TAB key to move across the rows and the mouse to move down.

To apply these changes and see how the chart now looks, click the **middle** button.

This is probably not the result you want. The chart has been automatically scaled. Automatic scaling ensures that the point (0,0) is the intersection of your horizontal and vertical axes. Because of the data you have entered, you want the point (1950,0) to be the intersection, instead. Correct this situation by scaling the axes yourself.

To scale the axes:

- Use the **left** button to turn on the **yes** box next to the question "Do you want to scale axis yourself?"

  Four additional boxes appear under the questions on the Edit Sheet.

- For the *vertical axis: minimum*, type **0.**
- Press the **TAB** key to move the editing cursor to the box for the *maximum* on the *vertical axis.*
- Type **5500.**
- Use the **TAB** key to confirm the entry.

  The editing cursor moves to the next box.

- For the *horizontal axis*, make the *minimum* **1950** and the *maximum* **1980.**

  Figure 8-10 shows how the completed Data sheet looks.

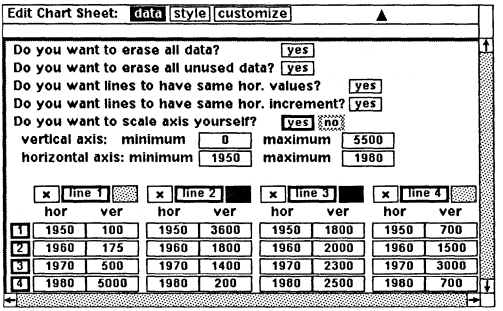


Figure 8-10. Completed Data sheet for line chart

- **Apply** the changes you have made.

  Note how the horizontal values on the chart have changed.

Note: Although you entered data for ten-year intervals (e.g., 1950, 1960), your chart automatically displays both those intervals *and* the points halfway between each interval (e.g., 1955).

Making Style Changes on Your Chart

The chart looks better now, but there is still a bit of work left to do before you have a finished chart.

Click the **left** button with the cursor in the **style** box to replace the Data sheet with the Style sheet.

In this chart, as in many, a black border called the *data border* encloses the data area. You will want to add *major hash* marks along the data border to indicate the vertical and horizontal increments on each axis. To make room for the hash marks, you must adjust the data margins (the area between the blinking edge of the chart when it is selected and the data area of the chart) and the label margins (the area between the labels and the data area).

Note that when you increase or decrease any data margin, the corresponding dimension of the data area is inversely sized. For example, if you increase the left or right data margin, the width of the chart data area decreases by the same amount.

To change the margins:

Move the mouse cursor over to *data margins: left* and across to  .

With the cursor pointing into the box shown above, click the **left** button.

Use the **middle** button to **Apply** this change.

You have increased the left data margin (the area to the left of the data border).

Move the mouse cursor over to *data margins: bottom* and across to  .

With the cursor pointing into the box shown above, click the **left** button.

Use the **middle** button to **Apply** this change.

You have increased the bottom data margin (the area below the data border).

Move the mouse cursor over to *label margins: bottom* and across to  .

With the cursor pointing into the box shown above, click the **right** button twice.

You have increased the bottom label margin (the area between the bottom labels and the data border).

Use the **middle** button to **Apply** this change.

By applying each change individually, you can see the effect of sizing each margin. You could have adjusted the three margins and applied all of the changes at once.

To turn on major hash marks:

Move the mouse cursor down the left-hand column of the Style sheet to the line labeled *major hash:* and over to the second box.

With the mouse cursor on the box, click the **left** button.

The box now has a black border (Figure 8-11).

Figure 8-11. Major hash thickness row with the second setting turned on

Use the **middle** button to **Apply** this change.

If you want the major hash marks to be shorter or longer than they are now, experiment with the row of boxes to the far right of *major hash* (Figure 8-9).

Figure 8-12. Major hash length settings

Towards the bottom of the sheet, on the left, there are now four *items*, indicating that this chart has four lines in it. On this section of the sheet, you select the texture for each of your lines.

When they are used for lines, some textures print better than others. Also, different textures can help you make points about the data.

To change the textures of lines:

- For this chart, turn on the *black* box (sixth from left) for the first item (**line 1, word processor sales**) and *grey* for the third and fourth items. (*Grey* is turned on for the second item already.)
- **Apply** these changes.
- **Close** the Chart Edit Sheet.

After you have entered text on your chart, you can come back to the Style sheet, if you like, and experiment with other changes to the appearance of your chart.

Changing the Font of the Labels

Now you will change the font of the labels.

To change the font for your chart:

- Select the chart.
- Hold down the **middle** button.
- Slide onto the Props submenu and then slide the mouse cursor onto the Font submenu.
- Slide onto the Family submenu, and select **Modern 10 point.**
- Select the chart again.
- Slide onto the Font submenu, and select **Bold.**

Entering Text on a Chart

You are ready now to add text to your chart. The text you enter around the chart will be in the type font of the component (as represented in the document header). You should change it as needed, using any of the methods you already know.

Figure 8-13 shows what the chart will look like when you finish. All the text is in various sizes of the Modern bold typeface: the heading is in 12 point, *Word Processors, (in millions of $'s), Typewriters, Pens,* and *Pencils* are in 8 point.

If you turn on the diagramming grid (using the Misc submenu on the Nothing Selected menu), it will be easier for you to line up the text to the right of the chart.

You want to add the following text: *SALES OF WRITING IMPLEMENTS, (in millions of $'s), Word Processors, Typewriters, Pens,* and *Pencils.*

To enter text:

- Use the **middle** button in the document header to select the font size you want the text to be.
- Point anywhere in the diagram, and type one of the labels.

  Once you finish entering all the text that belongs on a single line, be sure to deselect that text before entering a new text block.

If you do not want the label where it is, hold down the **middle** button while the text is still selected.

Slide onto the Move submenu.

Sometimes, it is easier to move something **Horizontally** and then **Vertically,** rather than in **All** directions at once. Try these various options as you enter and edit the text.

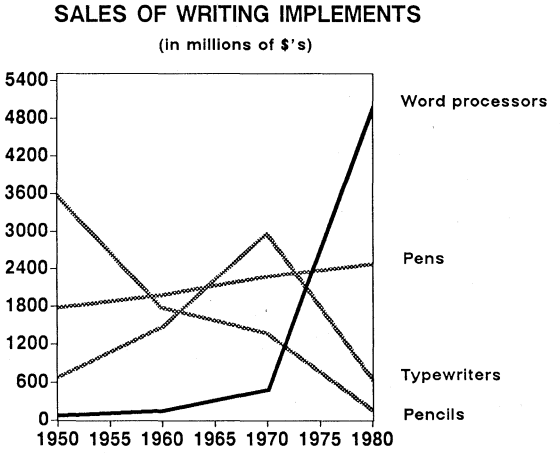


Figure 8-13. Completed line chart

There are many other actions that can be performed within the diagramming system. They are discussed in detail in the *Reference Manual*, Volume 2. Try as many of them as you like when you begin working on your own.

Chapter 9

Keyboard Alternatives

This chapter introduces methods of using the keyboard to perform basic functions, including many which you have already learned to perform using the mouse and menus. These functions include:

Creating components

Deleting text

Positioning the cursor

Changing fonts

Interrupting the software

Inserting special characters

Although this chapter contains general procedures rather than specific examples, we recommend you practice the procedures in either *pingo* or *Defense.*

Most of these functions involve a combination of keystrokes that include holding down the **CTRL** key, which is located to the left of the **A** key on the standard keyboard.

CTRL followed by a **character** means that you should hold down the **CTRL** key while typing the appropriate character. For example, to move the editing cursor forward one character, hold down the **CTRL** key and type **f.**

Creating Components

You can use the **LINE FEED** key to create new components that will have the same name and properties as the original component. **LINE FEED** always creates a component immediately *following* the component in which the *editing cursor* is positioned.

To create a new component identical to and following the one in which the editing cursor is positioned:

⌸ **LINE FEED**

Deleting Text

There are a number of ways to delete text using the keyboard.

To delete a character forward from the cursor:

- CTRL **d**

To delete forward from the cursor to the end of a word:

- CTRL **t**

To delete from the cursor to the end of a line:

- CTRL **k**

To delete a character backward from the cursor:

- DEL

To delete backward from the cursor to the beginning of a word:

- CTRL **w**

To delete text using a combination of the mouse and the keyboard:

- Select the block of text you wish to delete.
- Press any of the key combinations listed above for deleting text.

Positioning the Editing Cursor

Use the arrow keys to move the editing cursor up or down one line and left or right one character. Holding down an arrow key will cause the cursor to continue moving in the direction of the arrow. You can also use CTRL key combinations to move the cursor.

To move the cursor forward one character:

- CTRL **f**, *or* use the appropriate arrow key.

To move the cursor backward one character:

- CTRL **b**, *or* use the appropriate arrow key.

To move the cursor to the next line:

- CTRL **n**, *or* use the appropriate arrow key.

To move the cursor to the previous line:

- CTRL **p**, *or* use the appropriate arrow key.

To move the cursor to the beginning of the line:

- CTRL **a**

To move the cursor to the end of the line:

- CTRL **e**

Changing Fonts

On your keyboard is a row of function keys that you can use to change fonts.

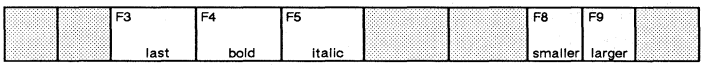


Figure 9-1. Function keys for changing fonts

To change to the last font used before the current setting:

- **F3** on a SUN120 and SUN 50

To change from roman to bold or from bold to roman:

- **F4** on a SUN120 and SUN 50

To change from roman to italic or from italic to roman:

- **F5** on a SUN120 and SUN 50

To decrease the type size:

- **F8** on a SUN120 and SUN 50

To increase the type size:

- **F9** on a SUN120 and SUN 50

Other Keyboard Commands

To center the cursor on the screen:

- CTRL **l** *(l* as in *lower* rather than *1* as in *123)*

A hard carriage return makes it possible for you to determine line breaks for yourself and override the publishing software's automatic line break feature.

To insert a hard carriage return:

⌨ **<RETURN>**

A bent arrow appears at the end of the line, and the editing cursor moves to the beginning of the next line.

There are times when you can take advantage of a feature which lets you interrupt the operation of the Interleaf software. For instance, if you have just entered a print command, and realize that you are printing the wrong document, you can interrupt the software and cancel the print command.

To interrupt operation of the publishing software:

⌨ **CTRL z**

The mouse must not be engaged in an operation when you type **CTRL z**.

After an *interrupt*, the options available to you are displayed on a stickup menu.

You can choose an option either by moving the mouse cursor to the appropriate box and clicking the **left** button or by typing the first letter of the command (e.g., **c** to *continue* or **C** to *Cancel).*

If you are in a document when you type **CTRL z**, and on the stickup you select

- **f***(ile)* and you have made changes in a document, you will be asked if you want to save the changes in a crash file. If you select **f** and you have not made changes, the editing session continues.
- **s***(uspend)*, the program you are running will be suspended and you will see an operating system prompt on your screen.

  To return to the Interleaf publishing software, type **fg** *(foreground)*.
- **e***(xit)*, the Interleaf publishing software will close, and you will be returned to the operating system. You will not be asked if you want to save any changes you have made.

- **C***(ancel)*, the operation in progress will be canceled. If you have sent a document to be printed, the print order will be canceled. If you select **C***(ancel)* while a document is being loaded (loading is the first action that occurs when you open a document), the loading will stop. If you select **C***(ancel)* while a search is in progress, the search will be terminated.
- **c***(ontinue)*, your editing session continues.

Accessing Special Characters from the Standard Keyboard

There are several characters available through a combination of **ESCAPE** sequences. **ESC** followed by a **character** means that you should press the **ESC** key before typing the appropriate character. You must repeat the sequence each time you want to use the special character. The **ESC** key is located to the left of the number **1** key.

To insert a double opening quotation mark (“):

ESC [“ ‘]

To insert a hard space in text so that two words will be treated as one word:

ESC <SPACEBAR>

To insert a hyphen (-):

ESC [- =]

To insert an em dash (—):

ESC [+ =]

To insert a cent sign (¢):

ESC [$ 4]

See the *Keyboard Control* chapter in the *Reference Manual*, Volume 1, for additional information on using the keyboard. For information on the standard Interleaf typefaces see the *Typefaces and Typography* chapter in the *Reference Manual*, Volume 1.

Chapter 10

Search and Replace Operations

Search and Replace operations are accomplished through the keyboard.

The **Search** operation makes it possible for you to look for a string of characters in text (for example, *elephants*).

After you have located the string, the **Replace** operation makes it possible for you to replace the search string with another string of characters (for example, to replace *elephants* with *zebras*).

Note: Search and Replace operations do not recognize text in frames.

To see how Search and Replace operations work, you need a fresh copy of *pingo. Pingo* is in the *Text* folder in the *Samples* drawer on your desktop. You can make a copy of it and keep the copy on your desktop.

To copy pingo onto your desktop:

- Select and open the *Samples* drawer on your desktop.
- Open the *Text* folder.
- Select *pingo* in the open *Text* folder.
- Hold down the **middle** button and release it when **Copy** is in reverse video.
- Move the mouse cursor onto your desktop and hold down the **middle** button.
- Release the button when **Paste** is in reverse video.
  An outline of the pingo *icon appears on your desktop.*
- Rename the document as *pingo2*.
- Click the **middle** button to open *pingo2*.

Search and Replace Exercises

While it is unlikely that you will often use Search and Replace operations in documents as short as *pingo,* you can use *pingo* to get an idea of how the operations work.

Forward Search

In a forward search, the software locates the first instance of a specified text string that appears *after* the editing cursor.

To search forward for text in pingo:

- With the editing cursor located at the beginning of *pingo2,* hold down the **CTRL** key and type **s**.
  Figure 10-1 shows the Search stickup menu you will see.

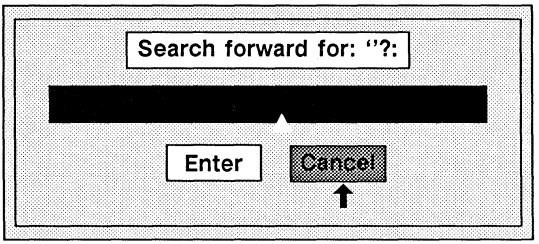


Figure 10-1. Search stickup menu

- In response to the query on the menu, type **ice**, and press **RETURN** *or* move the mouse cursor to **Enter** on the stickup menu and click the **left** button to confirm that this is the search string you want.
  The first instance of **ice** *is highlighted.*
- Search for the next instance of **ice** by holding down the **CTRL** key and typing **s**.
  The word **ice** *is highlighted.*
- End this Search operation by moving the mouse cursor into the text if necessary and clicking the **left** button.
  Notice that **ice** *is no longer highlighted.*

Backward Search

A **backward** Search operates in the same way as a forward Search, except that you use the command **CTRL r**.

To initiate a backward search:

Hold down the **CTRL** key, and type **r**.
Because you ended one search and then initiated a new one in the same editing session, the system reminds you of your earlier search.

Figure 10-2 shows what the stickup menu looks like. If you wanted to search for **ice** *again, you would not have to type anything in. You could just choose* **Enter** *on the stickup menu.*

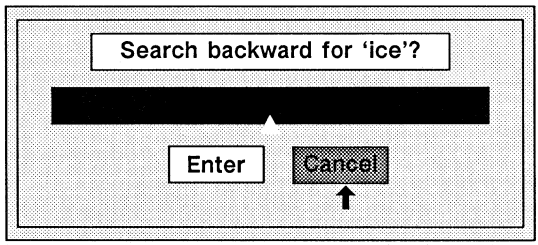


Figure 10-2. Search stickup menu after interruption

In response to the query on the stickup menu, type **pingo**.

To confirm, press **RETURN** *or* move the mouse cursor to **Enter** on the stickup and click the **left** button.
The status line displays a message that the word pingo *has been found.*

The instance of pingo *that is highlighted is the first instance appearing before the editing cursor when the backward Search was initiated.*

Forward and Backward Searches

You can alternate between forward and backward search any time you like. The direction of the search is determined by whether you use **CTRL s** or **CTRL r**.

Each of these commands can be used consecutively. For example, you can use **CTRL s** several times in succession to find instances of the string you want that occur several paragraphs after the cursor position. Or you can use **CTRL r** repeatedly to see previous instances of the string.

Switch back and forth between *forward* and *backward* searches until you feel comfortable with the process. End with a forward Search.

✓ Move on to the next exercise *leaving the last instance* of "pingo" (in the footnote) highlighted.

Replacing Text

You can search for text without replacing it. However, *it is necessary to search for text* in order to use the **Replace** function.

After you replace a text string with a new one, the search for the string to be replaced proceeds forward or backward, depending on the starting direction of the search.

To replace text:

Hold down the CTRL key and type **q**.
You will see the Replace stickup menu (Figure 10-3).

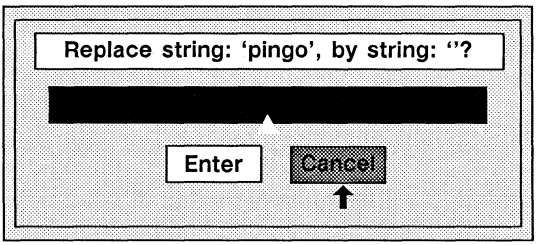


Figure 10-3. Replace stickup menu

In response to the query on the stickup, type **potato**. Then either press RETURN *or* move the mouse cursor to **Enter** and click the **left** button.
The highlighted instance of pingo *in the footnote is replaced with the word* potato.
Since the editing cursor was at the last instance of pingo, *in the document, a stickup appears asking whether you want to wrap to the beginning of the document.*

Press RETURN *or* move the mouse cursor to **Wrap** on the stickup and click the **left** button.
The document scrolls to the first page and the first instance of pingo *(in the title) is highlighted.*

Instead of replacing this "pingo", skip it by holding down the CTRL key and typing **s**.
The highlighted instance of pingo *is not replaced with* potato, *and the next instance of* pingo *is found.*

Type **CTRL q** to perform the replacement.
The selected instance of pingo *in the first paragraph is replaced with* potato *and the next instance of* pingo *(in the second paragraph) is selected.*

Remember that when you use **CTRL q**, the system not only replaces the *search* string with the *replace* string, but also moves to the next instance of the *search* string.

End the Search and Replace operations by moving the editing cursor in text.

Stopping a Search in Progress

Occasionally, you may mistype a search string without realizing it. If the system is looking for "Figure 58" instead of "Figure 1-58," the search will fail; but, in a long document, the process takes a while. In this circumstance, most users want to interrupt the search, cancel it, and start over.

To interrupt a search in progress:

Hold down the **CTRL** key and type **z**.

To cancel a search:

Move the mouse cursor to **Cancel<C>** on the stickup and click the **left** button, *or* type **C**.

Search Strings

As you have seen, when you initiate a search operation, the system asks you for the text you want to search for. If, in response to this question, you type a search string with only lower-case letters in it, the search routine will find all examples of the text. Thus, you can type **pingoes** if you want to find *pingoes, Pingoes,* and *PINGOES.*

However, the search routine is sensitive to upper-case letters. If you type **Pingoes**, it will find only *Pingoes* and *PINGOES.* If you type *PINGOES* (or *PIngoes* or *piNGoes* or any other combination of two or more of the upper- and lower-case letters in the string *PINGOES),* the routine will find only that combination and *PINGOES.*

A Summary of Search and Replace Operations

Search Operations

Both forward and backward searches are possible.

You can switch from a forward to a backward search or vice versa at any time.

Both forward and backward searches are circular searches, so that you can go from any location on a document and in either direction.

When a forward search reaches the end of a document, the system will ask you whether you want it to wrap around to the beginning of the document and continue the search.

Similarly, when a backward search reaches the beginning of a document, you will be asked whether you want it to wrap around to the end of the document and continue the search.

You conclude or interrupt a search operation by moving the editing cursor in text or by typing something from the keyboard.

Replace Operations

It is necessary to precede a Replace operation by a Search operation.

After you confirm the search text, you use **CTRL q** to replace the search string with the replace string and either **CTRL s** or **CTRL r** when you do not want to make a replacement.

You conclude or interrupt a combined search and replace operation by moving the editing cursor in text or by typing something from the keyboard.

For information on Global Search and Replace operations, see the *Keyboard Control* chapter of the *Reference Manual*, Volume 1.

Chapter 11

Using Tabs

In the Interleaf publishing software, you can specify up to 14 different tab settings in a component. Changeable tab settings are very useful when text alignment is important. In this chapter, you will use tabs to create:

a numbered list (Figure 11-1);

8. Add the eggwhites and continue beating until they are combined with the rest of the ingredients.
9. Pour the batter into two buttered and floured cake pans.
10. Bake for 35–40 minutes at 350 degrees.

Figure 11-1. Numbered list

an outline (Figure 11-2);

A. There is a tab set at *0 inches* where *A* is entered, and this sentence begins at the second tabstop, which is set at *0.3 inches*.
    The tab for this sentence is the third tabstop and is set at *0.9 inches*.
        The tab for this sentence is the fourth tabstop and is set at *0.9 inches*.
            The tab for this sentence is the fifth tabstop and is set at *1.2 inches*.

Figure 11-2. Outline

and a table (Figure 11-3).

RAZOR BLADE SALES IN THREE NEW ENGLAND TOWNS

TOWN	STATE	POPULATION	SALES
Lyric	Maine	12,345	$10,465.39
Poster	Vermont	3,206	4,513.78
West	Massachusetts	32,681	27,300.43

Figure 11-3. Table

These exercises will demonstrate uses of the four types of tabs you can create in a component: **Left tabs, Right tabs, Center tabs,** and **Decimal tabs.**

Setting Tabs

The easiest way to understand how to use the different types of tab settings is to use the default tab settings and then change them and watch what happens to your document.

You enter tabs into a component by pressing the **TAB** key. The effect a tab has on your text is defined on the Tab sheet of that component's Property sheet.

To practice setting tabs:

- **Create** a document, name it *PracticeTabs,* and **Open** it.
- In the empty component named *paragraph,* press the **TAB** key 4 times to insert 4 tabs.

  The lines you see are not actually part of the document; they appear in the document on the screen to let you know where tabs have been inserted, but they do not appear on the printed document.

For the moment, do not insert any text.

- Move the mouse cursor into the component bar to the left of the document.
- Select the component.
- Hold down the **middle** button, and release it when **Props** is in reverse video.

  A Component property sheet appears in a window in the upper right-hand corner of the screen.
- Point the mouse cursor at the box in its header labeled **Tab**, and click the **left** button to select this sheet.

  The Tab Sheet appears (Figure 11-4).

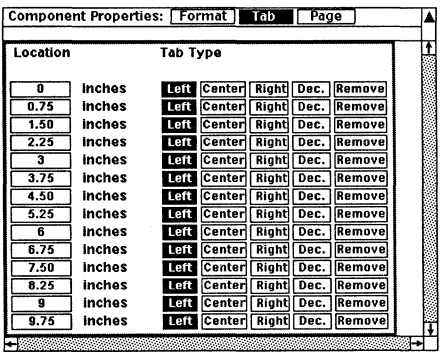


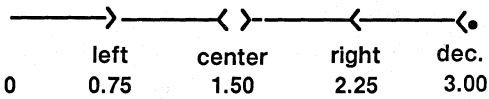
Figure 11-4. Tab sheet with default tab settings

The default tab settings are Left tabs at intervals of .75 inches, beginning at 0 inches. Tabs are set with reference to the left margin of the *component*, (not with reference to the left margin of the page). When you are setting tabs, consider the left margin of the component to be at tab position 0 inches.

Note that tabs are set in inches, not character spaces. This is because, with the exception of the typewriter typeface family, the publishing software fonts are proportionally spaced; thus, the space occupied by a single character varies with the character.

- Change the *1.50* inches tab to a **Center** tab by clicking the **left** button in the **Center** box.
- Change the *2.25* inches tab to a **Right** tab, and the *3.00* inches tab to a **Dec.** tab.
- **Apply.**

The tabs in your component will look like this:



Changing Tab Settings after Entering Text

To change tab settings after entering text:

- Change all the tabs back to **Left** tabs.
- **Apply** the changes, and **Close** the property sheet.
- Select the tabs you inserted by holding down the **right** button and moving the mouse horizontally until the tabs are in reverse video.
- Release the **right** button.
- Hold down the **middle** button, and release when **Cut** is in reverse video.
- Press the **TAB** key, and type **changes.**
- Select the component.
- Open the Tab sheet of the Component property sheets.
- Position the mouse cursor in the *Location* field that reads *0.75,* and click the **left** button.

- Change the *0.75* inches tab to **1** inch. **Apply**.
  Notice that changes *moves to the right.*
- Change this tab from a **Left** tab to a **Center** tab. **Apply** and watch what happens to *changes*.
  Changes *is now centered around the one inch mark.*
- Change the tab to a **Right** tab, and **Apply**.
  Changes *moves to the left of the one inch mark.*
- Change the tab at *1.5* inches from a **Left** Tab to a **Dec.** Tab.
- **Apply** and **Close** the property sheet.
- Press the **TAB** key.
  This moves the editing cursor to the **Dec.** *tab at 1.5 inches.*
- Type the number **55555.**
  Notice that the text grows to the left of the 1.5 inch mark.
- Now type a period (decimal point) and the number **44444.**
  Notice that the text now grows to the right of the decimal point you inserted.

Automatic Ordering of Tabs

You can enter tab settings in any order (Figure 11-5), and the publishing software will reorder them properly after you apply the settings (Figure 11-6).

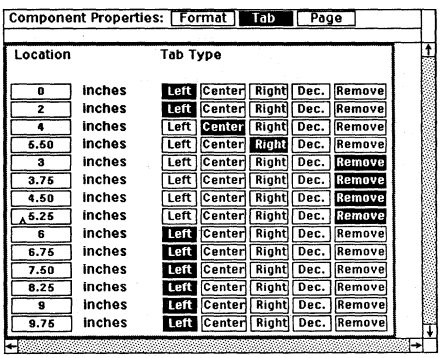


Figure 11-5. Tab sheet with user's unordered entries

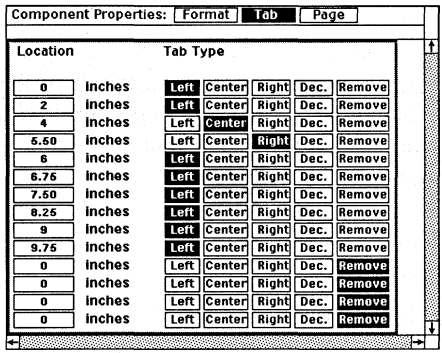


Figure 11-6. Tab sheet after entries are applied

Note: If you want tabs at 0, 2, 4, and 5.5 inches, it is not necessary to turn on **Remove** for *all* the extra tabs—only for those numbers between 0 and 5.5 inches.

Before going on to creating the examples, here is a summary of rules for setting tabs.

A Summary of Tab Setting

The example that follows shows where text appears when Left, Center, Right, and Decimal tabs are set at 2 inches (that is, 2 inches from the left margin of this component). The arrowhead shows where the tab is set in each instance.

Left tab at 2 inches
Center tab at 2 inches
Right tab at 2 inches
Decimal tab with . at 2 inches

Notice that the 2-inch tab setting is in the same place, whether the tab is Left, Center, Right, or Decimal. It is the *placement of the text* in relation to the tab setting that is different.

When you use a **Left** tab setting, the text grows to the right of the tab setting.

When you use a **Center** tab setting, the text is centered around the tab setting (in the example above, the *C* in the word *Center* and the *s* in the word *inches* are equidistant from the tab setting).

When you use a **Right** tab setting, the text grows to the left of the tab setting.

When you use a **Dec.**(imal) tab setting, the text grows to the left until a decimal point is encountered. From the decimal point on, the text grows to the right.

In other words, a *Decimal* tab behaves like a *Right* tab up to the decimal point and like a *Left* tab from the decimal point on. If no decimal occurs in the text, a Decimal tab behaves like a Right tab. If the first character typed at the tab stop is a decimal, a Decimal tab behaves like a Left tab.

Setting Tabs for Numbered Lists

There are various situations in which tabs are useful. One of the simplest is a series of numbered items like the following:

8. Add the eggwhites and continue beating to combine them with the rest of the ingredients.
9. Pour the batter into two buttered and floured cake pans.
10. Bake for 35–40 minutes at 350 degrees.

Using Negative Tabs and First Indents

The *Left* margin for each of the three components in the numbered list shown above is set at *1.44* inches. The *Right* margin is set at *1.8* inches.

For the item number to appear in the left margin, the first line must have a negative indentation. Therefore, the *First Indent* for these components is set at *–0.5* inches.

So that the text of the first line is aligned to the text of the other lines, a *Left* tab is set at *0* inches. There are many occasions when you will want to use this combination of a negative indentation for the first line of a component and a Left tab set at 0 inches to line up text.

To make room on the list for two digit numbers, a *Right* tab is set at *–0.2* inches.

This combination of a –0.5 *First Indent* and a –0.2 *Right* tab to make room for two-digit numbers works for font sizes between 6

and 14 point. The numbers will be placed in the space between settings C and D in Figure 11-7.

Note: If you are using a larger type size, you will need to make an adjustment. For example, for 24 point type, it is necessary to set the *First Indent* at *–0.7* inches. A larger point size may also make it necessary to change the left margin of the component.

Figure 11-7 shows the various tab settings, margins, and indentations for this component and explains what each setting signifies.

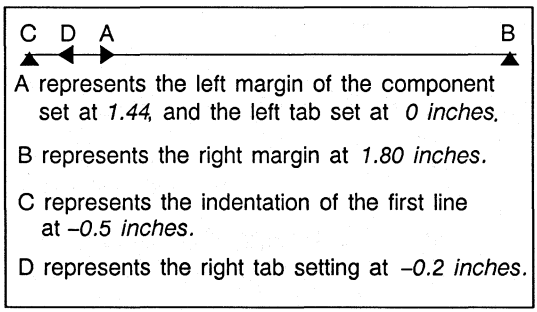


Figure 11-7. Margins, tabs, and indentations

To get a sense of how to use this kind of tab setting, do the following exercise using the recipe items. They are repeated at the end of the instructions for your convenience.

To set tabs for a numbered list:

- Create a new *paragraph* component in *PracticeTabs*.
- On the Format sheet of the Component property sheets, name the component *list* and set these specifications:

  Left margin: **1.44** inches
  Right margin: **1.80** inches
  First Indent: **–0.50** inches
  Font: **14** point **Modern**
  Alignment: **Flush Left**
  Hyphenation: **Off**

- On the Tab sheet, set up the following tabs:

  Left tab: **0** inches
  Right tab: **–0.20** inches

- **Apply** the changes.

✓ **Close** the property sheet.

☐ Enter the first recipe item by pressing the **TAB** key, entering **8.**, pressing the **TAB** key again, and typing the text, which is shown here again for your convenience.

> 8. Add the eggwhites and continue beating until they are combined with the rest of the ingredients.
> 9. Pour the batter into two buttered and floured cake pans.
> 10. Bake for 35–40 minutes at 350 degrees.

☐ Continue with the last two items in the same way, pressing **LINE FEED** to create the new components.

Setting Tabs for Outlines

The next exercises show two ways to create an outline: using tabs and returns in a single component; and using several components with different levels of indentation.

Using a Single Component for an Outline

The following involves slightly more complicated tab settings because this one component has four levels of indentation. All the tabs are Left tabs.

A. There is a tab set at *0 inches* where *A.* is entered, and this sentence begins at the second tabstop, which is set at *0.3 inches.*
The tab for this sentence is the third tabstop and is set at *0.6 inches.*
The tab for this sentence is the fourth tabstop and is set at *0.9 inches.*
The tab for this sentence is the fifth tabstop and is set at *1.2 inches.*

Figure 11-8 shows the tab settings for this component without the text.

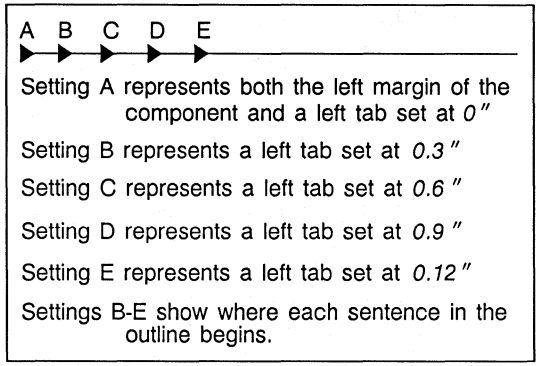


Figure 11-8. Tab settings for outline

Use the following procedure to create those tab settings.

To set tabs for an outline using a single component type:

- Move the mouse cursor into the component bar.
- Use the **left** button to position the component caret beneath the last component.
- Create a new *paragraph* component, using the **Create** command on the Component Location Selected popup menu.
- On the Format sheet of the Component property sheet for the new component, rename it *outline* and change the font to **Modern 14**.

  The Left *and* Right *margins and the* First Indent *are already set at* 0 *inches.*
- On the Tab sheet, set **Left** tabs for the component at **0**, **0.3**, **0.6**, **0.9**, and **1.2** inches.
- **Apply** and **Close** the Component property sheet.

To enter the outline text:

- Type **A.**, press the **TAB** key, and enter the first line of text, reproduced below.

  Remember that you can use the keyboard to switch between italic font and roman.

There is a tab set at *0 inches* where *A.* is

- Press the **RETURN** key.

- Press the **TAB** key, and enter the next line of text.

---

entered, and this sentence begins at the

- Press the **RETURN** key.
- Press the **TAB** key once, and enter the text of the third line.

---

second tabstop, which is set at *0.3 inches.*

- Press the **RETURN** key.
- Enter the fourth and fifth lines of text, pressing the **TAB** key twice before each line.

The tab for this sentence is the third tabstop and is set at *0.6 inches.*

- Enter the next lines, pressing the **TAB** key three times before each line.

The tab for this sentence is the fourth tabstop and is set at *0.9 inches.*

- Enter the last two lines, pressing the **TAB** key four times before each line.

The tab for this sentence is the fifth tabstop and is set at *1.2 inches.*

In this exercise, you used the **RETURN** key at the end of each line and then you used the **TAB** key to line up the text of each indented section.

Using Several Components for an Outline

For comparison, in the next exercise you will use four different kinds of components to create the same outline as the one you created above. You will not have to use the RETURN key to move from line to line or from one component to another in this exercise.

To create an outline using different kinds of components:

- Create a new *outline* component.
- On the Format sheet of the Component property sheets rename the component *outline1*, and make

  Top margin: **0.2** inches
  Bottom margin: **0.2** inches
  Left margin: **1.6** inches
  Right margin: **0.8** inches
  First Indent: **–0.3** inches
  Font: **14** point **Modern**
  Alignment: **Flush Left**
  Hyphenation: **Off**

- On the Tab sheet, set a **Left** tab at **0** inches.
- **Apply** and **Close** the Component property sheets.
- Type **A.**, and press the TAB key.
- Type the text of the first three lines, without using RETURN after you enter each line.

There is a tab set at *0 inches* where *A.* is entered, and this sentence begins at the second tabstop, which is set at *0.3 inches.*

- Create another *outline1* component. Name it *outline2*. Change the *Left* margin to **1.9** inches, and the *First Indent* to **0** inches.
- Enter the text on lines 4 and 5 of the example. (remember not to press RETURN after you enter each line).

The tab for this sentence is the third tabstop and is set at *0.6 inches.*

- Create a new *outline2* component. Change its *Left* margin to **2.2** inches and rename it *outline3*.
- Type the text on lines 6 and 7 of the example.

The tab for this sentence is the fourth tabstop and is set at *0.9 inches.*

- Finally, create a new *outline3* component. Change the *Left* margin to **2.5** inches. Name it *outline4*.
- Type the text on lines 8 and 9 of the sample.

The tab for this sentence is the fifth
tabstop and is set at *1.2 inches.*

The advantage of one method for creating outlines is the disadvantage of the other: a single component with different tab settings makes it easy to make fine adjustments to the way your text will look without having to change the properties of many different kinds of components.

On the other hand, when you use a single component to set up an outline like this, you may have to delete some RETURNs and tabs and put in others if you later edit the text.

Setting Tabs for Tables

There are times when you want to create a table with some centered headings, some columns set left, some columns set right, and some set to line up on decimal points. The following is an example.

RAZOR BLADE SALES IN THREE NEW ENGLAND TOWNS

TOWN	STATE	POPULATION	SALES
Lyric	Maine	12,345	$10,465.39
Poster	Vermont	3,206	4,513.78
West	Massachusetts	32,681	27,300.43

This table consists of three different kinds of components. Follow the procedure below to create a similar table in *PracticeTabs*.

To set up a table:

- Create a *paragraph* component.
- Name the component *title*.
- Set the *Top* margin at **0** inches, and the *Bottom* margin at **.20** inches.
- Set the *Left* and *Right* margins at **−0.05** inches.

- Set the alignment of the *title* component at **Centered** and the font at **Modern 14** point **Bold**.
- **Apply** and **Close** the property sheet.
- Type the first row of copy.

RAZOR BLADE SALES IN THREE NEW ENGLAND TOWNS

- Use **LINE FEED** to create a second component, and name it *headings*.
- Set the *Bottom* margin at **.10** inches.
- Set the *Left* margin at **1.25** inches and the right margin at **0** inches.
- Set the alignment at **Flush Left**.
- Make this component (*headings*) **Modern 10** point roman type font.
- Set the following tabs:

  a **Left** tab at **0** inches
  a **Right** tab at **1.5** inches
  Centered tabs at **2.5** and **3.8** inches

- Use the **left** button to turn on **Remove** beside any other numbers that fall between 0 and 3.8.
  They are likely to be the tabs set at 3 and 3.75 (Figure 11-9).

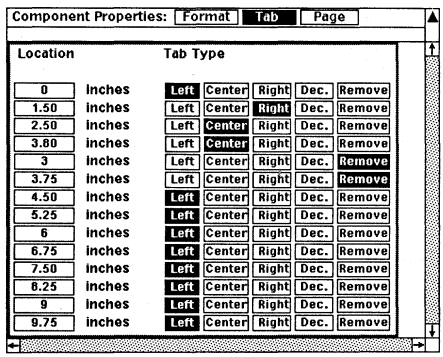


Figure 11-9. Tab sheet with Remove turned on.

- **Apply** and **Close** the property sheet.
- Type **TOWN.**

- Press the **TAB** key and type **STATE**. Press the **TAB** key again and type **POPULATION**. Press the **TAB** key once more and type **SALES**.
- Press the **LINE FEED** key to create another component.
- Name the new component *data* and set the *Bottom* margin at **.25** inches. Change the font of the component to **Classic 10** point roman.
- Set the following tabs:

  a **Left** tab at **0** inches
  Right tabs at **1.5** and **2.95** inches
  a **Decimal** tab at **3.95** inches
- **Apply** and **Close** the property sheet.
- Type the three rows of data, with tabs inserted between each item and returns entered at the end of each row. The data is shown again below.

Lyric	*Maine*	*12,345*	*$10,465.39*
Poster	*Vermont*	*3,206*	*4,513.78*
West	*Massachusetts*	*32,681*	*27,300.43*

Tab Appearance

In the exercises you just performed, you could see the lines used to indicate tab settings on the screen, but these lines would not have appeared in a printed copy of the document.

Using the **Tabs** submenu of the Text Location Selected popup menu, you can cause the tabs to appear in a number of forms in printed documents (Figure 11-10).

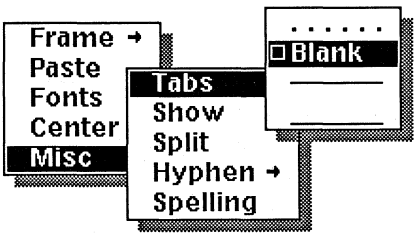


Figure 11-10. Tabs submenu

You can mix the way your various tabs look when your document is printed. For example, the following line uses all four possibilities—blank, underline, line, and dots.

Here is_____an example———of . . . . dots.

To accomplish this feat, all you need to do is choose what you want a particular tab to look like *before* you press the **TAB** key.

If you do not like the way a tab looks, delete the tab, and choose the appearance you want on the Tabs submenu. Then put the tab back in.

Even if you are using blank tabs, you may want to see the tab settings on the screen while you are entering and editing text. The **Show** submenu on the Text Location Selected popup menu makes it possible for you to choose whether or not you will see blank tabs on your screen (Figure 11-11).

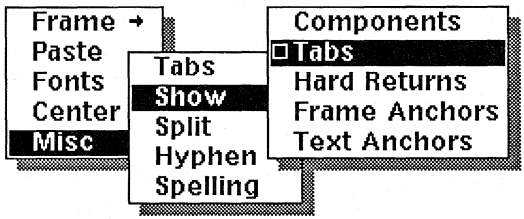


Figure 11-11. Show submenu

Chapter 12

Controlling Page Makeup

You have learned to control the margins and other properties of components and entire documents. You can also set properties for an entire document that affect the appearance of individual pages. For example, what can you do when you want a certain component—a main heading, say—to appear always at the top of the next page even if it will fit on the current page?

This chapter describes the settings on one of the Component property sheets, the **Component Page property sheet** (Figure 12-1). This sheet allows you to make page makeup decisions.

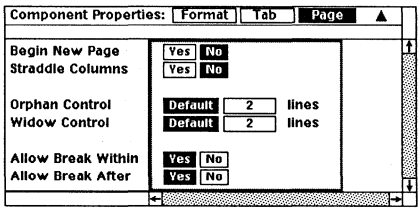


Figure 12-1. Component Page property sheet

As this chapter progresses, you will be told several times to close *pingo* without saving the changes you have made and then to reopen it. By closing without saving, you have the same, original version of *pingo* for each exercise.

To see how the page makeup properties work, you need a fresh copy of *pingo. Pingo* is in the *Text* folder in the *Samples* drawer on your desktop. You can make a copy of it and keep the copy on your desktop.

- **Copy** *pingo* from the *Text* folder in the *Samples* drawer and **Paste** the copy onto your desktop.
- Rename the document as *pingoOrig*.
- **Open** *pingoOrig*.

Some page makeup features can be better demonstrated with the software's vertical justification feature turned off. Vertical justification ensures that the text of the document fills the pages uniformly by distributing lines of text evenly and, if necessary, shrinking and expanding line spaces and the top and bottom margins of components.

To turn Vertical Justification off:

- Open the Page property sheet.
- Click the **left** button with the cursor on the **Off** box on the *Vert. Just.* line.
- **Apply** the change and **Close** the property sheet.

Most of the exercises in this chapter require that vertical justification remains off. To avoid having to turn the feature off each time you reopen *pingoOrig,* complete the next procedure to save the current version of the document.

To save a document without closing it:

- Display the name pulldown menu as if you were going to close the document.
- Move the mouse cursor down to **Save** and onto the Save submenu (Figure 12-2).

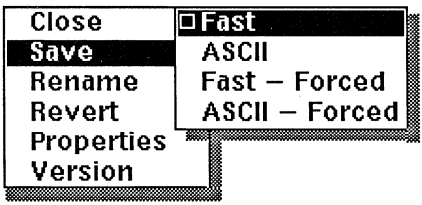


Figure 12-2. Save submenu

This menu lets you choose from various ways of saving a document. For more information on saving a document, see the Document Management *chapter in the* Reference Manual, *Volume 1.*

- Release the button when **Fast** is in reverse video.
  Messages about the progress of the save appear in the status line. When the save is complete, the message "Saved pingoOrig" appears.

Now the document is ready for you to perform the other page makeup exercises.

Begin New Page

The default setting for *Begin New Page* is **No**. If the setting is **No**, a component will start wherever it will fit on a page. If the setting is **Yes**, the component will begin at the top of a page.

You can apply this property to a component to make particular pages look better. You can also apply this property globally so that each of the components of a type—chapter titles, for example—will always appear at the top of a new page.

To use the Begin New Page feature:

- Select the component named *pingart,* and open its Component property sheet.
- Turn on the **Page** box in the Property Sheet header.
- On the Page sheet of the property sheet, turn on **Yes** for *Begin New Page.*
- **Apply.**
  The pingart *component disappears from Page 1, and the Page box in the document header indicates that the document is now three pages long.*
- **Close** the property sheets.
- To see the *pingart* component in its new location, scroll *pingoOrig* to page 2.

To use the Begin New Page feature globally:

- Select a *paragraph.*
- On its Page sheet, turn on **Yes** for *Begin New Page.*
- Apply the change using **Confirm** on the Global Apply submenu.
- **Close** the property sheets.
  PingoOrig *is now six pages long, and each paragraph appears at the beginning of a page.*

  You can scroll through the document to see the results.
- **Close** *pingoOrig* without saving the changes you have made to the components.

Orphan and Widow Control

An *orphan* is a single line at the bottom of a page, and a *widow* is a single line at the top of a page.

The software allows you to prevent *widows* and *orphans* from occurring in your document. The default for both *orphans* and *widows* is 2 lines. With these default settings, a component of fewer than 4 lines cannot be split across a page boundary.

You can test this for yourself. The last paragraph on the first page of *pingoOrig* has 5 lines. Three of the lines are at the bottom of *Page 1*, and two lines are at the top of *Page 2*. If you remove the last line of the fourth paragraph, a line will move from the first page to the second page to satisfy the widow condition.

To use orphan/widow settings:

- **Open** *pingoOrig,* and scroll to the second page.
- Select from the space following "another" at the end of the first line, to the period after the word *look* on the second line. (Figure 12-3.)

Figure 12-3. Text block to be cut from pingoOrig

- **Cut** the selected text block.
  The third line of the component is moved from the first to the second page. The widow condition of more than one line at the top of the second page is satisfied.
- Click the **middle** button to **Paste** the text you cut.
  The paragraph is returned to its original appearance.

  Both the orphan *condition for more than one line at the bottom of a page and the* widow *condition for more than one line at the top of the next page are satisfied.*
- **Deselect** the text.

Orphans and *widows* can be set to any number of lines between *1* and *16*. The greater the number of lines, the less likely the component is to break.

The *orphan* setting can be affected by the top and bottom page margins. For example, although you may set *Orphan Control* at 4, four lines of a component may not appear on the bottom of a page if there is insufficient room for them there. In that case, the entire component would be moved to the next page.

To practice using orphan/widow settings:

- Open the Page sheet of the Component property sheet for the fourth *paragraph* of *pingoOrig*.
- Change the *Orphan Control* to **4** lines, and **Apply** the change.
  The entire component moves to the second page because there was not enough room for five lines at the bottom of the first page.
- **Close** the property sheet.
- Point the mouse cursor at the Page box in the document header.
- Click the **middle** button to open the Page property sheet.
- Change the top and bottom page margins to **.5** inches. **Apply** the changes.
  The entire component moves to the bottom of the first page.

  With smaller top and bottom page margins, there is sufficient room not only to satisfy the orphan setting of 4 lines, but to move the entire component to the first page.
- Change the top and bottom page margins back to **1** inch and **Apply** the change.
  The component moves to the top of the second page.
- **Close** the Page property sheet.
- Turn on the Default box next to *Orphan Control* on the Page property sheet of the fourth paragraph.
- **Apply** the change.
  The fourth paragraph is returned to its original appearance with a break after the first three lines.
- Change the *Widow Control* to **4** lines, and **Apply** the change.
  The entire component moves to the next page because for four lines to appear on the second page, one line has to be taken from the previous page. If the software took only the one line it needed to satisfy the widow *setting for four lines, one line would be left on the first page, violating the* orphan *setting.*
- Change the *Orphan Control* to **1** line, and **Apply** the change.
  Now that you have set the Orphan Control *at* 1 *line, one line of the component appears at the bottom of the*

first page, and the remainder of the component appears on the second page.

- **Close** the property sheet.
- **Close** *pingoOrig* without saving the changes you have made.

Allow Break Within

If *Allow Break Within* is set to **Yes**, the system is allowed to put part of the component on one page and part of it on the next page if this does not violate the *widow/orphan* settings for the component.

If *Allow Break Within* is set to **No**, the component will not, as a rule, break across page boundaries. The only exception is a component that is longer than a single page. In that case, the component will break.

If it is necessary to break such a component, the *widow* setting for the component will be superseded. In other words, the system will fit as many lines of the component as possible on a single page even if this means that the number of lines at the top of the next page will be fewer than the number designated by the *widow* setting.

To see how Allow Break Within works:

- **Open** *pingoOrig*.
- Select the fourth *paragraph*.
- On the Component Page sheet, set *Allow Break Within* to **No**.
- **Apply** the change and **Close** the property sheet.
  Since there is no room on Page 1 for the entire component, all the lines of the paragraph 4 move to Page 2.
- **Close** *pingoOrig* without saving the changes you have made.

Allow Break After

The default for *Allow Break After* is **Yes** because it is normally reasonable to let the system decide where breaks should occur.

If **Yes** is turned on for *component a,* a break will be permitted between *component a* and *component b*.

However, *Allow Break After* is set to **No** in some circumstances to make sure that components that should appear together on the same page do appear there (at least in part).

For example, if the heading of this section, **Allow Break After,** had appeared all alone at the bottom of a page, the relationship between the heading and the text following it would have been obscured. In order to avoid this kind of break between a heading and the section it heads, the *Allow Break After* property of the *heading* components in this document was set to **No.**

If the heading had fallen naturally at the bottom of a page and there had been no room after it for at least 2 lines of the next component (the *orphan* setting for that component), the heading would have automatically moved to the top of the next page.

To see how "Allow Break After" works:

- **Open** *pingoOrig.*
- **Create** a *paragraph* between the third and fourth *paragraphs.*
  The paragraph following the one you just created moves to page 2.
- Enter a few words of text into the new paragraph so you can track its location easily.
- Select the new *paragraph.*
- On its Page sheet, turn *Allow Break After* to **No.**
- **Apply** and **Close.**
  The new paragraph moves to the next page so that the break does not fall between the end of the new component and the one after it.

Notice the large gap between the last line of text on Page 1 and the bottom of that page. Sometimes results like this are not desirable. One way the software lets you maintain a balanced page is through the vertical justification feature.

- Turn vertical justification back **On.**

Now the new paragraph, and the first two lines of text following it, fit on Page 1. When you applied vertical justification, the software made these lines fit on the page by proportionally shrinking line spaces and component margins throughout the document.

- **Close** *pingoOrig* without saving your changes.

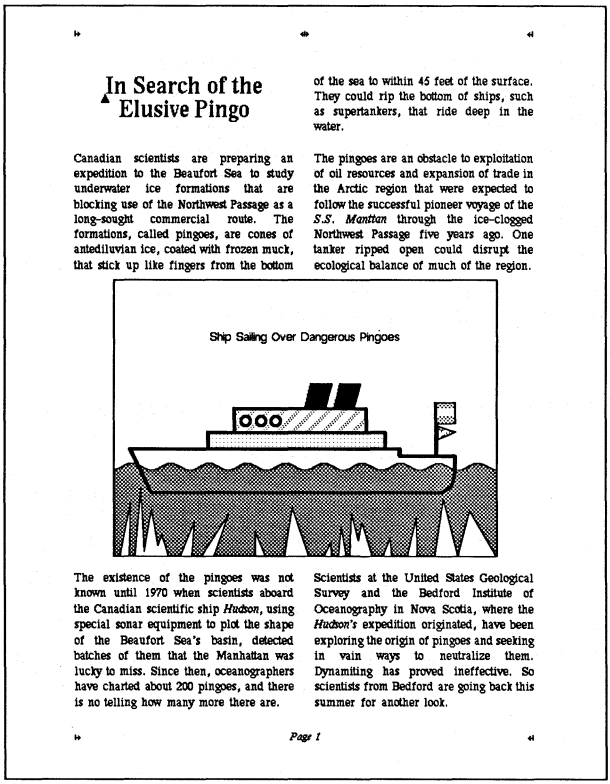
Multiple Column Makeup

With the Interleaf publishing software, you can have multiple-column documents. The number of columns on a page is limited only by the size of the page, the size of the text, and the size of the column gutters (the white space running between the columns). In the next exercises, you will turn a copy of *pingoOrig* from a one-column to a two-column document.

Since any irregularities in vertical text distribution are more obvious when the columns of text are side by side, it is a good practice to use vertical justification in any multi-column document.

To divide a document into two columns:

- **Open** *pingoOrig*.
- Open the Document Page property sheet.
- Turn vertical justification **On**.
- On the sheet, change *Columns* from 1 to **2**, and *Gutter Width* from 2 to **1.75**.
- **Apply** the changes and **Close** the property sheet.
  Note the changes in the document (Figure 12-4).



In Search of the Elusive Pingo

Canadian scientists are preparing an expedition to the Beaufort Sea to study underwater ice formations that are blocking use of the Northwest Passage as a long-sought commercial route. The formations, called pingoes, are cones of antediluvian ice, coated with frozen muck, that stick up like fingers from the bottom of the sea to within 45 feet of the surface. They could rip the bottom of ships, such as supertankers, that ride deep in the water.

The pingoes are an obstacle to exploitation of oil resources and expansion of trade in the Arctic region that were expected to follow the successful pioneer voyage of the *S.S. Manitan* through the ice-clogged Northwest Passage five years ago. One tanker ripped open could disrupt the ecological balance of much of the region.

The existence of the pingoes was not known until 1970 when scientists aboard the Canadian scientific ship *Hudson*, using special sonar equipment to plot the shape of the Beaufort Sea's basin, detected batches of them that the Manhattan was lucky to miss. Since then, oceanographers have charted about 200 pingoes, and there is no telling how many more there are.

Scientists at the United States Geological Survey and the Bedford Institute of Oceanography in Nova Scotia, where the *Hudson's* expedition originated, have been exploring the origin of pingoes and seeking in vain ways to neutralize them. Dynamiting has proved ineffective. So scientists from Bedford are going back this summer for another look.

Page 1

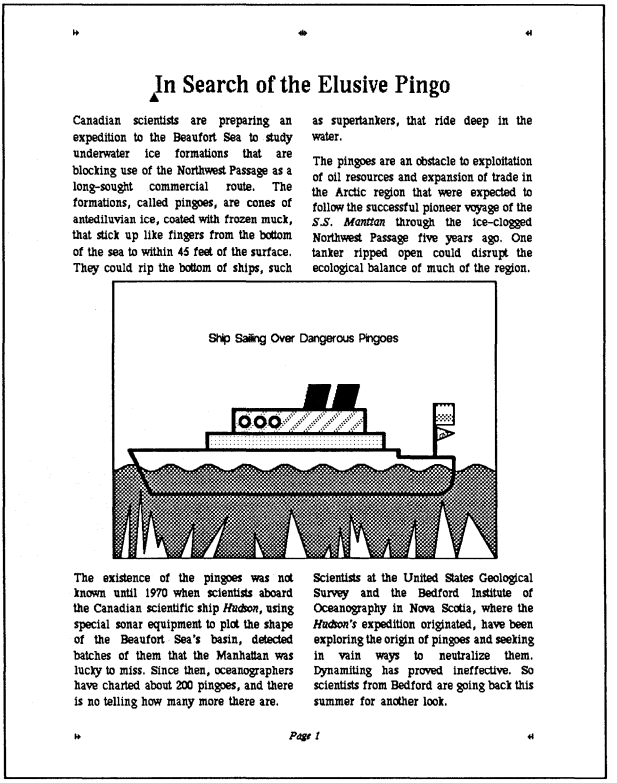
Figure 12-4. Two-column makeup

Notice that the diagram has not changed. Instead of appearing in one of the columns, the frame containing the diagram *straddles* the two columns. Any frame wider than the column width in a document will always straddle the columns.

Components not containing such a frame can also be made to straddle columns of text.

To make components straddle columns:

- Select the *title* component and display the component Page property sheet.
- Change the *Straddle Columns* setting from No to **Yes**; **Apply** the change; and **Close** the property sheet.
  Figure 12-5 shows the changes in the document.



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Page 1

Figure 12-5. Title straddling columns

- Scroll to the second page of *pingoOrig* and select the *ack* component.
- Display the Component Page property sheet and change the straddle setting to make the component straddle the columns.
- **Close** the property sheet.

Experiment with multiple column page makeup on your own if you wish. For more information on the many aspects of this feature, see the *Page Makeup* chapter in the *Reference Manual*, Volume 1.

Page Makeup Strategies

Because the Interleaf publishing software offers the user so much power and flexibility in determining the properties of a document, it may be tempting to make the layout of every page perfect as you enter it.

When you first type a document, you may find that an awkward looking, one-line component falls all alone at the top of a page. You may want to rush in and move it to the previous page. If you can, restrain this impulse. It is likely that as you edit the document you will add or delete something and that will cause text to shift so that your one–line component no longer falls at the top of a page. In any case, you can always move the line later, when the text is more stable and the decisions you make are more likely to stick.

Some page makeup decisions, however, are worth making the moment they come up, because they won't change with revision. For example, you will probably always want each *heading* attached to the component that follows it and each *main heading* to begin a new page.

Chapter 13

Headers and Footers

Headers and footers appear in the top and bottom margins of pages in a document to help orient the reader. For instance, in the sample page shown below, the header shows the chapter number, and the footer shows the page number.

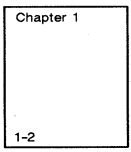


Figure 13-1. Sample page

While editing *pingo* or *Defense* you may have noticed the page number displayed at the bottom of each page. You may also have noticed diagramming text anchors at the top and bottom of each page. These anchors are part of the special frames in which you create your own headers and footers.

To fully demonstrate headers and footers, you need a document that is several pages long. In the next procedure, you create a document, and reduce its page height by about half. This will not only double the number of pages in the document, but it will also allow you to see two sets of headers and footers on the screen at once.

To create the document:

- **Create** a document, name it *shortpages,* and **Open** it.
- Using the Page property sheet, change the page height of *shortpages* from 11 inches to 5.25 inches. **Apply** the change and **Close** the property sheet.
- Hold down the line feed key to create new copies of the empty *paragraph* component in *shortpages*. Release the key after you have created at least four pages of empty components.

You won't need any text in this document.

Creating Headers and Footers

Header and footer frames are different from any other frame in the document in the following ways:

- You do not create them, and you cannot cut or copy them (though you can cut or copy the *contents* of the frames).
- They are *always* located in the top and bottom margins.
- They have no property sheets, because the software automatically assigns properties based on certain page properties (for instance, the height of a header or footer is the height of the top or bottom page margin, respectively).
- The software automatically duplicates them on each new page.
- When you select them, they open automatically.

In the next exercise, you will change the footers in *shortpages* so that all the page numbers appear in the lower-right corner of the page, next to some text.

To modify footers:

Position the mouse cursor in *shortpages,* in the bottom margin of *any* page, near the page number.

Click the **left** button to select and open the frame.

The changes you make to this frame will automatically apply to every footer frame in the document.

Point the diagramming arrow at the page number text.

Click the **left** button to select the text.

The text should blink. If not, repeat the last two steps.

Delete the page number text by holding the CTRL key and then pressing the **d** key, *or* by holding down the DEL key.

A small text anchor will appear where the text was. It blinks to show that it is still selected. (If you had cut the text in the last step, instead of deleting it, you would have cut the text anchor as well, which would have made it more difficult to align the text later.)

Point the diagramming arrow at the text anchor at the right edge of the footer.

- Click the **left** button to select the text anchor.
  The right text anchor should now blink to indicate selection, and the deselected center text anchor should stop blinking.
- Type your name.
  The text grows to the left of the anchor.

In the next steps, you will use the **ESC** key in combination with other keys to first enter a hyphen, and then to enter a page number token, which indicates that you want the software to automatically insert page numbers.

- Press—do not hold—the **ESC** key, then press the [-=] key near the right end of the number keys.
  A hyphen is inserted.
- Press—do not hold—the **ESC** key, then hold the **SHIFT** key while pressing the [#3] key.
  The page number appears in the footer.
- Deselect the text as you would any other diagramming object

Now that you have entered the page number token, the software will automatically insert the correct page number into each footer. (To create a token which causes the software to automatically insert the *name* of the document in a footer or a header, you would enter the sequence **ESC SHIFT** [@2], making sure to hold down the **SHIFT** key.)

- **Close** the frame as you would any other frame.
  The publishing software automatically duplicates this footer on each page.

Scroll through the document to see the results of your modifications to all of the footers. Notice that the changes you made appear in all footers, with the correct page numbers automatically inserted.

Creating Footers for Double-Sided Documents

Footers of the type you just created—with all of the page numbers on the right—are generally used in single-sided documents. Such documents have text only on one side. The pages can be bound on the left edge, and the page numbers will appear on the outside edge, where they can be easily seen.

To achieve the same effect in a double-sided document, such as this manual, the page numbers must appear on alternate sides of each successive page (Figure 13-2).

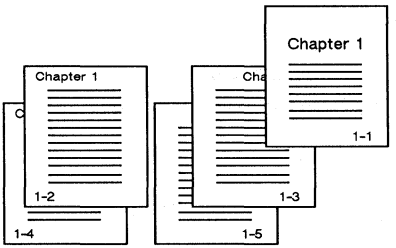


Figure 13-2. Double-sided document

The document shown in Figure 13-2 is called a **Right 1st Page** document, because the first page falls to the right of the binder when the document is opened. This manual is another example of a right first page document with an odd-numbered first page. In such documents, all odd page numbers appear on the right of the page, and all even numbers on the left.

The opposite occurs in a **Left 1st Page** document, where the first page falls to the left (Figure 13-3).

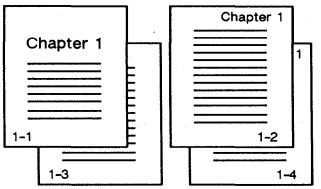


Figure 13-3. Left first page document

As you perform the following exercises, you will see how the publishing software automatically reflects the contents of headers and footers for double-sided documents.

To change single-sided layout to double-sided:

- Open the Page property sheet for *shortpages*. With the cursor on the **Right 1st Page** box on the *Page Layout* line under *Headers/Footers*, click the **left** button.

  The Right First Page *box will be in reverse video.*
- **Apply** the change and **Close** the property sheet.

Scroll through the document. Notice the text is automatically reflected, appearing on the right side of odd-numbered pages, and on the left of even pages.

In some documents, you do not want the same text in the left and right footers. In the next exercise, you override the automatic reflection feature by creating a unique prototype footer for the left-falling pages in the document.

To create a unique left footer:

- Open the footer frame on an even-numbered page.
  The changes you make to this frame will apply to all left falling, even-numbered pages in the document.
- Select the page number text and delete it using either the **DEL** key or a **CTRL** key sequence (do not use cut).
- Select the text anchor on the left edge of the footer.
- Type **left foot.**
- Press the **ESC** key, then press the [-] key near the right end of the number keys.
  A hyphen is inserted.
- Press the **ESC** key, then hold the **SHIFT** key while pressing the [# 3] key.
  The page number appears in the footer.
- **Deselect** the text as you would any other diagramming object and **Close** the frame as you would any other frame.

Now scroll through the document and look at the footers. The new footer is repeated on all even-numbered pages.

In the next procedure, you create headers for the document by creating prototypes for the right and left headers.

To create left and right headers:

- Move the mouse cursor into the top margin of an odd-numbered page.
- Click the **left** button to select and open the frame.
- Select the text anchor at the left edge of the frame.
- Type **inside text.**
- Select the text anchor at the right edge of the frame.

- Type **outside text**, then insert a hyphen and the page number token.
- **Deselect** the text and **Close** the frame.

Scroll through the document. Notice that only the right-falling pages have headers.

- Scroll to the beginning of *shortpages*.
- Using the same general procedures you used to create the right header prototype, create a prototype for left headers on page two. It should look similar to the one in Figure 13-4.

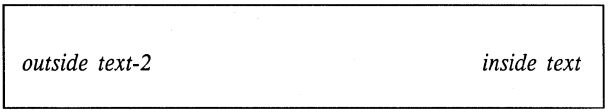


Figure 13-4. Left header

Scroll through the document again to see the latest changes.

In the next exercise, you change the document layout to **Left 1st page**, and the system automatically adjusts the left and right headers and footers.

To change from right first page to left first page:

- Open the Page property sheet for *shortpages*.
- Turn on the box labeled **Left 1st Page**.
- **Apply** the change.

Notice that the headers and footers have been symetrically reflected across the left and right pages. If you want to see this feature demonstrated, change from left first page to right first page a few times, applying each change.

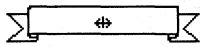
- Change the layout back to **Right 1st Page**, then **Apply** the change and **Close** the property sheet.

Creating Different First Headers

Often, you do not want the first page of a document to have the same header or footer as the rest of the pages. For instance, notice that the first page of each chapter in this manual has no header.

In the exercise below, you will create a fancy header for the first page of *shortpages,* using one of the graphic objects provided in the *Graphics* cabinet.

To create a different first header:

- Scroll to the beginning of *shortpages*.
- On the Page property sheet, change the *Diff 1st Header* setting from No to **Yes**. **Apply** the change and **Close** the property sheet.
  The first header is now empty.
- Select and **Open** the *Graphics* cabinet on the desktop.
- Select and **Open** the *Borders* folder in the *Graphics* cabinet.
- Select and **Open** the *Highlighters* document in the *Borders* folder.
  The frame containing the highlighting graphics is already open.
- Select the first banner object  .
- **Cut** the object.
  The object does not disappear from Highlighters because it is cut protected, *but a copy of it is made.*
- **Open** the header frame on page 1 of *shortpages*.
- **Paste** the banner object into the frame.
- While the banner is still selected, use the **Misc▸Align▸to frame▸Center** option to line up the center text anchors of the banner and the frame (Figure 13-5).

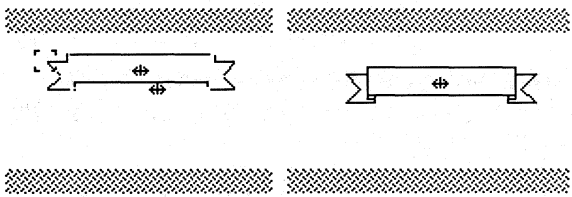


Figure 13-5. Lining up the text anchors

- Resize the banner by using the **Size▸to Frame▸Horizontal** option from the Object Selected popup menu.
  The banner stretches to the left and right margins of the page.

- Select the banner again.
- With the banner and the banner text anchor still selected, type your name.
- Using the **Size▸Vertical** option from the Object Selected Popup menu, make the banner high enough to contain all of the text.
- **Deselect** the banner and **Close** the header frame.
- **Close** the *Highlighters* document.
- **Close** the *Borders* folder, and the *Graphics* cabinet.

Allowing Headers and Footers to Bleed

By default, the width of a header or footer frame is the width of the page less the width of the left and right page margins. In other words, default header and footer frames normally do not extend into the left and right page margins.

The **Bleed** feature lets you create headers and footers that extend—or bleed—into the right and left margins of the page.

To use the Bleed feature:

- Open the Page property sheet. With the cursor on the **Yes** box next to *Bleed*, click the **left** button.
- **Apply** the change and **Close** the property sheet.
- Select and open the header frame on the first page of *shortpages*.
- Select the banner and again resize it using the **Size▸To Frame▸Horizontal** option from the Object Selected popup menu.
  The banner now stretches to the edges of the page.

Try some more exercises with headers and footers if you wish. For instance, use the diagramming system in a header frame to create your own letterhead.

Otherwise, you may now close and save *shortpages,* and either keep it on your desktop for future practice or cut it. For more information on headers and footers, see the *Page Makeup* chapter in the *Reference Manual*, Volume 1.

Chapter 14

Desktop Manager

The **Desktop Manager** is the facility that makes it easy for you to organize your documents. Remember that a document icon represents the equivalent of a stack of pages.

Any other icon you see on your desktop—a folder, drawer, or cabinet, or the clipboard—is a **directory**. A directory is simply a convenient place to store documents and, if desired, other directories. In fact, your desktop itself is a directory.

Because you have already had your desktop open and you have created at least one new document on it, your desktop no longer looks exactly as it did when it was new.

On the original desktop were the following object icons:

- a **document** icon labeled *pingo*
- a **drawer** icon labeled *UNIXpractice*
- a **drawer** icon labeled *Samples*
- two **cabinet** icons labeled *Graphics* and *Templates* and
- the **clipboard** icon

Figure 14-1 shows you how your desktop looked originally.

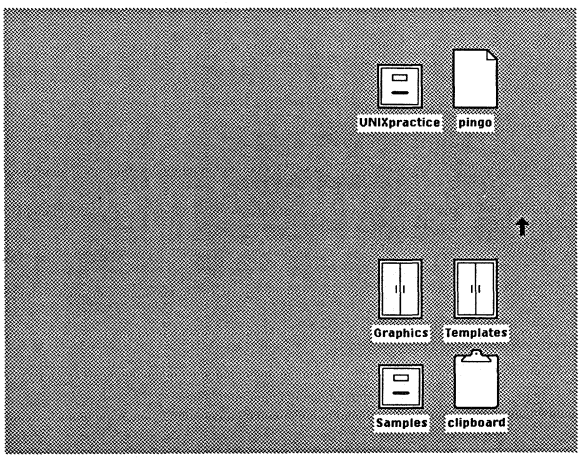


Figure 14-1. Original Interleaf desktop

Organizing Your Desktop

You can organize your documents and directories any way you like. However, for the sake of sanity, most people choose a conventional way to arrange their desktops. They store documents in folders and folders in drawers.

You will notice that the cabinet icon looks like a supply cabinet rather than a file cabinet. You can store drawers and folders filled with your documents in cabinets. However, it may be more useful to think of cabinets as places to store templates. The *Templates* cabinet on your desktop serves this purpose.

When you open the *Templates* cabinet, you will find folders containing templates for such documents as outlines, letters, and memoranda (as well as samples of a letter and a memo using these formats).

To open the Templates cabinet:

- Select and **Open** the *Templates* cabinet icon.

The Templates *cabinet opens in a window on your desktop (Figure 14-2). It contains three folders and one document.*

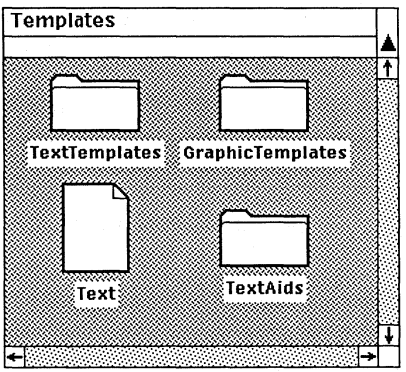


Figure 14-2. Open Templates cabinet

To open the Graphics cabinet:

- Select and **Open** the *Graphics* cabinet.

The *Graphics* cabinet may open on top of the *Templates* cabinet. If it does, perform the next two steps so that you can see both directories.

Move the mouse cursor into the *Graphics* window header and hold down the **middle** button to see the Window popup menu (Figure 14-3).

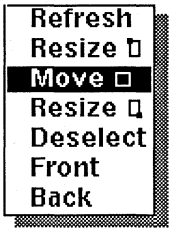


Figure 14-3. Window popup menu

Move the mouse cursor on the menu and release the button when **Move** is in reverse video.

Move the mouse on its pad.
You will see an outline of the Graphics cabinet window moving on your screen.

When the window no longer obscures the *Templates* cabinet, click the **middle** button to deselect it.

The contents of the *Templates* cabinet are *write protected*, which means that you cannot modify their contents. You can, however, copy the contents and modify the copies. Therefore, you should get accustomed to copying documents from the *Templates* cabinet to some other place (like your desktop or a drawer on your desktop, for example).

To copy a document from the Templates cabinet:

Select the *TextTemplates* folder in the *Templates* cabinet and open it (Figure 14-4).

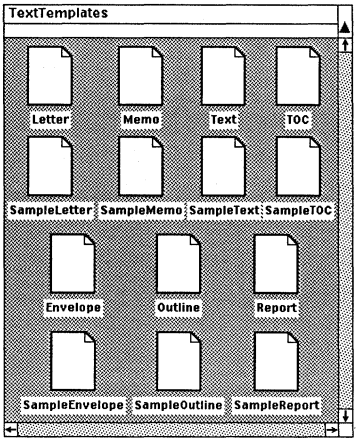


Figure 14-4. Open TextTemplates folder

- Use the **left** button to select the *Letter* icon in the *TextTemplates* folder.
- Hold down the **middle** button to see the Icon Selected popup menu.
- Release the button when **Copy** is in reverse video.

To paste an icon onto your desktop:

- Position the mouse cursor on the desktop itself.
- Hold down the **middle** button to see the Desktop Nothing Selected popup menu.
- Release the button when **Paste** is in reverse video.

The icon for *Letter* is still selected. If you wanted to, you could open *Letter* on your desktop and catch up on some of your correspondence.

- Instead, hold down the **middle** button and **Cut** the *Letter* icon.

Closing a Window

Since you can have many windows open at one time on your desktop, it is not necessary to close the *TextTemplates* folder or the *Templates* cabinet before you proceed. However, you will probably want to straighten your desktop before continuing.

To close a window:

Move the mouse cursor into one of the windows.
Moving the mouse cursor into a window activates that window. The header will be white with black letters.

If any icon in the window is selected, deselect it by clicking the **left** button when the mouse cursor is not touching that icon.

Hold down the **middle** button.

Release when **Close** is in reverse video.

Repeat the steps to **Close** the other windows.

Creating and Using a Folder

In Chapter 1, the icon for the document *pingo* was on your desktop, and you opened it. In Chapter 6, you created a document on your desktop, named it *Defense,* and opened it. You later made copies of *pingo,* and named them *pingo2* and *pingoOrig,* and you made a document called *shortpages.*

The icons for these documents are now on your desktop, and your first task in this section is to create a folder on your desktop in which to put them.

First, for your convenience, you should move *pingo, Defense, pingo2, pingoOrig,* and *shortpages* into an empty area near the upper right corner of the desktop.

To create a folder:

With the mouse cursor on the desktop, hold down the **middle** button and slide onto the Create submenu.

Since **folder** is the default, you can just release the button.

Move the folder icon wherever you want it on your desktop.

The folder you just created is still selected.

To name and open a folder:

Hold down the **middle** button and move the mouse cursor until **Props** is in reverse video.

Release the button.

On the Object property sheet, change the name of the folder to *Practice*.

Apply and **Close**.

Hold down the **middle** button again and move the mouse cursor until **Open** is in reverse video.

The empty folder is opened in a window in the upper left-hand corner of the screen.

For the following exercise, you will be using the icons you just moved into the upper right corner of the desktop. If any of the windows on your desktop are obscuring these icons, just use the **Move** command on the Window pulldown menu to move them out of the way.

To select the document icons, you will use the left button and a *selection box*, which works in the same way as a selection box in a diagram.

To use a selection box on the desktop:

Move the mouse cursor to a grey area in the upper right corner of your desktop, near the document icons you just moved.

While holding the **left** button, move the mouse cursor.

A selection box appears.

Move the mouse until the five documents you just moved—and only those documents—are in the selection box.

Release the button.

The documents should appear in reverse video. If not, repeat the previous steps, making sure to get all unselected icons inside the box.

To put documents in a folder:

With all five documents selected, hold down the **middle** button, and release when **Cut** is in reverse video.

Move the mouse cursor into the open the *Practice* folder.

Hold down the **middle** button and move the cursor until **Paste** is in reverse video.

Release the button.

Move the icons wherever you want them in the folder. Then click the **middle** button to put them down.

You may want to resize the folder window and rearrange the pasted documents by selecting and moving them individually.

This exercise has not made a great difference in the appearance or the organization of your desktop since you have only exchanged a few documents for one folder, but you will find in the future that variations on this operation will help you manage and keep track of numerous documents and directories.

Working With Multiple Open Documents

It is possible to have up to 16 windows open on your desktop at the same time. Each one can be made active at any time by moving the mouse cursor into the window. All actions performed with the mouse or through keyboard entry affect only the document or directory in the active window.

To edit two open documents:

- **Open** *pingo* and *Defense*.
  One of the documents may obscure part or all of the other.
- If necessary, move one of the documents, using the Window popup menu, so that both are entirely visible. It may also be necessary to resize the documents.
- Move the mouse cursor into *Defense*.
  Notice that the header box of the Defense *document window is now highlighted, and the* pingo *header box is in reverse video. The active window is always the only highlighted window on the desktop.*
- Enter a few sentences of text into *Defense*.
  Notice that pingo *is not affected.*
- Select and **Cut** the sentences you just entered.
- Move the mouse cursor into *pingo*.
  Pingo *is now the active window.*
- Position the editing cursor at the beginning of the first paragraph.

- Choose **Paste** on the Text Location Selected popup menu.
  The sentences you just cut from Defense *appear in* pingo.
- **Close** both documents and the *Practice* folder.

As you use the publishing software, you will find it increasingly useful to have multiple documents and other windows concurrently open on the desktop.

Clearing the Clipboard

Every object you cut or copy is put on the **clipboard**, where it stays until you either paste it somewhere or remove it completely from your desktop.

Since the contents of the clipboard take up valuable storage space on the computer, it is a good idea to clear the clipboard at least once a day.

Clearing the *clipboard* means pasting some icons where you want them and **purging** others, altogether and for all time, from your desktop.

When you want to **purge** objects from the clipboard, the clipboard must be open on your desktop.

- **Open** the clipboard.
- Select the *Letter* icon on the clipboard.
- Hold down the **middle** button to see the Clipboard popup menu (Figure 14-5).

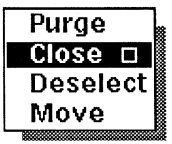


Figure 14-5. Clipboard popup menu

- Release when **Purge** is in reverse video.
  On a stickup menu, you will be asked to confirm that you really want to purge the document.
- Move the mouse cursor to **Confirm,** and click the **left** button.
  The Letter *icon disappears from the clipboard. It is now permanently gone.*
- **Close** the clipboard by clicking the **middle** button.

Setting up Two Drawers and their Contents

One of the nicest things about the Desktop Manager is the flexibility it gives the individual user. Some people have impeccably neat desktops with documents filed in folders and tucked away inside drawers.

Other people have desktops cluttered with documents, folders, drawers, etc. When they open a folder, folders and possibly even a drawer or two tumble out onto the screen.

Although there is no one *right* way to organize a desktop, the way described below is a good starting place. Even if you do take this particular way as your model, you will probably find yourself making adjustments because of the nature of your work and your own sense of order.

Assume that your current work can be broken down into the following three categories:

- proposals
- letters
- and memos

Some of the proposals are internally directed and others are directed to outside sources; the letters are to prospective, current and former clients; and the memos can be divided into departmental and company memos.

To create and use sample directories:

- Near the bottom of your desktop, **Create** three **Drawers** and name them *proposals, clientletters,* and *memos.*
- **Open** *proposals,* and with the mouse cursor in that drawer, **Create** two **Folders.**
- Name them *internal* and *external.*
- **Open** *clientletters,* **Create** three **Folders,** and name them *present, prospective,* and *former.*
- **Open** *memos,* **Create** two **Folders,** and name them *departmental* and *company.*
  Remember, if one window covers another, you can use the Window popup menu to move it.
- **Close** all the drawers, except *proposals.*

You now have an organized set of directories in which to put your work. Figure 14-6 shows the desktop with the three drawers

on it and with the *proposals* drawer open. You may want to use the drawer Window popup menu to make this window smaller, since most of the space in it is unused.

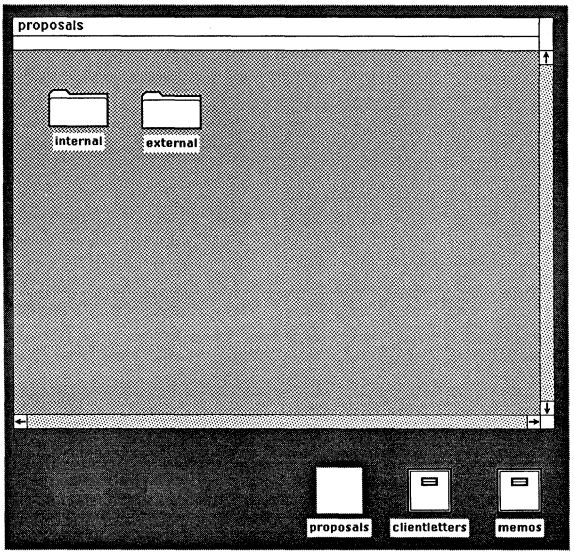


Figure 14-6. Desktop with open drawer

To make your work even easier, you can copy the templates for a letter and a memo from the *Templates* cabinet into the appropriate folders or drawers.

- **Close** *proposals*.

A Template Cabinet

If you had to do the same sort of work every month, it would make sense to put the three drawers into a cabinet. You could name the cabinet *monthlypatterns*.

At the beginning of January, you could copy the drawers from *monthlypatterns* onto your desktop. Then you could name the copy of the *proposals* drawer *janproposals,* for example.

At the end of January, you could move the drawers for January off your desktop into a drawer named *janwork*.

Then, at the beginning of February, you could copy the drawers from monthlypatterns onto your desktop again, naming the copy of the *proposals* drawer *febproposals*.

Chapter 15

On Your Own

In this chapter, we simulate the time when you are on your own, using the software to create documents typical of your job. Therefore, in the exercises that follow, you are told to perform various actions, but you are not usually told *how* to perform them, because they are actions you have practiced in earlier exercises. Before you begin working on your document, you may find it helpful to read through the entire chapter.

You probably know by now that it is perfectly safe—and fun besides—to experiment until you get something right. However, if you want specific instructions, you can look up references to various features of the publishing software in the *Index* to this manual.

This chapter is divided into several short sections. Most of the breaks between sections are arbitrary and dictated more by regard for the user than by necessity.

As with the other exercises, if you want to stop in the middle, **Save** your document and **Close** your desktop.

Starting Out

First, find approximately three pages of text from a book or sample document from your company. The sample should be typical of the work you will be doing with the Interleaf publishing software. Don't worry if your sample does not have graphics, since we will provide these.

- **Create** a document on your desktop (or in the folder named *practice* if you have one).
- Name it anything you like and **Open** it.

Changing Page Properties

- Make sure the document has the following page properties:

Vertical Justification	**On**
Top margin	**1.25** inches
Bottom margin	**1.50** inches

Left margin	**1.50** inches
Right margin	**1.75** inches
Page Layout	**Single Sided**

Creating Footers

- Create a footer with the text of your choice and the page number token centered in it. Use the font of your choice.

Creating a Title

- Create a second *paragraph*.
- Make the first *paragraph* component a *title*.
- Make the following changes on the *title* component property sheet:

Alignment	**Centered**
Font	**Modern 18** point **Bold**

- Type a title for your document.

Adding and Changing Components

- Create a new component under *title*.
- Change this component as follows:

Name	**author**
Bottom margin	**0.35** inches
Left margin	**3** inches
Alignment	**Flush Right**
Font	**Modern 12** point **Italic**

- Type your name in this component.
- In the *paragraph* component, type in the first paragraph of your text.
- Create another *paragraph*.
- Type in the text of your next paragraph.

If there are **bold** or *italicized* words in the original text, change your font as you type. If there are no bold or italicized words, select some words, and make them **bold** or *italic*.

More Changes to Components

- Create another *paragraph.*
- Give the component the following properties:

Name	**list**
Left Margin	**1** inch
Right Margin	**1** inch
First Indent	**–0.5**

- Set **Left** tabs at **0** and **0.5** inches and a **Right** tab at **–0.25** inches.

Pretend that each sentence in the next paragraph of your document is a numbered item in a list of instructions:

- Enter the first item in the new component *list.* Press the **TAB** key, type **1**, type a period, then press the **TAB** key again.
  Since your numbered list will be made of multiple components, remember to use only one number and one item per component.
- Create two or three numbered *list* components this way, and enter text in each.
- Number your next *list* component **10**.
  Notice how the right tab lines up your numbers and periods the way they should be.

Some New Wrinkles

- Create another *paragraph.*
- Make the following property changes to the component:

name	**subhead**
Top margin	**0.5** inches
Bottom margin	**0.2** inches
Font	**Modern 14** point

- Type a subheading.
- Create a *paragraph,* and type the text of your next paragraph.
- Create a *list* component.
- Change its name to *namelist,* and make its *First Indent* **0** inches.

- Type in a list of some of your coworkers' names, pressing **RETURN** after each name.
- Continue typing text into components of different types until you have at least a two-page document. Feel free to invent some new component types, if you want or need to.

Adding Graphics

Figure 15-1 is a diagram for you to create in your document. (If your document has some diagrams in it, you can substitute one of those for the one that follows here.)

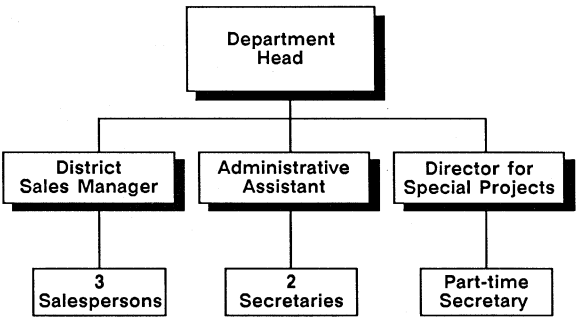


Figure 15-1. Practice diagram

Before you can begin constructing the diagram, you must, of course, create a frame for it.

To insert a frame in your document:

- Create a *paragraph* after the second *paragraph*. Change its name to *diagram*.
- Create an **At Anchor** frame in this component.
- Give the frame a *Width* of **5.25** inches and a *Height* of **3** inches.
- Open the frame.
- Create the organizational chart in the frame.

The following procedure suggests one method of creating the shadowed boxes for the diagram.

To create a shadowed box for the diagram:

- **Create** a **Box**.
- Duplicate it, using **Move** on the Dup submenu.
- Place the duplicate on top of the original. The bottom and right edges should extend past those of the original so that the outside portion of the duplicate has the dimensions you want for the shadow.
- Change the **Fill** of the duplicate to *black*.
- Select the original and change the **Fill** to *white*.
- Select the black duplicate and move it behind the original using the **Back** command on the Misc submenu.

As you can see, the text is centered within each box. You could center the text in your boxes by moving it around, but there is an easier way.

To center text in your diagram:

- Press a **CTRL c** sequence.
  The message "entering centered text" will appear in the status line.
- Type **Department** anywhere in the top box.
- Press the **RETURN** key, and type **Head**.
- With **Head** still selected, use the **right** button to select *Department*.
- Hold down the **middle** button.
- Slide onto the Misc submenu.
- Release the button when **Group** is in reverse video.
- Select the *text* and the *box*.
- Hold down the **middle** button.
- Slide onto the Misc menu and then the Align submenu.
- Release the **middle** button when **Centers** is in reverse video.

Improving the Results

Before you do anything else to it, you may want to scroll through your document or **Print** it, so that you can see exactly what it looks like on paper.

As you decide whether or not you like the way it looks, ask yourself some questions:

- Is each of the *subhead* components on the page with the component that follows it? To ensure that a *subhead* always appears on the page with the component that follows it, you should have turned the *Allow Break After* box on the Component Page property sheet to **No.** You can do this now and apply the change **Globally.**
- Do the margins between components please you? Should there be a larger margin between the last component in a section and the subhead that follows it? If it seems to you there should be, change the top margin of *subhead* globally so that there will always be more margin between a *subhead* and the component above it.
- Are the page margins wide enough? Too wide?
- Edit your document until it looks right to you. Then **Print** it. **Save** the document and **Close** it.

Obviously, no one can anticipate the particular kinds of jobs you will have to do on your own, but this exercise should have given you some practice meeting different kinds of demands and making various decisions.

As you and the people around you develop your skills in using the Interleaf publishing software, you will find it useful and instructive to ask others how they would approach a task, for example, how they would create various kinds of diagrams.

From such consultations, everyone can become more proficient.

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