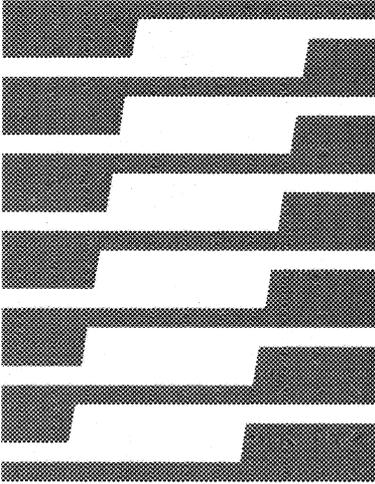


Interleaf



Technical
Publishing Software

Training Manual

Sun / Release 3.0

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Interleaf publishing software.

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Introduction

How to Use the Training Manual

This *Training Manual* is designed to give you an overview of the Interleaf Publishing software and experience using many of its features. However, because the *Training Manual* is not exhaustive, you should plan to use it in conjunction with the two-volume *Reference Manual*.

There are several features that are discussed only in the *Reference Manual*. The most important of these are the *book*, *tables of contents*, *autoreferencing*, and *indexing*. Many other parts of the software are dealt with in much greater detail in the *Reference Manual*. For example, in the chapter *Modifying Diagrams*, you will learn what a *lock* is and how to set and clear one, but you will need to consult the diagramming section in Volume 2 of the *Reference Manual* for details about the use of the various locks.

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 follow the instructions. 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**.

Introduction

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

-  means click the **left** mouse button.
-  means click the **middle** mouse button.
-  means click the **right** mouse button.
-  means hold down the **left** mouse button.
-  means hold down the **middle** mouse button.
-  means hold down the **right** mouse button.
-  means release whichever mouse button you are holding down.
-  represents the mouse itself.
-  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.

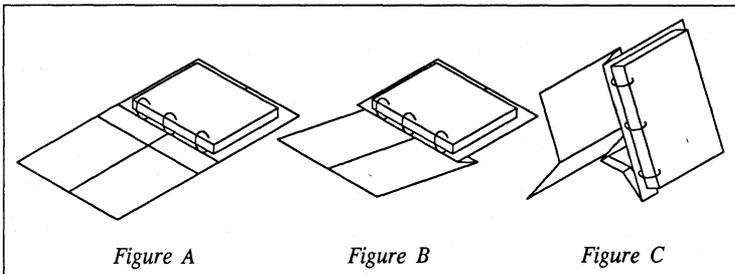


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Chapter 1

Getting Started

The primary purposes of the seven chapters in the *Getting Started* section of this manual are to introduce you to some of the essential ideas behind the Interleaf publishing software and to make it possible for you to use the software productively in a very short time.

People who want to experiment on their own, needing to know a very few basics, may want to go through these chapters and then dip into the rest of the training manual or use the *Reference Manual* when their experiments lead them into a situation they need to have explained.

People who want to understand the conceptual framework for the software will use these chapters to give them a practical context in which to test some of the concepts presented in the rest of the manual.

Once you have finished the first seven chapters, you can pick and choose and mix and match the chapters and exercises to suit your needs.

When you have completed this first chapter, you will know how to

- access the publishing software
- move the mouse cursor
- use menus
- use the mouse to select icons
- create and name icons
- open and close icons
- close your desktop

Logging Into Your Workstation

The part of the Interleaf publishing system you see first is your **workstation**, consisting of a monitor, a keyboard, a mouse, and a mousepad. Your workstation may be a stand alone computer or be connected to other workstations in a **network**.

When no one is logged into your workstation, the screen displays a moving pattern, called a **screen saver**. Before you can gain access to the publishing software, you must interrupt the screen saver and enter your login name (and your password if you have one).

To gain access to the publishing software:

- ☐ Hold down the **CONTROL** key and press **c**.
You will see a stickup menu in which to type your login name.
- ☐ Type your login name and press the **RETURN** key.
If you do not type your login and press RETURN within one minute, the screen saver returns.
If you have a password, you will see another prompt that requires the same sequence.
The stickup is removed. Either the desktop or a UNIX prompt appears. If the desktop appears, you are ready to work in the software.
- ☐ If a **UNIX** prompt appears, type **ops** and press the **RETURN** key.
A stickup displays the Interleaf copyright statement.
- ☐ Press the **RETURN** key.
The desktop appears.

When you are working in the publishing software, but have used neither the mouse nor the keyboard for an hour, the software saves a version of each open document and displays an abbreviated screen saver. *These actions do not close your desktop or change your desktop.* Unless your workstation has been re-booted* while you were away, you can refresh your screen and see your desktop as you left it by moving the mouse or by pressing any key on the keyboard.

* **Rebooting** is a procedure that provides your workstation with a new copy of the operating system. The operating system for your workstation is **UNIX**.
When a workstation is rebooted, all processes are terminated.

The Interleaf Desktop

The **desktop** is your interface to all of the Interleaf document preparation and management features. Unless your system administrator has already made some changes to the desktop, your new desktop will look like the one in Figure 1-1.

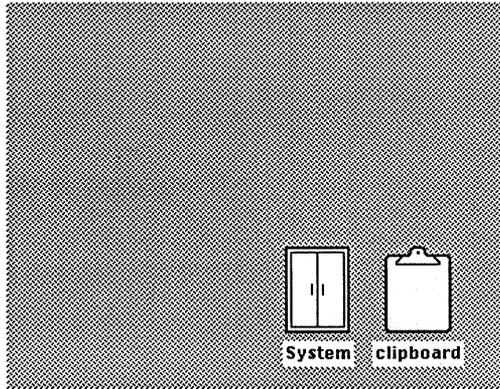


Figure 1-1. The Interleaf publishing software desktop

The only two objects on this new desktop are the *clipboard* and a cabinet named *System*. Throughout the manuals for the software, we refer to the objects on the desktop either as **objects** or as **icons** because they represent what you have access to from your desktop, but they are not the things themselves. There are other kinds of icons you will see and create as you proceed. Soon, your desktop will undoubtedly lose this spare look.

The Mouse and the Mouse Cursor

The arrow you see on your desktop (↑) is the **desktop mouse cursor**, which moves when you move the 3-button optical **mouse** on its pad (Figure 1-2).



Figure 1-2. The mouse and the mouse pad

If you turn the mouse over, you will see a red light shining from inside. When you move the mouse on the pad, this light reads the grid on the pad and lets the mouse cursor know where to move on the screen. In order for the mouse to move the mouse cursor correctly, the mouse must be positioned flat on the pad with the sides of the mouse approximately parallel to the sides of the pad, as shown in Figure 1-2.

To practice using the mouse:

- ☰ Move the mouse in a circular pattern on the mouse pad.
The mouse cursor follows a similar pattern on your desktop.
- ☰ Take the mouse off its pad, and circle it in the air.
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*.
While you are getting accustomed to using the mouse, you may find that you have moved the mouse off the pad before the cursor is where you want it on the screen. You can overcome this difficulty by using a combination of moving the mouse on the pad and moving it in the air.
This combination is typical of the way that you will use the mouse to move the mouse cursor since the mouse will rarely be in the same relative position on the pad as the mouse cursor is on the screen.
- ☰ Move the mouse on the pad so that the cursor goes onto the clipboard icon , and leave it there until it starts blinking.
The mouse cursor blinks after remaining still for ten seconds, so that you can locate it more easily when you need to use it.
- ☰↑ Move the mouse cursor back onto the desktop.

How the Mouse Buttons Are Used

In the publishing software, typically you select something — an icon on the desktop, a place in text, objects in a diagram. Then, you choose what you want to do with what you have selected. Each of the three mouse buttons has a particular function in this process:

- The **left** button is used to make a selection.
- The **right** button is used to extend or edit the selection.
- The **middle** button provides access to the popup and pulldown menus of the choices you can make.

No matter what part of the system you are in, when you hold down the *middle* button, you will see the menu of the choices that are appropriate to the circumstances.

Creating Objects on the Desktop

The first popup menu you will see if you hold down the middle mouse button is the Desktop Nothing Selected menu (Figure 1-3).

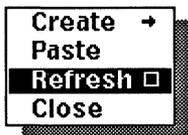


Figure 1-3. The Desktop Nothing Selected popup menu

The Create submenu gives you a list of the objects you can create. Figure 1-4 shows the default menu; however, the menu you see on your own desktop could be different if your system administrator has already tailored it to the needs of your organization.

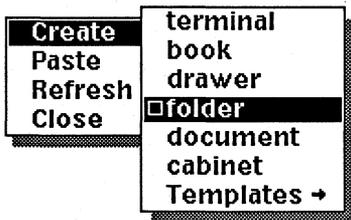


Figure 1-4. Create submenu

To create an object on the desktop:

- ☐☐ Hold down the **middle** mouse button.
- ☐ Move the mouse cursor until **Create** is high-lighted.

On popup menus, the mouse cursor takes the form of a small box ☐. No matter how long you hold down the button, this form of the cursor will not blink because the software is waiting for you either to issue a command by releasing the button while one of the commands is high-lighted or to cancel the menu by sliding the mouse cursor off the menu before releasing the button.

- ☐☐ Release the button when **document** is high-lighted.

The outline of a document icon appears on your desktop. The icon is ready for you to move wherever you like on your desktop.

- ☰ Without holding down any mouse buttons, move the document icon to the center of your desktop.
- ☰ Click the **left** mouse button to put the icon down, but leave it selected.

The document icon is black with a white outline to show that it is selected.

Naming Objects

If you left all of the documents and other objects you created on your desktop with their generic names — *document*, *folder*, etc. — you would not be able to tell them apart. On the Object property sheet, you can rename the documents and other objects you create.

To change the name of an icon:

- ↖ If the *document* icon is not black with a white outline, point the mouse cursor at it, and click the **left** mouse button to select it.
- ☰ Hold down the **middle** mouse button to see the Desktop Icon Selected popup menu (Figure 1-5).

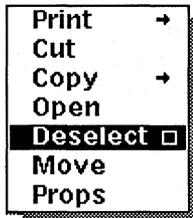


Figure 1-5. Desktop Icon Selected popup menu

- ☰ Release the button when **Props** is highlighted. *The Object property sheet for this document opens in a window in the upper right-hand corner of your desktop (Figure 1-6).*

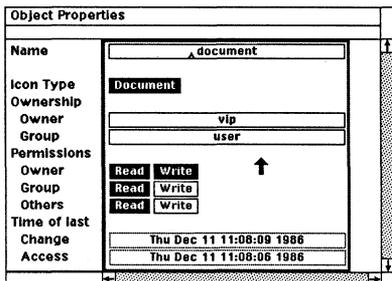


Figure 1-6. Object property sheet

The window with the property sheet in it is now the **active window** — the one in which mouse button and keyboard actions will have an effect. You can easily distinguish an active from an inactive window by looking at the header bar (the bar in Figure 1-6 with Object Properties displayed in it). The header bar of an active window has a great deal of white in it, while the header bar of an inactive window is entirely black with white lettering. White lettering on a black background is referred to in this manual as **highlighting** or **reverse video**. Figure 1-7 shows how the Object property sheet in Figure 1-6 looks when it is inactive.

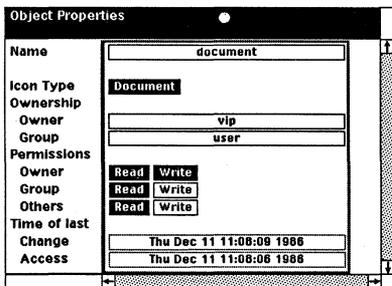


Figure 1-7. Inactive Object property sheet

In the chapters specifically about property sheets and the desktop, you will learn more about the entries on this sheet. For the moment, you will only change the name of document.

- ☐ Since the property sheet caret — a triangular place marker that indicates where entry from the keyboard will appear — is in the *Name* field, you can just start typing any new name you choose. When you start to type, document is automatically erased and the new name is highlighted.

- ☐ Press the **RETURN** key to confirm the new name.
The display returns to normal video.
- ☐☐ Hold down the **middle** mouse button to see the **Apply** menu.
- ☐☐☐ Release the button when **Apply** is highlighted.
*Since **Apply** is the default command on this menu, in the future, you can just click the middle button when you want to apply changes.*
- ☐☐☐ Hold down the **middle** mouse button again to see the **Close** menu.
- ☐☐☐ Release the button when **Close** is highlighted to close the property sheet.
*Again, you are implementing the default command on a popup menu; in this case, **Close**. In the future, you can just click the middle button when you want to close a property sheet.*
The property sheet closes, and the document icon remains selected.

Selection

Because parts of the system necessarily differ from one another in significant ways — for example, icons on the desktop are separate, scattered objects while text is connected and linear — **selection** works in slightly different ways depending on where you are. But the basic idea is always the same, and the mouse buttons function the same way in *every* part of the software.

Since no icons are open yet, you will learn first the mechanics of selecting icons.

Closed icons have borders. Open icons do not. Both closed and open icons can be selected. Figure 1-8 shows how a document icon looks in the four possible states.

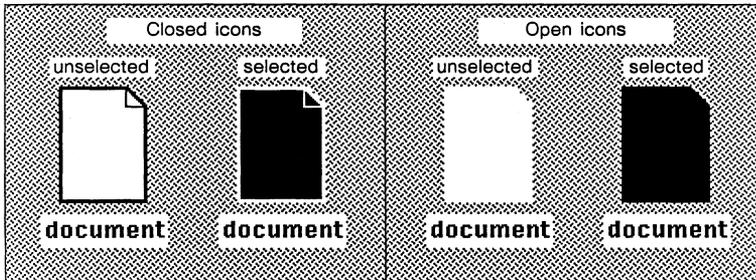


Figure 1-8. How an icon looks in different states

Selecting an Icon

To select an icon:

- ➦ Move the mouse cursor so that at least the tip of the arrow is inside the border of the document icon you just created and named.
- ☑ Click the **left** mouse button.
The icon is selected.

To select additional icons:

- ✓ With the mouse cursor inside the border of each of the icons you want to select, click the **right** mouse button.

Deselecting Icons

All selected icons are automatically deselected when you use the *left* mouse button to select one icon on the desktop. Sometimes, though, you may want to deselect only one of several selected icons or all of the selected icons on the desktop.

To deselect a single icon:

- ✓ Make sure two or three icons are selected.
- ✓ With the mouse cursor inside the border of the icon you want to deselect, click the **right** mouse button.

To deselect all the selected icons:

- ✓ Make sure two or three icons are selected.
- ✓ Move the mouse cursor to an empty gray area on your desktop.
- ☐☐☐ Click the **left** mouse button.
All the icons return to normal video.

Opening Icons

Once you have selected an icon, when you hold down the middle mouse button, you see a menu of the available choices.

To open an icon:

- ✓ Select the cabinet icon labeled *System*.
- ☐☐☐ Hold down — do not click — the **middle** mouse button.
The Desktop Icon Selected popup menu appears where the mouse cursor was pointing. Open, the default command, is highlighted.
- ☐☐☐ Release the middle button.
The System cabinet opens in a window on your desktop (Figure 1-9).

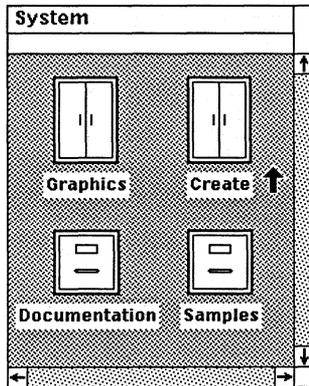


Figure 1-9. Contents of System cabinet

The System Cabinet

At the moment, you need to know only a few things about your *System* cabinet. First, your *System* cabinet is linked to the *System* cabinet on your system administrator's desktop and does not actually belong to you. Therefore, you cannot work in it, but you can copy documents or directories (cabinets, folders, drawers) to your desktop where you can modify them. Second, you should not cut your *System* cabinet because it contains many necessary and useful items. If you ever cut it by mistake, your system administrator can recreate it for you.

For information about how you can use the *System* cabinet to customize your desktop, see *Document Templates* in Volume 1 of the *Reference Manual*.

Among the contents of the *System* cabinet is the *Documentation* drawer. In this drawer, there is a folder called *Training*. While you are learning to use the publishing software, you will work with the *Training* folder extensively, and you will want to save some of the work you do. Therefore, it makes sense to copy the folder and put it directly on your desktop. This copy of the folder will belong to you, so you can alter its contents in any way you choose. Because it will be right on your desktop, you will be able to open it more quickly.

If you ever need a fresh copy of one of the documents in the *Training* folder, you can copy it from the *System* cabinet.

The instructions in the *Training Manual* assume that you have copied the *Training* folder and pasted it on your desktop.

To copy the Training folder and paste it on your desktop:

- ✓ Make sure the *System* cabinet is open.
- ✓ Open the *Documentation* drawer.
- ✓ Select the folder icon labeled *Training*.
- ☐☐☐ Hold down the **middle** mouse button.

- ☐☐☐ Release the button when **Copy** is highlighted.
*It is not necessary to slide the mouse cursor onto the sub-menu because you want the default command **Normal**. The **Copy Link to** command is not dealt with in the Training Manual. See the chapter Desktop Management in Volume 1 of the Reference Manual for information on how to use this command.*
You will see the clipboard icon flash briefly to indicate that it now contains a copy of the Training folder.
- ☐☐☐ Move the mouse cursor out of the window in which the contents of the *Documentation* drawer are displayed and onto your desktop.
- ☐☐☐ Hold down the **middle** mouse button.
- ☐☐☐ Release the button when **Paste** is highlighted.
*If you do not see the desktop menu with **Paste** on it, this indicates that something on your desktop is selected. Choose the **Deselect** command on this menu, and then, repeat the two previous steps.*
- ☐☐☐ Move the mouse to position the folder icon where you want it, and click the **middle** button to put it down and deselect it.
Deselect is the default on the popup menu after you create or paste an icon, so you do not need to see the menu. If you had wanted to put the icon down without deselecting, you could have clicked the left mouse button.

Although you can have as many as 16 windows open at one time, it is often easier to work on your desktop if you close windows you know you probably are not going to need for a while. Since you no longer need the *System* cabinet or *Documentation* folder open, you can close the windows in which they are open. You can close the windows in any order following the next procedure.

To close a window:

- ☐ With the mouse cursor in the middle of the window with the contents of the *System* cabinet in it and with nothing selected, click the **middle** mouse button to choose the **Close** command on the Desktop Nothing Selected menu (Figure 1-10).

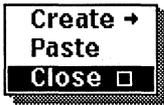


Figure 1-10. Desktop Nothing Selected popup menu

Notice that the menu in Figure 1-10 is slightly different from the one you see on the desktop itself. Because the desktop does not have scroll bars, the **Refresh** command is on the desktop menu. The **Refresh** command renews the screen display. When you use the **Refresh** command on the Desktop Nothing Selected popup menu, the software renews the screen display of the desktop and all open windows.

The scroll bar and the Window popup menu are discussed in the chapter Windows.

Closing Your Desktop

It is not necessary to close windows before closing your desktop — except for document windows if you have made changes to the documents.

If your desktop appeared as soon as you logged into your workstation, closing your desktop will automatically log you out of your workstation. If you logged into UNIX before accessing the publishing software, you will need to close your desktop and then log out of UNIX.

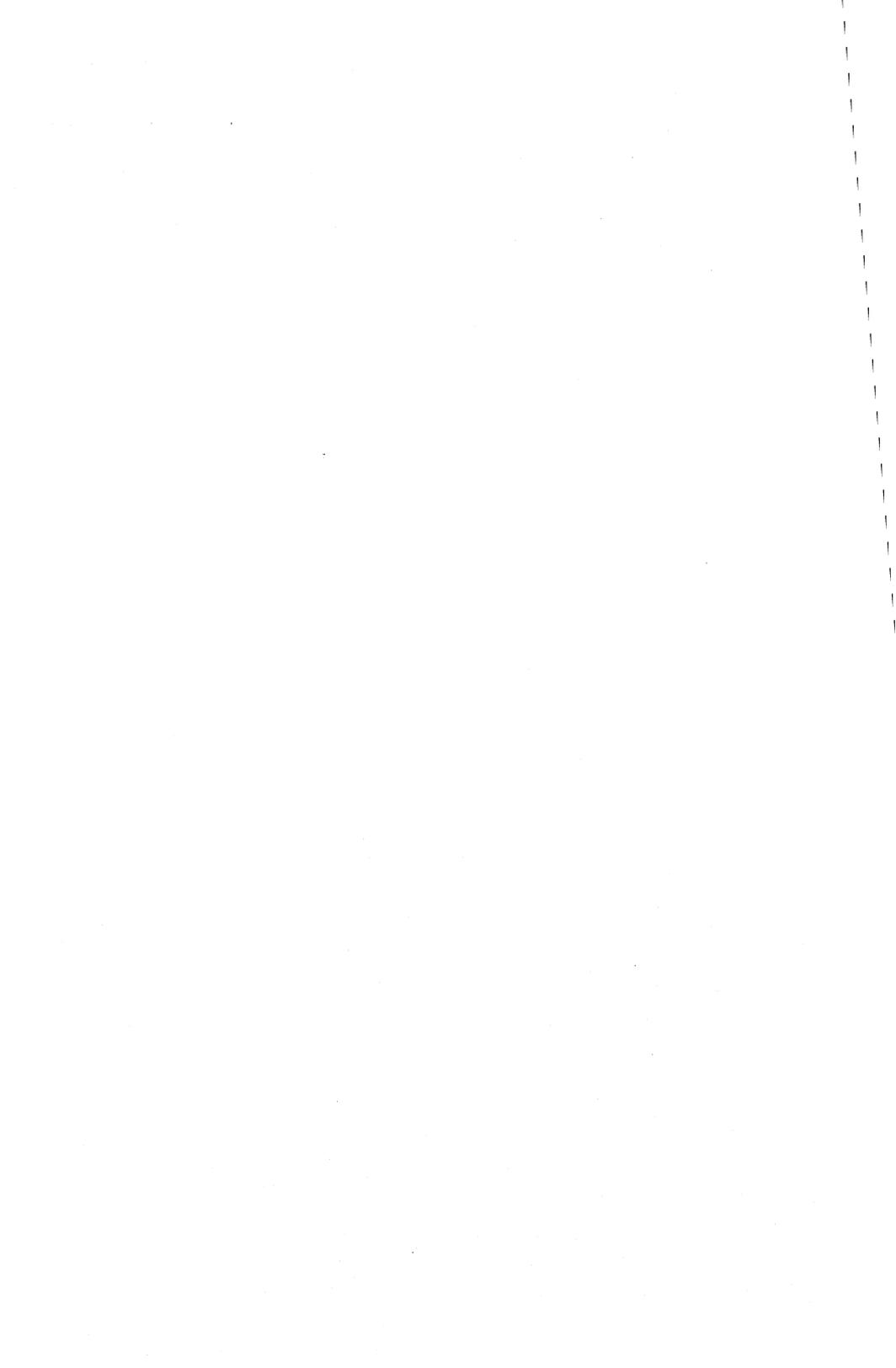
To close your desktop and logout of your workstation:

- ⇧ Move the mouse cursor into a gray area on your desktop.
- ☐☐☐ Click the **left** mouse button to make sure no icons are selected.
- ☐☐☐ Hold down the **middle** mouse button to display the Desktop Nothing Selected popup menu.
- ☐☐☐ Move the mouse cursor until **Close** is highlighted.
- ☐☐☐ Release the **middle** mouse button to select **Close**.
The Close stickup menu appears.

If you had made any changes to documents that you had not saved, you would have been told to close these documents before closing your desktop. Closing the documents would give you the opportunity to save your changes.

- ⇧ Move the mouse cursor until **Confirm** is highlighted.

- ■ ■ Click the **left** mouse button to confirm.
If you logged directly into the publishing software, the desktop will be closed, and the screen saver will reappear. If you logged into UNIX, the desktop will be closed, and you will see a UNIX prompt.
- ☐ At the UNIX prompt, type **logout** and press the **RETURN** key to log out of your workstation.
The screen saver will reappear.



Chapter 2

Menus

There are three kinds of menus in the publishing software: **popup**, **pulldown**, and **stickup**.

When you are pointing the mouse cursor anywhere except into one of the boxes in the header of a document window and hold down the middle mouse button, you see the **popup menu** of commands that is appropriate to the place the cursor is pointing and to the circumstances. A popup menu appears exactly where your mouse cursor is pointing.

Pulldown menus appear only when you hold down the middle mouse button with the cursor pointing into one of the boxes in the header bar of the window in which a document is displayed.

You select a command on popup and pulldown menus the same way — by releasing the middle button when the command you want is highlighted. You also cancel popup and pulldown menus the same way — by sliding the mouse cursor completely off the menu before releasing the mouse button.

A third type of menu, a **stickup menu**, requires a deliberate response from you. Most stickup menus can be canceled by choosing the **Cancel** command on the menu.

The first part of the publishing software you saw was the stickup menu on which you logged into the software. There is only one difference between this stickup menu and the others you will see: if you do not complete the login process in one minute, the login stickup goes away and is replaced by the screen saver. Other stickups remain on your screen (and prevent you from doing anything else) until you make a choice or until the workstation is rebooted.

Using Popup and Pulldown Menus

In most circumstances, whether or not something is selected determines which popup menu appears when you hold down the middle mouse button. The names of the popup menus — for example, Desktop Nothing Selected, Desktop Object Selected, Component Location, Component Selected — indicate where you will see the menu and under what circumstances.

Throughout the manuals for the publishing software, we refer to the various popup menus by fairly lengthy names — for example, the Desktop Nothing Selected and Desktop Object Selected menus. Do not feel you need to memorize these names. We use them to make it clear *where you will see a particular menu and under what circumstances*. After a little experience with the software, you will learn which menu to expect; this knowledge is important, not the names.

The property sheet popup menus are discussed in the chapter *Property Sheets and Masters*, and the scroll bar popup is discussed in the chapter *Windows*.

To use a popup menu:

- ✓ Open the *Training* folder.
- ✓ Select the icon for *stripes*.
- ☐☐ Hold down the **middle** mouse button.
The Desktop Object Selected popup menu appears (Figure 2-1).

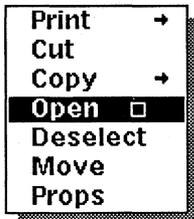


Figure 2-1. Desktop Object Selected menu

- ☰ Move the mouse on the pad to move the cursor up and down on the menu.
The highlighted choice will change in response to this movement.
- ☐ Release the button when **Open** is again highlighted.
Stripes opens with the mouse cursor pointing into the Name box in the document header.

To see a pulldown menu:

- ☐ With the mouse cursor pointing into the box in the document header that displays the name *stripes*, hold down the **middle** mouse button.
The Document Name pulldown menu is displayed with the default command Close highlighted (Figure 2-2).

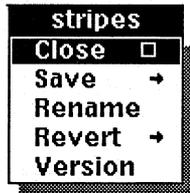


Figure 2-2. Document Name pulldown menu

To cancel a popup or pulldown menu:

- ☐ Without releasing the **middle** mouse button, slide the mouse cursor off the popup until none of the choices is highlighted.
- ☐ Release the **middle** mouse button.
The pulldown disappears.

Submenus

On some menus, you see arrows pointing to the right after command names. These arrows indicate that there are *submenus* of additional, related commands or of miscellaneous commands.

To see a submenu:

- ✓ Move the mouse cursor into the text of *stripes*.
- ☐ Hold down the **middle** mouse button to display the Text Location popup menu (Figure 2-3).

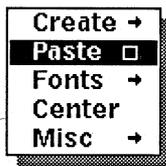


Figure 2-3. Text Location popup menu

- ☐ Slide the mouse cursor down the menu until **Fonts** is highlighted.
- ☐ Slide the mouse cursor in the direction of the arrow.

You see the *Fonts submenu* (Figure 2-4). Many of the commands on this menu have submenus of their own.

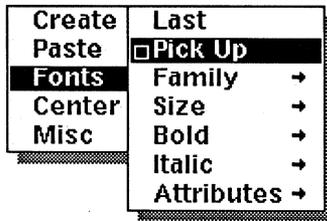


Figure 2-4. Fonts submenu

- ✓ Cancel the menu and submenu by moving the mouse cursor off the submenu and releasing the middle button.

Popup and Pulldown Menu Defaults

Whenever you display a popup or pulldown menu, one of the choices on it is already highlighted. This is the menu's **default** command. The menu defaults when you open your desktop have been chosen by Interleaf.

For some menus, the default is always the same. For example, on the Desktop Nothing Selected popup menu, **Refresh** is always the default command; and on the Document Name pulldown menu, **Close** is always the default. Other menus have **dynamic defaults** that change when you change commands.

To see how dynamic defaulting works:

- ☐☐☐ With the mouse cursor in the text of the first paragraph, hold down the **middle** mouse button to display the Text Location popup menu (see Figure 2-3).

If you do not see this menu, check to make sure that nothing on the text page is highlighted.

- ☐☐☐ Slide the mouse cursor onto the Fonts submenu. **Pick Up**, the system default, is highlighted.
- ☐☐☐ Release the button when **Bold** is highlighted.
- ☐☐☐ Hold down the **left** mouse button.
- ☐☐☐ Move the mouse to move the text caret somewhere else in text.
- ☐☐☐ Release the button.
- ☐☐☐ Hold down the **middle** button again.

Figure 2-5 shows the menu you will see.

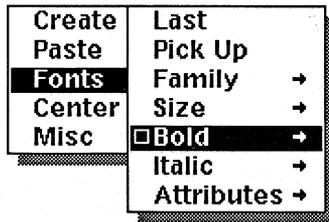


Figure 2-5. Fonts submenu

A dynamic default remains the default until you choose another command or until you reset the default on the menu. You reset the default the same way you cancel a menu: by sliding off the menu before releasing the middle mouse button.

To reset the default on a popup or pulldown menu to the system default:

- ☐☐☐ Without releasing the **middle** mouse button, slide the mouse cursor off the popup until none of the choices is highlighted.
- ☐☐☐ Release the **middle** mouse button.

Dynamic Popup Menus

Some popup menus are dynamic, and the entries on them change depending on circumstances. For example, the **Create** submenu of the Component Location popup menu changes as you create components with new names. Figure 2-6 shows the **Create** submenu for *stripes* as you see it on your screen and with a new component named *note* added.

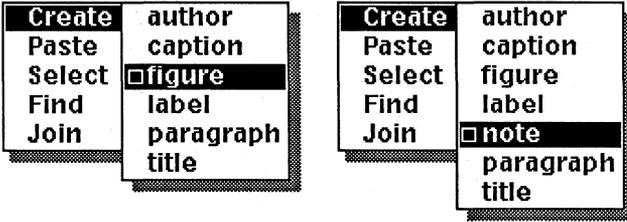


Figure 2-6. Dynamic popup menus

Using Stickup Menus

Most of the time, you will not see stickup menus as often as you do popup menus. But you will see at least one every time you use the **Close** command to end an editing session.

To see a stickup menu:

- ☐☐ With the mouse cursor on the desktop, hold down the **middle** mouse button to display the Desktop Nothing Selected menu.
- ☐☐ Slide the mouse cursor on the menu until **Close** is highlighted.
- ☐☐ Release the **middle** mouse button.
The Close Desktop stickup appears (Figure 2-7).

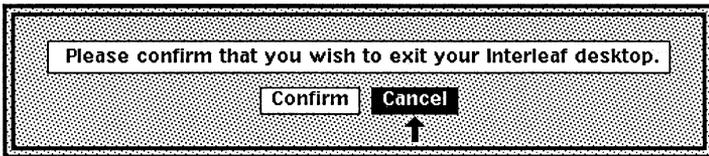


Figure 2-7. Close Desktop stickup

- ☐☐☐ Move the cursor to **Confirm**, and click the **left** button to close your desktop.
- or ☐☐☐ Click the **left** mouse button to **Cancel** the stickup.

Chapter 3

The Mouse Cursor and the Carets

In the first two chapters, you were introduced to some of the basic features of the publishing software. In this chapter, you will learn about several more:

- the various forms of the mouse cursor
- two carets — the text caret and the component caret
- how the cursor and the two carets work in a document
- selection on the document page and in the component bar

To prepare for the exercises in this chapter, log into your workstation, select the folder named *Training*, open it, select the document named *stripes*, and open it. Figure 3-1 shows *stripes* in an open document window with the parts of the window labeled.

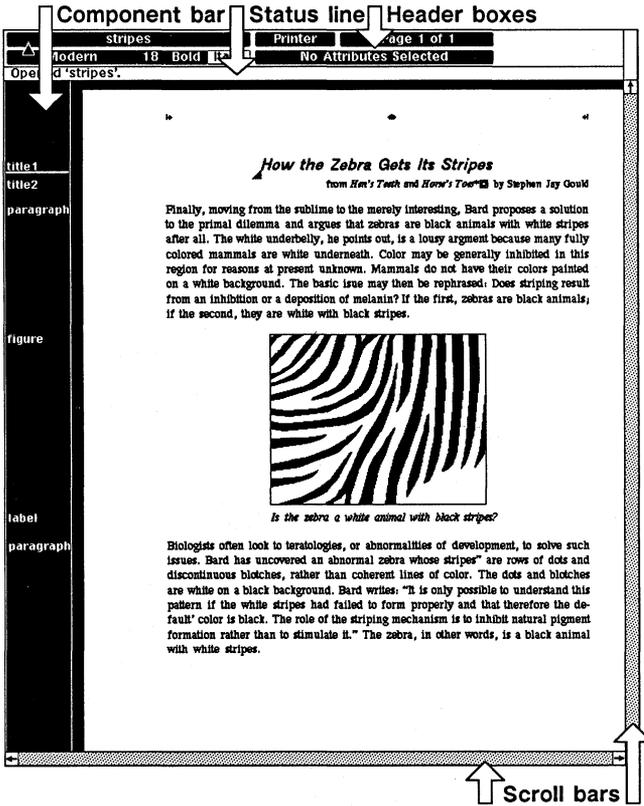


Figure 3-1. Open document

The Mouse Cursor

The **mouse cursor** can take six shapes, depending on its location. These different shapes are visual reminders of the location of the cursor.

You have already seen the mouse cursor in two forms:

- ↑ as it appears on the desktop, in property sheets, and on stickup menus
- as it appears in popup or pulldown menus

In a document window, the mouse cursor can take four additional shapes:

- ▲ In the header of a document window and in the scroll bars, it is a triangle.
- ▲ In the text of a document, it is a chevron.
- ◆ In the component bar to the left of the document, it is a diamond.
- ↖ In an open frame (except when you are editing a micro-document), it is a slender, slanted arrow.

To see the shapes of the mouse cursor in a document window:

- ▲ When you open a document, the mouse cursor is a triangle and is pointing at the name of the document in the document header (Figure 3-2).

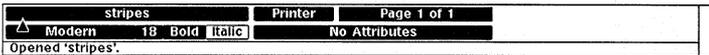


Figure 3-2. Mouse cursor in document header

- ◆ Move the mouse, so that the cursor is in the component bar (Figure 3-3).

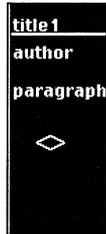


Figure 3-3. Mouse cursor in component bar

- ▲ Move the cursor to the right onto the text page. Notice that the cursor changes shapes as it crosses the vertical, white line (Figure 3-4).

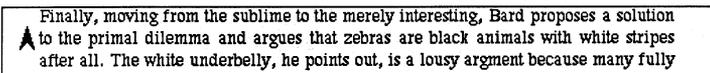


Figure 3-4. Mouse cursor on text page

When the mouse cursor is between the white line and the scroll bar on the right and in the shape of a chevron, you will see one of the text popup menus when you hold down the middle mouse button.

▲ Move the cursor into the figure of zebra stripes.

☐☐☐ Click the **left** mouse button *twice*.

One click selects the frame, and the second click opens the frame. Only when a frame is open do you see the mouse cursor as a slanted arrow ↘ (Figure 3-5).

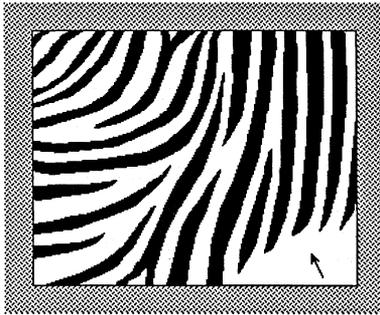


Figure 3-5. Mouse cursor in an open frame

↘ Move the cursor into the component bar.
It remains an arrow indicating that any action you take will have its effect inside the open frame.

☐☐☐ Hold down the **middle** mouse button to see the Diagramming Nothing Selected popup menu (Figure 3-6).

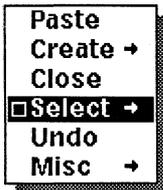


Figure 3-6. Diagramming Nothing Selected popup menu

☐☐☐ Release the button when **Close** is highlighted.

Restrictions on the Movement of the Mouse Cursor

The movement of the mouse cursor is restricted in only two situations:

- When the cursor is in the component bar and you hold down the left or the right mouse button, you will not be able to move the cursor outside of the component bar.
- When the cursor is in the text area of a document and you hold down the left or right mouse button, you will not be able to move the cursor outside of the text area.

Otherwise, you can move the cursor freely anywhere on your desktop and into open windows. The window the mouse cursor is in is always the active window where mouse and keyboard actions take effect.

The Text Caret

The **text caret** is a filled triangle. Like the mouse cursor, the text caret can be moved and it takes different forms:

- ▲ when the font at the caret location is roman
- ▲ when the font is bold
- ▲ when the font is italic
- ▲ when the font is bold italic
- ▲ in property sheets

Although you may have moved it by now, when you opened *stripes*, the text caret was at the beginning of the title, and its slant indicated that the font of the component *title* is italic.

When the mouse cursor is inside the text area and you start typing, the cursor merges with the text caret. When this happens, the text caret retains its slant and weight but is slightly larger.

Moving the Text Caret in a Document

Unlike the mouse cursor, which can be anywhere on the screen, the text caret must always be pointing at a particular place where editing can occur. There are several ways to move the caret from one location to another in a document:

- Holding down the left mouse button while you move the mouse is by far the most efficient and accurate, and you would do well to make this method a habit. When you hold down the left button, the document will automatically scroll when the caret touches a boundary of the text area. This method is called the **drag technique**.
- When you want to move the caret more than a page or two from its current location, the **Go To** command on the Page pulldown menu is the quickest way.
- Sometimes, when the destination for the caret is visible, you may choose to move the mouse cursor until it is pointing where you want the caret and then click the left button.
- You can also move the caret using the arrow keys on the keyboard. When you use this method, the document scrolls when the caret touches a boundary of the text area.

To position the text caret at a new location:

- ▲ Move the mouse until the cursor is a chevron in the text of *stripes*.
- ▣▣▣ Hold down the **left** mouse button.
The caret moves to the place in text that is closest to the mouse cursor. Often, this place is so close to the mouse cursor that the cursor and caret are combined.
- ≡▣▣▣ Move the mouse to move the caret around in the text of the document.
Notice that the caret jumps from one potential editing location to another.
- ≡▣▣▣ Move the mouse horizontally.
As long as you stay close to one horizontal plane, the caret is constrained to that line of text to make it easy for you to place the caret accurately.
- ▣▣▣ Release the mouse button.
Because the caret moves from one potential editing location to another, it does not move when you release the mouse button.

- ☐☐☐ Without holding down any buttons, move the mouse, so that you can see the caret.

The text caret is the correct weight and slant for the font at the caret position.

- ☐☐☐ If you want to see the way the caret moves when you move the mouse cursor and then click the left mouse button, place the mouse cursor so that it points at the center of a letter and click the left button.

The caret will move either left or right, and it is impossible to be sure which direction it will choose.

Selecting Text

You select a block of text by using both the left and right mouse buttons. You use the *left* button to position the text caret and mark the starting point of the selection. Then you use the *right* button to mark the end point(s).

The following exercises show you several ways to select and deselect text. During these exercises, keep the mouse cursor on the text page of *stripes*.

To select a small block of text:

- ✓ Use the **left** mouse button to position the text caret at the beginning of the second sentence of the first paragraph in *stripes* (“The white underbelly. . .”).

- ☐☐☐ Hold down the **right** mouse button, and move the mouse to the right to the end of the line of text.

The line of text to the right of the text caret is highlighted to show that it is selected.

- ☐☐☐ Release the mouse button.

To deselect the whole block of text and leave the text caret where it is:

- ☐☐☐ Hold down the **middle** mouse button.

- ✓ Choose **Deselect** on the Text Selected popup menu.

The caret is still at the beginning of the second sentence of the paragraph.

To select a large block of text:

- ☐☐☐ Hold down the **right** mouse button, and move the mouse vertically to move the cursor through the text until the figure of zebra stripes is highlighted to show that it is selected.

Whole lines of text are selected. The figure will be selected after the mouse cursor passes it.

The figure is in an area set aside for diagramming. While the contents of this area are diagramming objects, the area itself, which is called a frame, is part of the text.

- ☐☐☐ Release the mouse button.

To deselect part of the text:

- ▲ Point the mouse cursor at the end of the first paragraph.

- ☐☐☐ Click the **right** mouse button.

The first paragraph from the beginning of the second sentence to the end is still selected. The frame and the text of the label component are no longer highlighted.

You can also select text, and then add to the selection on the other side of the text caret.

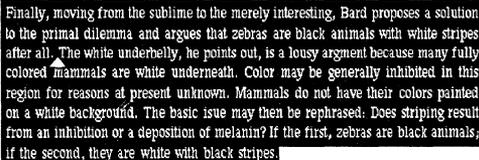
To add to a selection of text:

- ✓ Make sure the second sentence in the first paragraph is selected with the text caret at the beginning of the sentence.

- ☒▲ Without holding down any of the mouse buttons, move the mouse cursor to the beginning of the first paragraph in *stripes*.

- ☐☐☐ Click the **right** button.

All the text between the caret and the beginning of the paragraph is added to the selection (Figure 3-7).

A screenshot of a text document showing a selection box around a paragraph. A text caret is positioned at the beginning of the first sentence. The selection box extends from the caret to the end of the paragraph. The text inside the selection box is highlighted in black.

Finally, moving from the sublime to the merely interesting, Bard proposes a solution to the primal dilemma and argues that zebras are black animals with white stripes after all. The white underbelly, he points out, is a lousy argument because many fully colored mammals are white underneath. Color may be generally inhibited in this region for reasons at present unknown. Mammals do not have their colors painted on a white background. The basic issue may then be rephrased: Does striping result from an inhibition or a deposition of melanin? If the first, zebras are black animals; if the second, they are white with black stripes.

Figure 3-7. Selected text on both sides of the text caret

You now have text selected on both sides of the text caret. You can add to the selection at either end by following the previous

instructions, or you can deselect from either end back towards the caret. The following exercise shows you how to deselect text on both sides of the text caret.

To deselect text on both sides of the text caret:

- ☐☐ Hold down **right** button and move the mouse to deselect part of the text on one side of the caret.
As long as you hold down the right button, you can select and deselect the text on this side of the caret until you have just the text you want selected.
- ☐☐ Release the button.
- ✓ Move the mouse cursor to the other side of the text caret and repeat the first step.

The Component Caret

The **component caret** is a white line above or below the name of one component in the component bar. You see it only when no components are selected. It is a position marker and indicates where an action in the component bar will occur.

When no components are selected, actions in the component bar occur immediately above or below the component with the *component* caret. The direction of the action depends on whether the component caret is above or below the component name.

When components are selected, actions in the component bar occur immediately below the component with the *text* caret in it.

You can move the component caret in exactly the same ways that you move the text caret (see list on page 3-6). The drag technique moves the component caret most efficiently within a page or two of its starting location.

To move the component caret:

- ◆ Move the mouse cursor into the component bar.
- Hold down the **left** mouse button, and move the mouse slowly so that the cursor moves up and down in the bar.
Since the left button is used to select components as well as to move the caret, each component name is highlighted as the cursor passes over it so that you cannot see the component caret.
- Release the button when the component caret is above the component named *title*.

Selecting Components

Sometimes you want to perform the same operation on a number of different components — **Cut** them, for example. You can select as many components as you like. The selected components can be either consecutive or scattered around in the document.

To select one component:

- ✓ With the mouse cursor in the component bar, hold down the **left** button, and move the mouse until *title* is highlighted.
- Release the button.

To deselect a single component:

- With the mouse cursor positioned over the selected component name, click the **right** mouse button.
The component title is no longer selected, and the component caret is below its name. If you have selected more than one component and you want to deselect only some of them, you can use this technique to deselect individual components.

To select multiple components:

- Select one component with the **left** mouse button.
- Select additional components with the **right** mouse button.
If you are selecting several components in a row, hold down the right button, and move the cursor over the component names.

To deselect all components:

- ☐☐☐ With the cursor in the component bar, hold down the **middle** mouse button to display the Component Selected popup menu (Figure 3-8).

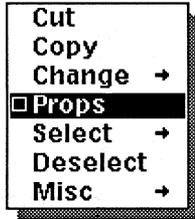
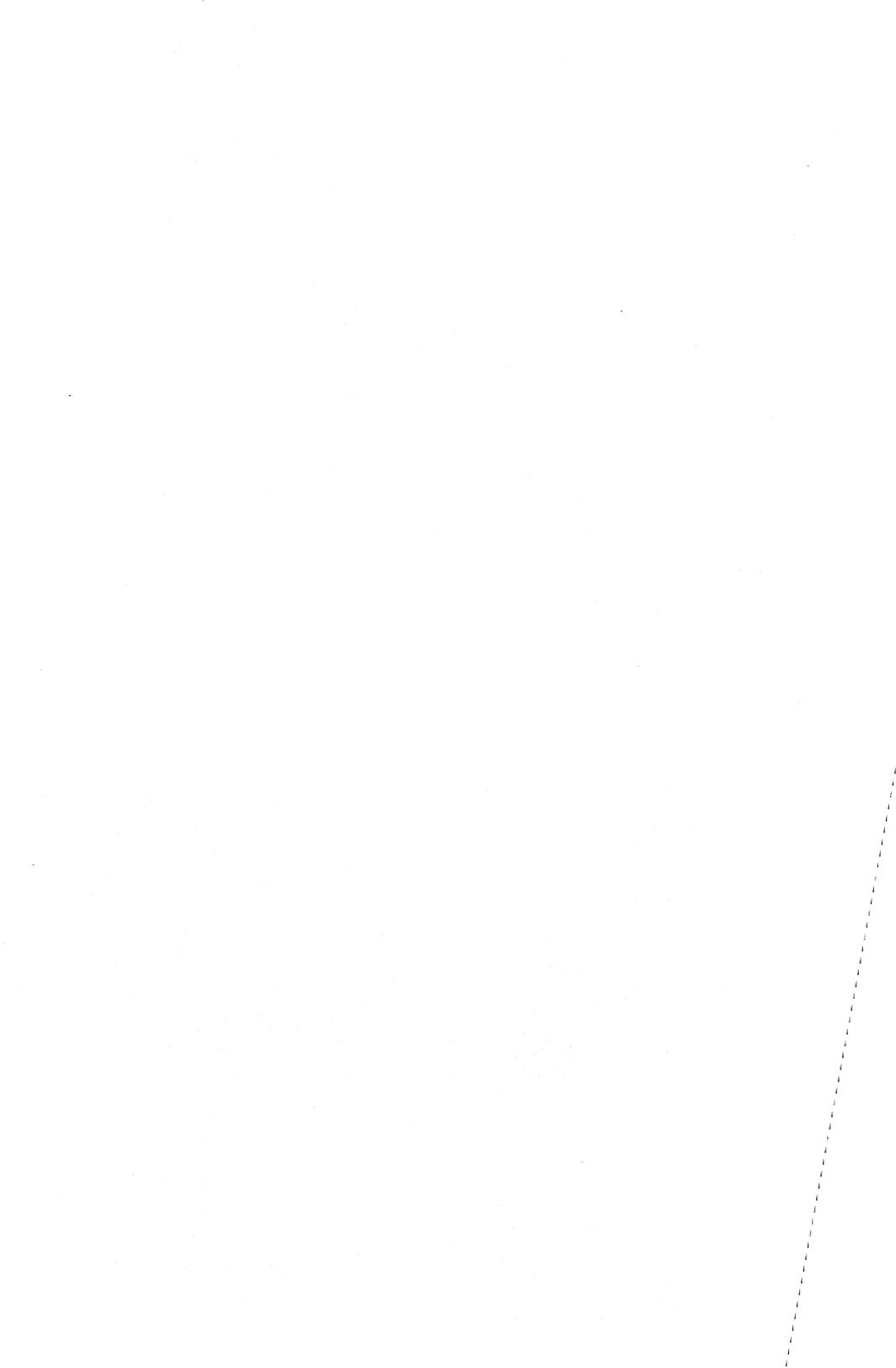


Figure 3-8. Component Selected popup menu

- ☐☐☐ Release the button when **Deselect** is highlighted.

Selection in diagramming requires an understanding of the diagramming system. Therefore, the subject is covered in the chapter *Introduction to Diagramming* rather than in this chapter.



Chapter 4

Windows

The purpose of this chapter is to show you the characteristics of the Interleaf window system and how to make good use of these characteristics.

Open windows are the means by which you gain access to many parts of the system. For example, when you open an icon, its contents appear in a window, and property sheets also open in windows. Although it does not have the same characteristics as other windows, the desktop itself is a window.

All windows, except the desktop, have four things in common:

- the Window popup menu
- the header bar
- the status line
- the scroll bars

The commands on the Window popup menu affect the window itself, messages from the software appear in the status line, and the scroll bars affect the position of the contents in the window.

Actions have their effects in only one window at a time. A window becomes the active window when you move the mouse cursor into it. The header bar of an active window is in normal video, and the header bar of an inactive window is in reverse video. Figure 4-1 shows the header bar of *stripes* when it is in the active window and when it is in an inactive window.

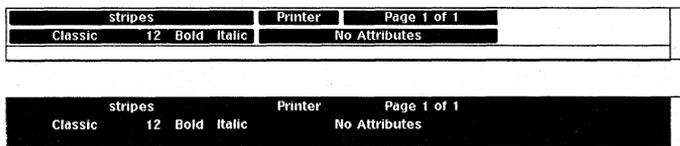


Figure 4-1. Header bars of active and inactive window

The Window Popup Menu

You can have as many as 16 windows open on your desktop at one time. Although you will not usually have this many open, you may often have four or five. You use the commands on the Window popup menu to rearrange and manipulate the windows to suit your work (Figure 4-2).

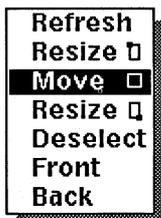


Figure 4-2. Window popup menu

There are several places in a window where you will normally access this menu: in the header (including the status line), and in the scroll bars on the right and bottom of the window (Figure 4-3).

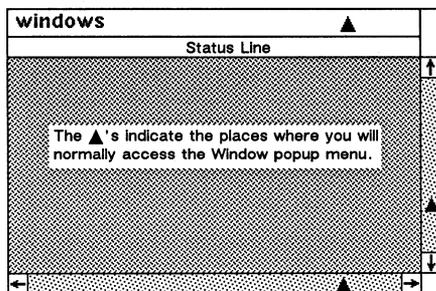


Figure 4-3. Location of Window popup menu access

Since there are pulldown menus associated with the header in document windows, the tip of the mouse cursor must be pointing at an open place in a document header in order for you to display the Window popup menu when you hold down the middle mouse button. See the document header in Figure 4-3.

The Defaults on the Window Popup Menu

The defaults on the Window popup are dynamic and change according to circumstance.

When a window is in any way covered by other windows, the default on its Window popup is always **Front**.

To uncover a window:

- ✓ Move the mouse cursor to one of the locations where the Window popup appears, and click the **middle** mouse button.

When a window is not covered by other windows, there are shifts in the Window popup default. In the header, **Move** is the default while, in the scroll bars, **Resize** □ (from the lower right-hand corner of the window) is the default. Remembering this difference can save you time (Figure 4-4).

| Default when... | in header: | in scroll bars: |
|-----------------------------|------------|-----------------|
| window is partly obstructed | Front | Front |
| window is unobstructed | Move | Resize □ |

Figure 4-4. Window popup defaults

You will find that you do not need to remember what happens after you use **Front**, **Refresh**, **Resize**, or **Move** because the defaults are the next most logical possibilities (Figure 4-5).

| After you use... | the default in header is: | the default in scroll bars is: |
|------------------|---------------------------|--------------------------------|
| Front | Move | Resize □ |
| Refresh | Move | Resize □ |
| Move | Deselect | Deselect |
| Resize | Deselect | Deselect |

Figure 4-5. Window popup defaults

In the next section, there are several exercises that will show you the pattern of defaults.

How Windows Are Placed on the Desktop

Depth has a different meaning on your electronic desktop from the meaning it has on your ordinary desktop. On your ordinary desktop, two pieces of paper can both be lying on the desktop. You can move either piece on top of the other. On the Interleaf desktop, even if windows do not touch each other, only one is directly on the desktop. The other windows are stacked — in order — on top of this one.

If you do not do anything to change the order, it is determined by the order in which you open the windows. However, at any time, you can change the order of windows in the stack by using commands on the Window popup menu. The following exercises show you how the system works and how to use the Window popup menu.

To see how windows are placed on your desktop:

✓ Open the *Training* folder.

✓ Open *windows1*.

✓ Open *windows2*.

The windows with the two documents in them open side by side and they appear to be on the same plane.

▲ Move the mouse cursor into the header of *windows1*.

☐☐ Hold down the **middle** mouse button.

Since Move is the default on the menu in the header when the window is not obscured by other windows, you could just click the middle button to execute the command.

✓ Release the button, and move the mouse.

An outline of the window will move.

☐☐ When the outline of *windows1* overlaps an inch or two of *windows2*, hold down the **middle** mouse button.

Deselect is the default.

☐☐ Release the button to set the window down and **Deselect** it.

Windows2 is in front because it was opened after windows1.

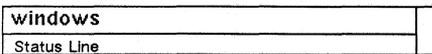
To move a window to the front:

- ✓ Move the mouse cursor into the header or the bottom scroll bar of *windows1*.
- ☐☐ Hold down the **middle** mouse button.
Front is the default.
- ☐☐ Release the button.
Windows1 is put on top of all other open windows. If you move windows around on your desktop, windows1 will stay on top.

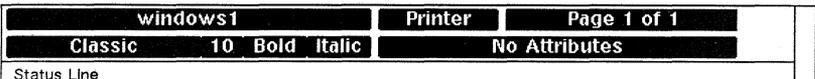
You can experiment with other commands on the Window popup menu. When you are finished exploring this menu, close *windows1* and *windows2*.

The Status Line

Below the header in an open window is a white horizontal bar, which is called the **status line**. Messages from the software that require a response from you appear in the status line. Figure 4-6a shows the status line of a directory window, and Figure 4-6b shows the status line of a document window.



(a)



(b)

Figure 4-6. Status lines in directory and document windows

There is a status line in every window, but the messages in the status line of document windows are often more important than the ones that appear elsewhere. You will want to check the status line of a document you are working in periodically, especially when something occurs that you do not expect.

Examples of the kinds of messages you will see are messages about a document as it is opening and as it is being saved and messages about the diagramming environment in an open frame.

To see a message appear in the status line:

- ✓ **Open any document, and watch the status line.**
Messages appear in the status line as the document is opening. When the document has been loaded, the message: Opened 'documentname' appears in the status line.

You do not need to erase the messages that appear in the status line because the software will do this automatically when there is something new to report. However, some messages — such as ones about saving the document — may disconcert you if they stay around too long, so you may want to get in the habit of erasing them.

To erase the message in the status line:

- ⇧⌘ Move the mouse cursor into the component bar or into the text of the document.
- ⏏ Click the **left** button to erase the message.

When you have a frame open, you cannot erase the messages about the diagramming environment because you may need this information as long as you are working in the frame. However, the software temporarily substitutes other messages for the environmental messages when necessary.

Using the Scroll Bars to Move Contents through a Window

To the right and at the bottom edge of every window is a **scroll bar** that provides a method for moving the contents of a window through the window (see Figure 4-7).

The scroll bars in a document window represent one of several ways to move a document through its window, and you will choose which one is best in different circumstances.

You must use the scroll bars to move the contents of other windows. However, it is not possible to scroll the contents of terminal windows.

The Right Scroll Bar

When the mouse cursor is in the right scroll bar, the mouse buttons work in a logical manner, but it may take a little practice to get accustomed to what happens.

Clicking the *left* button scrolls the contents *down* through the window. In the case of a document, clicking the left button brings into view pages that are closer to the beginning of the document. In the case of a folder or drawer, etc., clicking the *left* button brings into view the icons that are closer to the top of the window.

Clicking the *right* button scrolls the contents *up* through the window. In the case of a document, clicking the *right* button brings into view pages that are closer to the end of the document. In the case of a folder or drawer, etc., clicking the *right* button brings into view the icons that are closer to the bottom of the window.

To use a scroll bar to move a document through a window:

- ✓ **Open** the *Training* folder on your desktop.
- ✓ **Open** *widgets_revisited*.
- ☰▲ Move the mouse cursor into the right scroll bar about half way between the top and bottom.
- ☐☐☐ Click the **right** button.
You will see the first page of widgets_revisited move up. Page 2 of widgets_revisited will begin to come into view.
- ☰▲ With the mouse cursor still in the scroll bar, click the **left** button.
The beginning of widgets_revisited will appear again. When you get to the beginning of the document, clicking the left button will have no effect.

To position a particular line of a document at the top of a window:

- ☰▲ Place the mouse cursor in the scroll bar opposite the line, and click the **right** button.

The Bottom Scroll Bar

The scroll bar at the bottom of a window works in essentially the same way as the one to the right. It is most often used to scroll a document horizontally when the document is wider than the window in which it appears.

The *right* button scrolls the contents of the window to the left, and the *left* button scrolls the contents of the window to the right. (This probably sounds illogical, but you will find that, in practice, it is perfectly logical and exactly what you expect.)

To see how scrolling from left to right works, make the window *widgits_revisited* narrower, and use the bottom scroll bar to move from the left side of the document to the right side.

How to Determine the Amount of Scrolling

The position of the cursor in a scroll bar determines how much scrolling will take place.

The amount of vertical scrolling is equal to the distance from the top of the right scroll bar to the cursor. Therefore, the closer the cursor is to the bottom of the right scroll bar, the greater the amount of vertical scrolling. By the same token, the closer the cursor is to the right of the bottom scroll bar, the greater the amount of horizontal scrolling (Figure 4-7).

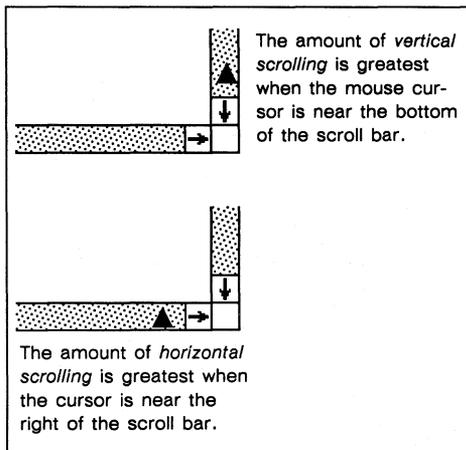


Figure 4-7. Placement of cursor for maximum scrolling

The following exercises will make this distinction clear.

To scroll quickly to the end of a document:

- ▲ Position the mouse cursor towards the bottom of the right scroll bar.
- ☐☐☐ Click the **right** button as many times as it takes to get to the end.

To scroll quickly to the beginning of a document:

- ▲ With the mouse cursor in the same position, click the **left** button ☐☐☐ until you reach the beginning.

To scroll slowly towards the end of a document:

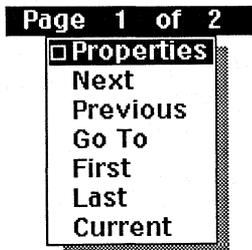
- ▲ Move the cursor up towards the top of the scroll bar and click the **right** button ☐☐☐.
It takes many more clicks to move through the document when the cursor is further up the scroll bar.

To scroll slowly towards the beginning of a document:

- ▲ With the mouse cursor in the same position, click the **left** button ☐☐☐.

Summary of Scrolling Methods Used in Document Windows**To scroll up or down:**

- With the mouse cursor in the right scroll bar, click the left or right button.
- Move the cursor into the Page box in the document header, and use the commands — except **Properties** — on the Page pulldown menu (Figure 4-8).

*Figure 4-8. Page pulldown menu*

- With the mouse cursor in text or in the component bar, hold down the left mouse button, and move the mouse up or down on the pad. If you are scrolling very far, you will, of course, have to pick the mouse up and put it down elsewhere on the pad.
- Use function keys. See the section *Moving the Text Caret* in the appendix *The Keyboard*.

With the first two methods — the mouse cursor in the scroll bar and the commands on the Page pulldown menu — the text caret remains where it was when you began scrolling (except when you use the **Go To** command). You can get quickly back to the place in text where you began the scrolling by using the **Center** command on the Text Location popup menu (Figure 4-9).

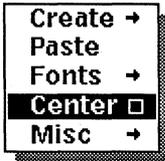


Figure 4-9. Text Location popup menu

The **Center** command centers the text caret vertically in the window. It is very useful when you have scrolled your document and do not remember what page you started on.

To scroll from side to side:

- With the mouse cursor in the bottom scroll bar, click the left or right button.
- With the mouse cursor in text, hold down the left button and move the mouse from side to side on the pad. (This will have an effect only when the window is narrower than the document.)
- Use function keys. See the appendix *The Keyboard* for details.

Chapter 5

Desktop Manager

The **Desktop Manager** is the facility that makes it easy for you to *organize* your documents and directories, to *create* new documents and directories, and to *eliminate* documents and directories you no longer need.

Although the words **document** and **directory** may summon up quite impressive images, in the publishing software, they often refer to quite ordinary things. For example, a 200-page manual created with the software is a document and so is a 5-line memorandum.

A **directory** is simply a convenient place to store documents and, if desired, other directories. In fact, your desktop itself is a directory. The *cabinet*, *drawer*, and *folder* icons you create on your desktop represent directories.

In this chapter, we will discuss only documents and directories that are represented by the icons shown in Figure 5-1.

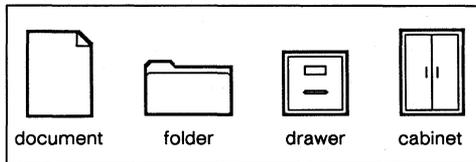


Figure 5-1. Icons for documents and directories

The clipboard is discussed in the chapter *The Clipboard*. The other desktop objects are discussed in the chapter *Fundamentals* in Volume 1 of the *Reference Manual*.

Setting Up Two Drawers and their Contents

You can organize your documents and directories any way you like. However, for the sake of convenience, most people choose a conventional way to arrange their desktops. They store documents  in folders  and folders in 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 in this section is a good starting place. But, 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
- 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*.
- ↑ With the mouse cursor in the open window, **Create** two **folders**.
- ✓ Name one of the folders *internal* and the other *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 of the drawers, except *proposals*.**

You now have an organized set of directories in which to put your work. Figure 5-2 shows a desktop with the three drawers on it and with the *proposals* drawer open. You may want to use the Window popup menu to make the window in which the *proposals* drawer opens smaller, since most of the space in it is unused.

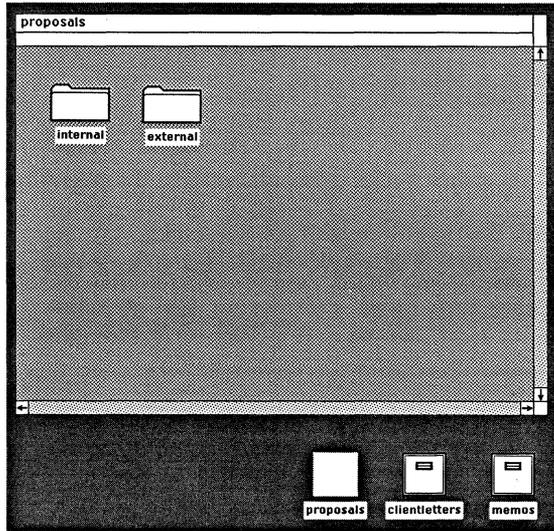


Figure 5-2. Desktop with open drawer

✓ **Close *proposals*.**

A Template Cabinet

You will notice that the cabinet  icon looks like a supply cabinet rather than a file cabinet. Since this icon represents a directory, 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 and other materials that you will use as the basis for the work you do. The *System* cabinet on your desktop serves this purpose.

If you had to do the same sort of work every month, it would make sense to put the three drawers you created in the last section into a cabinet, which you could name *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*.

At the beginning of February, you could copy the drawers from *monthlypatterns* onto your desktop again, naming the copy of the *proposals* drawer *febproposals*.

Permissions

Permissions define who has access to the objects on your desktop. The subject of permissions is intricate, and you will find it fully discussed in the chapter *Desktop Management* in Volume 1 of the *Reference Manual*. In this manual, we present only a few rudimentary guidelines.

When you create an object on your desktop, you control who can have access to it and who can make changes to it. A document you create with the **Create** command on the Desktop Nothing Selected popup menu gives you, as the owner of the document, permission to open or copy or cut the document and to make changes to it. These are referred to as *Read* and *Write* permission. It is **Read** permission that gives you permission to open or copy or cut a document. **Write** permission gives permission to make changes to a document.

The rest of the world has only Read permission for documents you create. You can ascertain the permissions on documents and directories by looking at the Object property sheet for the object. Figure 5-3 shows the Object property sheet for the default document.

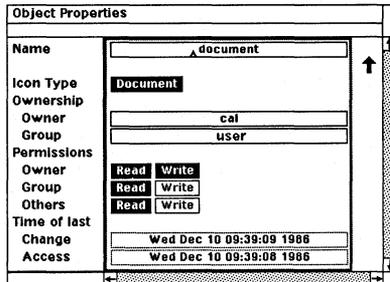


Figure 5-3. Object property sheet for default document

The Purpose of Read and Write Permissions

Although exceptions exist, you will usually want to have both Read and Write permission for the directories and documents you create. These permissions make it possible for you to open a document and change it in any way you choose and to open a directory and put other objects in it.

Even though you cannot change an object for which you have Read but not Write permission, you can **Cut** the object if it is in a directory for which you have Write permission. This is convenient when other users put documents *they* own on *your* desktop: you can copy the documents, so that you can change them, and then cut the originals.

You will probably want to limit the permission you give to other people on your desktop. Sometimes you will not want them to **Copy** a document or a directory, so you will withhold Read permission. More often probably, you will give other users Read permission for documents, but withhold Write permission, so that they do not change your documents.

When you give other users Read permission for a document that is in a directory in which they also have Read permission, you give them permission to copy the document to their own desktops.

When you give other users Write permission for a document, you are giving them permission to overwrite *your* copy of the document with one of their own. This is probably not something you want to do without reflection!

The **Copy Link to** command on the Desktop Object Selected popup menu affects permissions. Before using this command, please consult the section *Desktop Links* in the chapter *Desktop Management* in Volume 1 of the *Reference Manual*.



Chapter 6

The Clipboard

There are **Cut** and **Copy** commands on the menus you see when you have selected an icon, a component, a block of text, or a diagramming object. When you use one of these commands, an icon representing what you have cut or copied is put on the clipboard.

The **clipboard** is a *temporary* storage container for what you cut and copy. The clipboard makes it possible for you to cut and copy material between documents whenever you like and to move icons from one directory to another.

There are two major categories of icons on the clipboard: those that have their own names and those that have *from* before their names.

- When you cut or copy a whole document, a folder, a drawer, etc., a named icon is put on the clipboard, and this icon and its contents remain intact on the clipboard until you either paste the icon somewhere or purge it from the clipboard.
- When you cut or copy a section of a document — a word, a component, a whole illustration, a single object from an illustration — the material becomes the temporary contents of a *from* icon.

Unlike the contents of named icons, the contents of *from* icons can be overwritten while they are on the clipboard. Therefore, if you want to paste the contents of a *from* icon somewhere, it is a good idea to do so immediately after you cut or copy it because the next time you cut or copy something of the same type from a document — *any* document — the contents of the *from* icon will be overwritten.

There are two types of *from* icons, a *from* 'documentname' document icon and a *from* 'documentname' graphics icon. Figure 6-1 shows examples of these two icons.

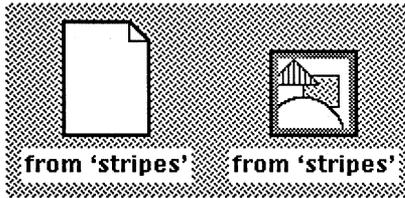


Figure 6-1. Clipboard “from” icons

A *from* ‘documentname’ document icon is identical to any other document icon. Only its name and its fate if it is left on the clipboard are different. Even if the *from* ‘documentname’ document icon contains nothing but a single character, you can paste it on your desktop and open it.

A *from* ‘documentname’ graphics icon, like all other graphic objects, can be pasted on your desktop, but it cannot be opened. To see its contents, you must paste the icon into an open document.

To see how the clipboard works:

- ✓ **Open** the clipboard.
- ✓ Select and **Open** the *Training* folder.
- ✓ Select the *stripes* document within the *Training* folder.
- ☐☐☐ Hold down the **middle** mouse button to see the Icon Selected popup menu.
- ☐☐☐ Release the mouse button when **Copy** is highlighted.
A copy of stripes is put on the clipboard. It remains selected, so that you can paste it somewhere immediately.
- ✓ Select the icon for *stripes* again.
- ✓ **Copy** it.
The new copy of the icon for stripes appears on the clipboard. It is selected, and the icon for the first copy is deselected.
- ✓ Select the icon for *stripes* in the *Training* folder and **Open** it.
- ☐◆ Move the mouse cursor into the component bar on the left of the document window.
- ☐☐☐ Hold down the **left** mouse button.

- ⇨ Move the mouse cursor down the component bar until the name of the first *paragraph* component is highlighted.
- ☐☐☐ Release the mouse button.
- ☐☐☐ With the mouse cursor still in the component bar, hold down the **middle** button.
- ☐☐☐ Release the button when **Copy** is highlighted.
A document icon appears on the clipboard. It contains not only the paragraph component you copied, but also all the information needed to structure a document like stripes.
- ☐☐☐ Deselect the “from” icon in the clipboard.
This step is necessary only so that you can see exactly what happens to this icon after you follow the next step in the instructions.
- ✓ In *stripes*, select the following text in the first paragraph: “Color may be generally inhibited in this region for reasons at present unknown.”
- ☐☐☐ **Copy** the selected text.
There is still only one from icon in the clipboard, and it is selected because it has just become the container for the sentence you copied. The component you copied previously has been overwritten.

To see the contents of the “from” icon:

- ⇨↑ Move the mouse cursor onto your desktop.
- ✓ Hold down the **middle** mouse button, and select the **Paste** command on the Desktop Nothing Selected popup menu.
- ✓ Hold down the **middle** mouse button again, and select the **Open** command on the Desktop Object Selected popup menu.
The sentence you copied from stripes appears in a paragraph component.

There are a number of ways to compare the structure of the *from* document with the structure of the original document and see that they are identical. The quickest way is to compare the choices on their Component Create submenus. Since the *from* document has only text from a *paragraph* component in it, you might expect to find only *paragraph* on its Component Create submenu. However, as you will see in the next exercise, the *from* document has the same structure as the original document.

To compare the structure of the “from” document with the structure of the original document:

- ☞ Move the mouse cursor into the component bar of *from* ‘stripes’.
- ✓ Make sure no components are selected.
- ✓ Hold down the **middle** mouse button, and slide the cursor onto the Create submenu (Figure 6-2).

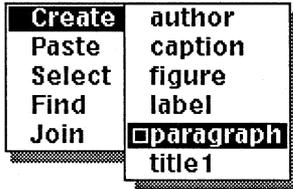


Figure 6-2. Create submenu for “from ‘stripes’”

- ✓ Before releasing the button, slide the cursor off the menus.
- ✓ Move the mouse cursor into the component bar of ‘stripes’.
- ✓ Make sure no components are selected.
- ✓ Hold down the **middle** mouse button, and slide the cursor onto the Create submenu.

You will see the same menu as the one in Figure 6-2.

Chapter 7

Printing

In this chapter, you will learn about the two ways to print documents and about the virtual terminal that you can use to check on the progress of jobs you send to the printer.

You can print the contents of an *open document* or the contents of an *icon*. You will learn as you use the software which method is better for you to use and when, but here are some guidelines to help you choose.

When you print an open document, the document is composed and sent directly to the printer, and your workstation is tied up while composing and sending are accomplished. These activities rarely take very much time, but you should be aware that you will not be able to use your workstation until the process is complete.

When you print icons, composing and sending to the printer take place in the background and do not interrupt other activities. This means that printing from an icon will often take longer than printing an open document because background work is not given priority treatment by the software.

Printing the contents of an icon has the advantage that you can send a number of jobs to the printer at once. For example, you can select multiple icons or the icon for a folder if you want all the contents of the folder printed.

Figure 7-1 shows the default versions of the Printer pulldown menu and the Desktop Print menus. The printer entry (*cx1*) may be different if your printer is another type or if your printer has been renamed. There may also be more than one printer listed.

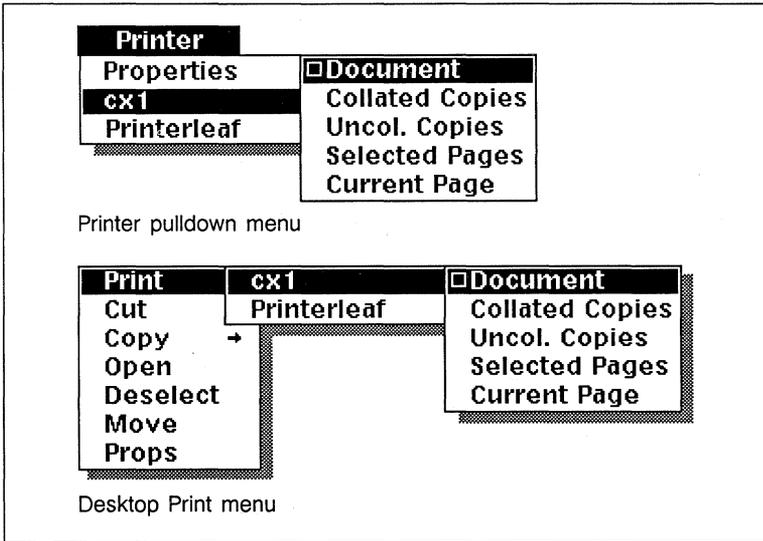


Figure 7-1. Printer menus

In the *Training Manual*, we are concerned only with printing whole documents, but the other printing choices are self-explanatory, and you may want to try some of them on your own. For details about their operation, see the chapter *Printing* in Volume 2 of the *Reference Manual*.

Refer also to the *Reference Manual* for information about Printerleaf files and the Printer property sheet.

To print an open document:

- ▲ Point the mouse cursor into the Printer box in the document header.
- ☐☐ Hold down the **middle** mouse button to see the menu.

The default on the menu sends the whole document to the default printer.

- ☐☐☐ Release the button.

Messages in the status line inform you that the document is being composed and sent to the printer. While the document is being prepared for printing and being sent to the printer, you cannot use the mouse cursor.

To print the contents of icon(s):

- ↑ Select the icon(s) whose contents you want to print.

- ☐☐☐ Hold down the **middle** mouse button.

- ☐☐☐ Slide the mouse cursor onto the Print submenu.
When you print from the desktop, you must slide the mouse cursor onto the Print submenu. Otherwise, the contents of the selected icons will not be printed. The icon(s) will remain selected.

After the icon is queued for printing, it is deselected.

If you have selected the icon for a directory, you will be asked to confirm that you want all of the contents of the directory printed.

The Print Queue

The printer you send your documents to may be in the same room with your workstation or it may be on another floor. If the printer is in your office, you can easily and directly check the progress of your job. If the printer is further away, it is useful to know where your job is in the queue of print jobs before you run off to pick it up.

Creating a Terminal and Checking the Queue

You can create virtual terminals on your desktop (or in any directory window) that will give you access to UNIX, the operating system for your workstation. When you are in UNIX, you can check on your print job. You can also use the virtual terminal for other purposes. See *Appendix B* in Volume 2 of the *Reference Manual* for details about other uses for the virtual terminal and for an explanation of the commands on the Terminal popup menu.

To create and open a virtual terminal:

- ↑ Place the mouse cursor on the desktop or in an open window except a document window or another terminal window.
- ✓ Make sure no icons are selected.
- ☐☐ Hold down the **middle** mouse button to see the Desktop Nothing Selected popup menu.
- ☐☐☐ Slide the mouse cursor onto the Create submenu.
- ☐☐☐ Release the button when **terminal** is highlighted.
The terminal icon will be in animation state.
- ☐☐☐ Hold down the **middle** mouse button again and select **Open** on the Object Selected popup menu.
The terminal window opens in the lower left-hand corner of the desktop. The default size of the terminal window is 24 lines tall and 80 characters wide. As with other windows, you can change both the size and the position of a terminal window.

Several seconds after you open the window, a UNIX prompt will appear in the window.

To find out the position of your job in the print queue:

- ☐ At a UNIX prompt, type **lpq <RETURN>**.
The command lpq stands for line printer queue. It will show you the queue for the default printer of your workstation. If you have access to more than one printer and you have sent a job to another printer, you can find out its place in the queue of the other printer by typing lpq -Pname of printer <RETURN>. Figure 7-2 shows what two typical displays look like.

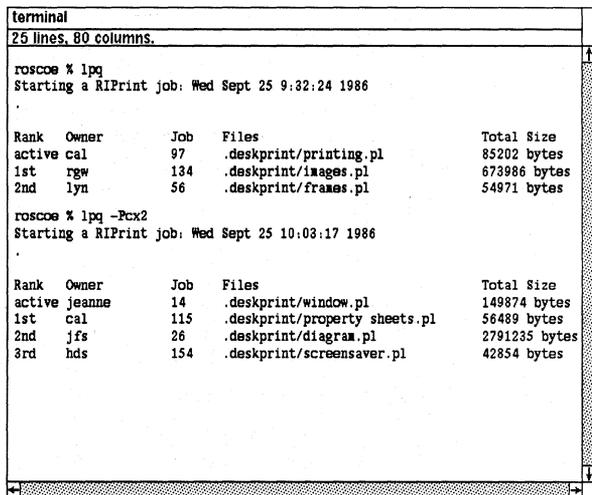


Figure 7-2. Virtual terminal with print queue information

Sometimes when you use the commands, **lpq** and **lpq -P**, you will get other responses if the printer needs paper or is unavailable at the moment.

Removing a Job from a Print Queue

You may on occasion discover after sending a document to the printer that you do not want to print it after all. If **lpq** or **lpq -P** does not show your job as the *active* job, you can remove it from the queue.

To remove a job from the print queue:

- ☐ At a UNIX prompt, type **lprm jobnumber <RETURN>**.

*The jobnumber is the number in the third column in Figure 7-2. This command removes the job from your default printer. If you have access to more than one printer and you have sent a job to another printer, you can remove it from the queue of the other printer by typing **lprm jobnumber -Pname of printer <RETURN>**.*

Additional Information about Virtual Terminals

When you open a virtual terminal, it becomes active. You can leave terminal windows open all the time. Note, however, that closing a terminal window does not deactivate the terminal.

If you close your desktop with active terminals on it, you will see a stickup menu reminding you that processes are active in these terminals. If you use your terminals only to issue a few limited UNIX commands like **lpq**, you can close your desktop with active terminals. If, on the other hand, you are running a complex process in a virtual terminal, the warning alerts you to the need to be sure it is finished before you close your desktop since closing will automatically terminate the process whether it is finished or not.

To deactivate a virtual terminal, hold down the **CONTROL** key and press **d**.

Chapter 8

Text Editing Operations

To perform the editing operations in this chapter, you will select either a location in text or a block of text and then use the mouse cursor and a popup menu or the keyboard to make changes. You will be concerned only with the text page itself. You will learn to

- insert text in the middle of existing text
- select text
- make font changes with the keyboard and with the cursor and a popup menu
- cut and paste a block of text
- access special characters that do not appear on the keyboard
- split a component into two components
- use the spelling checker

Although there are some brief instructions, the exercises in this chapter assume that you know about the mouse cursor and the text caret and how to use them. If you do not, please refer to the chapter *The Mouse Cursor and the Carets*.

In preparation for the exercises, open *stripes*, which is in the *Training* folder on your desktop.

Selecting a Location in Text

In *stripes*, the letter *u* needs to be inserted in the word *argument* in the third line.

To select a location in text and position the text caret:

- ✓ Make sure the mouse cursor is on the text page.
- ☐☐ Hold down the **left** mouse button and move the mouse until the caret is between the *g* and *m* (Figure 8-1).

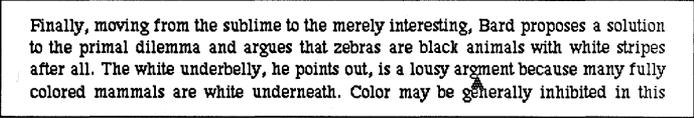


Figure 8-1. Text caret in text

- ☐☐ Release the **left** button.
- ☐ Type **u**.

The publishing software makes room for the letter. You can insert any amount of text anywhere you like just this easily. The font of the new text will be the font to the left of the caret position. The Font box in the header box always displays the font at the caret position. If you have any attributes — Strikethrough, Underline, or Revision Bars — turned on, these will also apply to the text you insert. This information is displayed in the Attributes box next to the Font box.

Selecting Text

In the next two exercises, you will select a word and change its font. The word “Horse’s” in the second line of the document should be italicized.

To select a block of text:

- ☐☐ Hold down the **left** button, and move the mouse until the text caret is positioned at either end of the word “Horse’s”.
- ☐☐ Release the button.

- Hold down the **right** button, and move the mouse cursor to the other end of the word. The word *Horse's* will be highlighted (Figure 8-2).



Figure 8-2. Selected text

- Release the button.

Changing Fonts

You can now edit the selected text. Since this word needs to be italicized, that is a good function to perform first.

You can italicize the highlighted word by using either the keyboard or the mouse and a popup menu. The keyboard is by far the quicker way to accomplish a simple font change like roman to italic.

Using the Keyboard

Seven of the function keys above the alphanumeric keys are dedicated to some of the most frequent font and attribute changes, and it is worthwhile to learn the placement of these keys (Figure 8-3).

| | | | | | | | | | |
|--|--|-----------------------|------------|--------------|-----------------|--------------|---------------|--------------|--|
| | | F3 default last | F4 bold | F5 italic | F6 underline | F7 strike | F8 smaller | F9 larger | |
|--|--|-----------------------|------------|--------------|-----------------|--------------|---------------|--------------|--|

Figure 8-3. Function keys for changing fonts

All these keys except F3 work both when text is selected and when a location is selected. F3 does not change the font of selected text, only the font at the caret position.

F4 (bold), F5 (italic), F6 (underline), and F7 (strikethrough) are toggle keys, so you can easily switch back and forth — without taking your hands off the keyboard — from roman to italic and back to roman, for example.

To change the font to italic using the keyboard:

- ✓ Make sure “Horse’s” is selected.
- ☐ Press the F5 function key.
Horse’s will be italicized. If you press the key again,
Horse’s will return to roman.

Try some of the other keys out, and watch what happens to the text and to the display in the Font and Attribute boxes.

Using the Mouse and a Popup Menu

You can also change fonts by using the mouse and a popup menu. Although this method is slower for some operations, it gives you more choices than the function keys. For example, you can change typeface families or jump from 6 point to 36 point (when this range of point sizes is available).

To change the font using the mouse and a popup menu:

- ✓ Change the font of “Horse’s” back to roman.
- ☐☐ Hold down the **middle** button.
You will see the Text Selected popup menu (Figure 8-4).

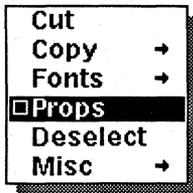


Figure 8-4. Text Selected popup menu

- ☐ Move the mouse cursor to **Fonts**, and slide it onto the Fonts submenu.
- ☐ Move the mouse cursor down the menu until **Italic** is highlighted and slide it onto the Italic submenu.
- ☐☐ Release the mouse button.
Because Toggle is the default command, you will not usually need to display the submenu to change the font to what you want (Figure 8-5).

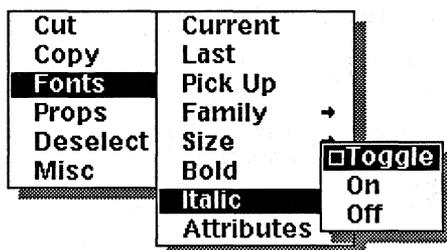


Figure 8-5. Italic submenu

Toggle changes roman and bold text in a selected block to italic and italic text to roman.

Cutting and Pasting Text

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

To cut a selected block of text:

- ✓ Select the first sentence of *stripes* (Figure 8-6).

Finally, moving from the sublime to the merely interesting, Bard proposes a solution to the primal dilemma and argues that zebras are black animals with white stripes after all. The white underbelly, he points out, is a lousy argument because many fully

Figure 8-6. Selected text

Notice that the selected block includes the space at the end of the sentence. Cutting the space along with the sentence has two effects: first, you will not have to cut it from the beginning of the next sentence; second, if you paste the text before another sentence, you will not have to insert a space between the sentences.

- ☐☐☐ Hold down the **middle** button to display the Text Selected popup menu.
- ☐☐☐ Release the button when **Cut** is highlighted. The sentence beginning with “Finally” disappears.

To paste the text you cut:

- Position the text caret at the beginning of the second paragraph, before the word “Biologists.”
- ☐☐☐ Hold down the **middle** button to display the Text Location popup menu (Figure 8-7).

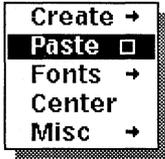


Figure 8-7. Text Location popup menu

Although the default on this menu can change, **Paste** is always the default after you **Cut** or **Copy** text. In the future, just position the caret and click the middle button to paste text you have cut or copied.

- ☐☐☐ Release the button.
“Finally” appears at the beginning of the second paragraph. Since it is still selected, you can use the same technique to put it back. To deselect it, click the left mouse button.

Special Characters

There are several important characters that are not on the keyboard and one important character that is on the keyboard, but not in an obvious place. The following exercise will show you how to insert the following characters: an opening double quotation mark, a hard space, a hyphen, an em dash, a cent sign, and an opening single quotation mark.

To insert an opening double quotation mark (“):

- Position the text caret before the word *stripes* in the second line of the second paragraph.
- ☐☐ Press and release the ESC key (to the left of the row of numeric keys).
- ☐☐ Press and release the ☐ key (next to the Return key).

Even though the closing double quotation mark is in the shift position, it is not necessary to hold down the SHIFT key for the opening double quotation mark.

You have no use in the exercises in this chapter for the other characters that require you to press the **ESCAPE** key before typing a character; however, several of them are such important characters that we present them here. Details about the rest of them can be found in the appendix *The Keyboard*.

The space the software inserts between words when you press the spacebar is a **natural soft space** that allows a line break between one word and the next. Sometimes, you do not want one word separated from the next by a line break. When this is the case, you can insert a **hard space**. The most commonly used hard space is the same width as the space you get when you press the spacebar. It is called the **natural hard space**.

To insert a natural hard space in text so that two words will be treated as one word:

- Press and release the **ESC** key.
- Press the **SPACEBAR**.

There are several other hard spaces of different sizes. See The Keyboard in Volume 1 of the Reference Manual for details.

To insert a hyphen character (-):

- Press and release the **ESC** key.
- Press the key.

This hyphen character is the same width as the hyphen the software uses when it hyphenates a word at the end of a line. Use it in hyphenated words like right-hand.

To insert an em dash (—):

- Press and release the **ESC** key.
- Press the key.

The em dash is used to set off parenthetical matter — i.e., information that is not essential — from the rest of a sentence.

To insert a cent sign (¢):

- Press and release the **ESC** key.
- Press the key.

*It is not necessary to hold down the **SHIFT** key.*

Unlike the characters that use the **ESCAPE** key, the opening single quotation mark is on the keyboard, but it might take you a while to find it.

To insert an opening single quotation mark:

- ✓ Position the text caret before the word *default* toward the end of the second paragraph.
- ☐ Press and release the  key.
*This key is below the **BACK SPACE** key on all **SUN3** keyboards and next to the **BACK SPACE** key on a **SUN2/50** or **SUN2/120** keyboards.*

On the first page of this chapter and throughout this manual, there are many bulleted lists. The bullets that were used are in the Symbols font, which is on the submenu of the Text Location menu. There are four point sizes in the Symbols font: 8, 10, 12, and 14; and there are three sizes of filled bullets and two of unfilled in each point size.

To insert a bullet:

- ✓ Change the font at the cursor position to Symbols, and choose a point size.
- ☐ Hold down the **SHIFT** key, and press the **s** key.
*This sequence inserts the smallest of the filled bullets. The larger filled bullets are in the shifted position for the **d** and **f** keys. There is no small unfilled bullet. The two larger unfilled bullets are in the unshifted position for the **d** and **f** keys.*

Splitting a Component in Two

One of the most useful commands on the Text Location menu is **Split** (the default on the **Misc** submenu). This command makes it possible for you to alter the structure of a section of a document easily. For example, there are times when it becomes apparent that a paragraph has become too long and should be split in two or more pieces.*

* The **Join** command on the Component Location popup menu makes the two components on either side of the component caret into one component. If the two components are different kinds of components, the new component is like the one that is *above* the other.

To divide a component in two:

- ✓ Position the text caret before the *C* of *Color* in the fourth line of the first paragraph of *stripes*.
- ☐ Hold down the **middle** mouse button.
- ☐ Slide the mouse cursor onto the Misc submenu.
- ☐ Release the button when **Split** is highlighted.
Because Split is the default command on this menu, in the future, you can release the button when Misc is highlighted when you want this command.

Notice that the first instruction told you to position the caret before the C rather than after the period at the end of the preceding sentence. As a result, Color is at the left margin of the new component rather than one space to the right as it would otherwise be. This positioning of the caret left a space at the end of the first paragraph. You will need to cut this space only if you add enough text to the paragraph to move the last sentence to the end of a line, but not enough to move it to the next line. The resulting blank line would be quite obvious.

Spelling and the Dictionary

We will not go into detail about the workings of the spelling checker or the dictionary in this manual; however, these are such useful features that we give you one brief exercise. See the chapter *Spell Checking and Hyphenation* in Volume 1 of the *Reference Manual* for a complete discussion.

You can check spelling from any place in the document. However, the following exercise assumes you will begin with the text caret at the beginning.

To check spelling:

- ✓ Position the text caret at the beginning of *stripes*.
- ☐ Hold down the **middle** mouse button.
- ☐ Slide the mouse cursor onto the Misc submenu.
- ☐ Release the button when **Spelling** is highlighted (Figure 8-8).

The system highlights "Stephen" because most proper names are not in the dictionary Interleaf uses.

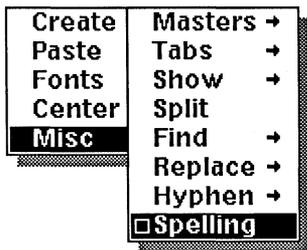


Figure 8-8. Misc submenu of the Text Location menu

- Hold down the **middle** button again to see the menu choices now available to you (Figure 8-9).

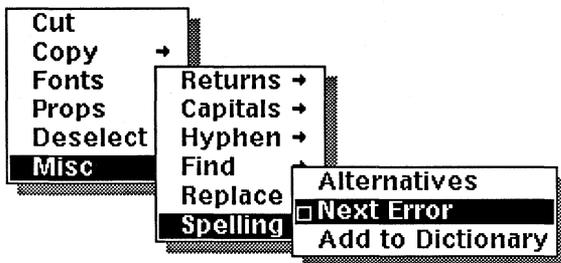


Figure 8-9. Spelling submenu

- Choose **Add to Dictionary** if you expect that the name Stephen will come up often in your work (if, for example, your own name is Stephen, and your name appears often in what you write).
The first time you use the Add to Dictionary command, a dictionary is created on your desktop. You can add words to this dictionary at any time. Your system administrator may have created a system dictionary that you also have access to. Your own dictionary and the system dictionary can have a combined total of 15,000 words in them.
- or Choose **Next Error**.
 - Continue checking until “issue” is highlighted.
 - Choose **Alternatives**.
A list of Spelling Suggestions is displayed in a window (Figure 8-10).

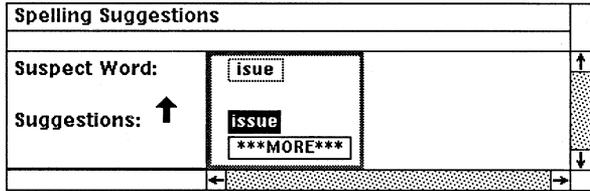


Figure 8-10. Spelling suggestions sheet

- ☐☐☐ To **Replace** “issue” with the highlighted suggestion, click the **middle** mouse button.
*Because **Replace** is the default, issue is replaced by issue and the Spelling Suggestions sheet is closed.*
- or ☐☐☐ To see additional suggestions, point the mouse cursor at the box labeled **More**, and click the **left** mouse button.
- or ✓ To close the suggestions sheet without replacing the word, hold down the **middle** mouse button, slide the cursor to **Cancel**, and release the button.

Chapter 9

Search and Replace Operations

There are a number of items that you can search for using the Find submenu on the Text popup menus. In this manual, the only commands we discuss are those associated with text (Figure 9-1).

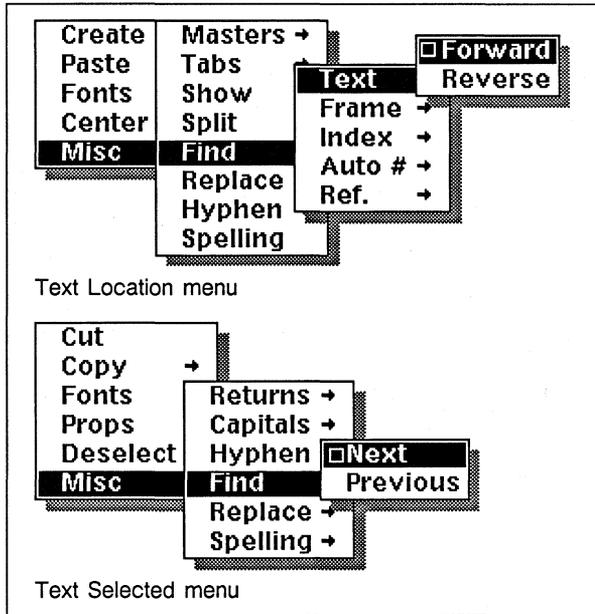


Figure 9-1. Find text submenus

The **Search** operation makes it possible for you to look for a string of characters (for example, *elephants* or *Mr. Paul Reynolds*).

After you have located an instance of the search string, you can continue the search or use the **Replace** operation to replace this string with another string of characters (for example, to replace *elephants* with *zebras*). Figure 9-2 shows the Text Selected popup menu with the Replace submenu.

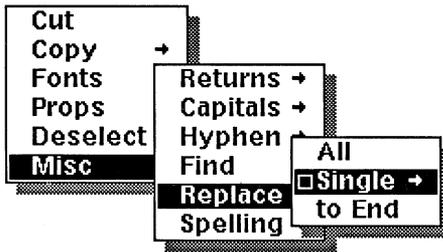


Figure 9-2. Replace text submenu

You can also use the keyboard for basic search and replace operations. Both methods are given in this chapter.

To prepare for the exercises, open *Widgets_Revisited* in the *Training* folder on your desktop.

Forward Search

You can begin a search anywhere in a document; for the moment, it will be easier if you begin with the text caret at the beginning of *Widgets_Revisited*.

In a forward search, the software locates the first instance of the specified text string *after* the text caret.

To search forward for text using the popup menus:

- ☐ With the text caret positioned at the beginning of *Widgets_Revisited*, hold down the **middle** mouse button.
- ☐ Slide the mouse cursor onto the Misc submenu, then onto the Find submenu and the Text submenu.
- ☐ Release the button when **Forward** is highlighted.

Figure 9-3 shows the Search stickup menu you will see.

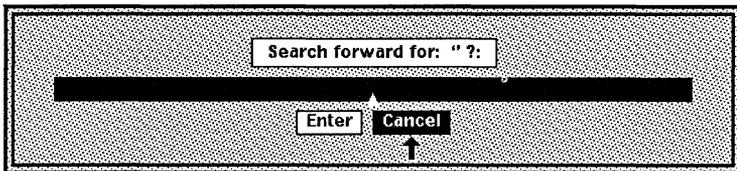


Figure 9-3. Search stickup menu

- ☐ In response to the query on the menu, type **widget**.
- ✓ Confirm by choosing **Enter** or by pressing the **RETURN** key.
The first instance of widget is highlighted.
- ✓ To search for the next instance of **widget**, hold down the **middle** button to see the Find submenu of the Text Selected popup menu.
Since Find Next on the Text Selected menu always follows Find Text Forward on the Text Location menu, in the future, you can just click the middle button when you wish to continue a forward search.
- ☐ Release the button.
- ☐ To end this search, hold down the **middle** mouse button, and move the mouse cursor back to **Deselect** on the Text Selected menu.
- ☐ Release the button.

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 lowercase letters in it, the search routine will find all examples of the text. Thus, you can type **widgets** if you want to find *widgets*, *Widgets*, and *WIDGETS*.

However, the search routine is sensitive to uppercase letters. If you type **Widgets**, it will find *Widgets* and *WIDGETS*. If you type **WIDGETS**, the routine will find only *WIDGETS*.

In the following exercise, you will use the keyboard and limit the search string more than you did in the previous exercise.

To search forward for text using the keyboard:

- ☐ Hold down the **CTRL** key and press **s**.
You will see the Search stickup menu. The default search string is widget because that is the last text you looked for in this document.
- ☐ In response to the query on the menu, type **Widget**.
- ✓ To confirm that this is the search string you want, either hold down the **CTRL** key and press **s** again, or move the mouse cursor to **Enter** on the stickup menu and click the **left** mouse button.
The first instance of Widget that occurs after the caret is highlighted. The word widget with a lowercase w is skipped.
- ☐ Hold down the **CTRL** key and press **s** again to find the next instance of **Widget**.
- ☐ To end this search, hold down the middle mouse button, and move the mouse cursor to **Deselect** on the Text Selected menu.
- ☐ Release the button.

When a forward search reaches the end of the document, a stickup menu appears asking if you want to continue the search from the beginning of the document. If you have been using the popup menu in the search, you can continue by clicking the middle mouse button. If you have been using either the popup menu or the keyboard, you can continue by holding down the **CTRL** key and pressing **s**.

Reverse Search

A reverse search operates in the same way as a forward search, except that the commands on the popup menus are **Reverse** instead of **Forward** and **Previous** instead of **Next**. The keyboard sequence for a reverse search is **CTRL r** instead of **CTRL s**.

You can alternate between forward and reverse searches any time you like.

Stopping a Search in Progress

Occasionally, you may mistype a search string without realizing it. If the software is looking for “NewYork” when it should be looking for “New York”, the search will fail; but, in a long document, the process takes a while. In this circumstance, you can interrupt the search, cancel it, and start over.

To cancel a search:

-  Hold down the **CTRL** key and press **g**.

Replacing Text

In addition to deleting or cutting text and typing in new text, there are other methods for replacing text. When you want to replace text globally or to the end of a document, you can do so without first searching for the text. Alternatively, you can combine the search and replace operations.

Replacing Text without Searching for It

There is a **Replace** submenu on the **Text Location** popup menu that makes it possible for you to replace text without first finding the search string (Figure 9-4).

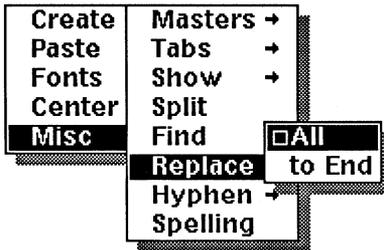


Figure 9-4. Replace submenu on Location menu

You can use it when you know the search string is in the document and you want to replace either all the instances of it or all the instances to the end. For example, you could use this command to change *Paul Reynolds* to *Paul Marsh Reynolds* in *Widgets_Revisited*.

There is not a keyboard alternative to replacing all instances of a search string, but you can replace all instances to the end by holding down the **CTRL** key and pressing first **x** and then **q**.

Combining Search and Replace

When you know that you want to replace every instance of a search string or all the instances to the end of a document with the replacement string, the previous replacement method is the most efficient one to use. However, there may be times when you want to search for a string and replace it selectively one instance at a time. And there may be other times when you want to search and replace one instance at a time for a while just to make sure that the search string is unique enough that the software will not find an instance of it that you do not want to replace.

To search for text and replace it one instance at a time using popup menus:

- ✓ Search for **widget**.
- ☐☐ Hold down the **middle** mouse button to see the Text Selected popup menu.
- ☐☐ Slide the mouse cursor onto the Misc submenu, then onto the Replace submenu and the Single submenu.
- ☐☐ Release the button when **with New** is highlighted (Figure 9-5).

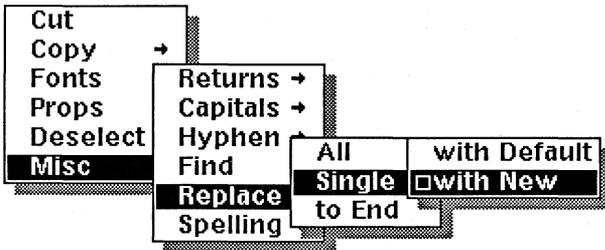


Figure 9-5. Replace submenu

You will see the Replace stickup menu. The default replace string is widget (Figure 9-6).

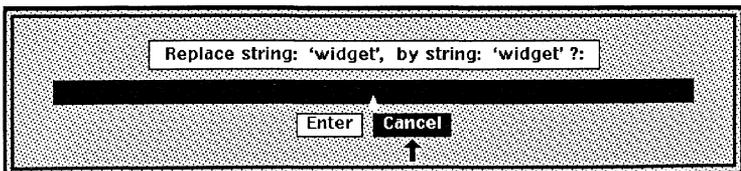


Figure 9-6. Replace stickup menu

- ☐ In response to the query on the menu, type **edge**.
- ✓ Confirm that this is the replacement string you want.
Widget becomes edge. Edge remains highlighted, but the caret moves to the end of the word.
- ☐☐ Hold down the **middle** mouse button to see the Find submenu on the Text Selected menu.
After you replace a search string, Find Next is always the default. Therefore, in the future, you can just click the middle mouse button when you want to continue a search.
- ☐☐ Release the button.
The next instance of widget is highlighted.
- ☐☐ Hold down the **middle** mouse button to see the Replace submenu on the Text Selected menu.
With Default is now the default command. Therefore, when you want to replace the search string with the default string, you can just click the middle mouse button.
- ☐☐ To replace **widget** with **edge**, release the button.
- ☐☐ Click the **left** button to cancel the search.

To search for text and replace it one instance at a time using the keyboard:

- ✓ Search for **widget**.
- ☐ Hold down the **CTRL** key and press **q**.
You will see the Replace stickup menu. The default replacement string is edge.
- ☐ In response to the query on the stickup, type **potato**. Then either hold down the **CTRL** key and press **q** again, or move the mouse cursor to **Enter** and click the **left** button.

You can also search for a string and then replace every instance of it or all the instances from the caret position to the end of the document.

To search for text and replace it globally using popup menus:

- ✓ Search for the text you want to replace it.
- ☐☐ Hold down the **middle** mouse button.
- ☐☐ Slide the cursor onto the Replace submenu.

- ☐☐☐ Release the button when **All** is highlighted.
You will see the Replace stickup menu.
- ☐ In response to the query on the menu, type the replacement string, and select **Enter** to confirm that this is the replacement string you want.
All of the instances of the search string are replaced by the replacement string. A message in the status line tells you how many instances of the search string the software found and replaced.

To End is similar to **All**. The only difference is it replaces the search string from the text caret position to the end of the document.

To replace it to the end of the document using the keyboard:

- ✔ Search for the text you want to replace.
- ☐ Hold down the CTRL key and press **x**.
- ☐ Hold down the CTRL key and press **q**.
You will see the Replace stickup menu.
- ☐ In response to the query on the menu, type the replacement string.
- ✔ To confirm that this is the replacement string you want, either hold down the CTRL key and press **q**, or move the mouse cursor to **Enter** on the stickup menu and click the **left** mouse button.
All of the instances of the search string between the text caret position and the end of the document are replaced by the replacement string.

Chapter 10

Property Sheets and Masters

The main purposes of this chapter are

- to familiarize you with property sheets and the ways to change settings
- to introduce the concept of master definitions, which are crucial to understanding components and frames

In this chapter, you will find basic information about the effects of some of the settings on property sheets. However, for a complete discussion of each property sheet, please see the *Reference Manual*.

If you need to develop formats for documents, you will find essential information in this chapter.

If you are using template documents that someone else has already created, you may not need to know the contents of this chapter thoroughly at the moment, but you should read it to gain an understanding of how documents are structured.

Property Sheets

There are a number of property sheets used for a range of purposes throughout the software. Only seven of them concern us in the *Training Manual*. Five are the backbone of the software because they are the means by which you structure the contents of a document.

- The settings on the **Page property sheet** determine the basic structure of an entire document. For example, the page margins and the number of columns are entered on this sheet.
- Components are the major building blocks of a document. The settings on the **Component property sheet** affect the properties of single components or of all components in the document with the same name and of the master definition for the component.

- The settings on the **Frame property sheet** affect the dimensions, placement, and, sometimes, the contents of an area in which graphic elements are displayed. Like the settings on the Component property sheet, the settings on the Frame property sheet affect the properties of a single frame or of all the frames in a document with the same name and of the master definition for the frame.
- Data-driven charts are among the graphics that appear in frames. The settings on the **Edit Chart sheet** determine the kind of chart and the way it looks.
- A microdocument is a document inside a frame. The settings on the **Microdocument Page property sheet** determine the basic structure of a microdocument. The Microdocument Page property sheet contains only those settings from the Page property sheet that are relevant to microdocuments.

The settings on one of the other two property sheets, the **Printer property sheet**, determine where and how a document is printed.

The settings on the **Object property sheet** apply to all objects on the desktop, not just to documents. They establish such things as the name of an object and who has access to it. In the chapter *Getting Started*, you changed the name of a document using its Object property sheet.

To prepare for the exercises that follow, open a copy of *stripes* in the *Training* folder on your desktop.

Changing Settings on a Property Sheet

There are three basic ways to change settings on property sheets.

- You type information into a field. The *Columns* field and the *Margins* fields on the Page property sheet are examples.
- You turn a toggle box on or off with the left mouse button. When a toggle box is on, it is highlighted. The *Page # Style* setting on the Page property sheet is an example.

- You use the left or right mouse button to cycle through the choices in a list seeing only one choice at a time. The two boxes on the left in the row of *Font* settings on the Component property sheet are examples of lists.

To open the Page property sheet:

- ▲ Point the mouse cursor into the Page box in the document header with *Page 1 of 1* in it.
- ☐☐☐ Hold down the **middle** mouse button and choose **Properties** on the Page pulldown menu.
The Page property sheet for stripes will open in a window in the right-hand corner of your screen (Figure 10-1).

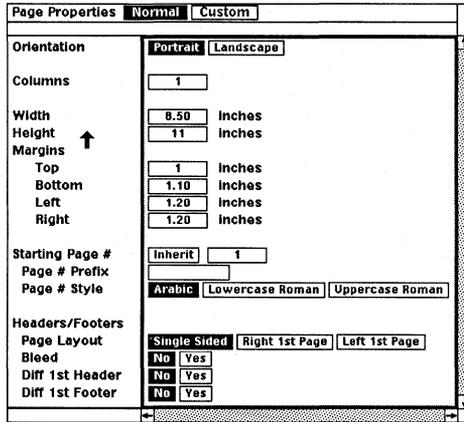


Figure 10-1. Page property sheet

To enter numbers or text in a field on a property sheet:

- ▲ Point the mouse cursor into the box next to *Columns*.
- ☐☐☐ Click the **left** button to position the caret in the box.
- ☐ Type **2** in the box.
When you start typing, the contents of the box (in this case, the numeral 1) are automatically erased. It is also possible to edit the contents of such a field. For editing information, see the chapter Basic Procedures in Volume 1 of the Reference Manual.

- ☐ Press the **TAB** key to confirm what you have typed and to move the caret to the next box in which you can type. Continue pressing the **TAB** key until the caret is positioned in the field whose contents you want to change.

*A typed entry must be confirmed by pressing either the **TAB** or the **RETURN** key.*

*Use **TAB** when you want to move the caret to a different field in which you want to make a change.*

- or ☐ Press **RETURN** to confirm what you have typed without moving the caret out of the field.

*Use **RETURN** when you expect to make changes in the field.*

On most of the property sheets we are concerned with in this chapter, you have at this point three choices: you can make additional changes, you can apply the change you have made, or you can cancel the change. In this case, you will make one more change before applying.

To change a toggle setting:

- ↑ Point the mouse cursor into the box next to *Page # Style* that says **Lowercase Roman**.

- ☐☐☐ Click the **left** button.

Lowercase Roman is highlighted to show that it has been turned on, and Arabic is displayed in normal video to show that it has been turned off.

Applying Changes and Closing a Property Sheet

When you have made one or more changes on the Page property sheet and most of the other property sheets, you will see the Apply menu. In *all* property sheets, **Apply** is the menu default when you have made changes, so you can just click the middle mouse button when you want to apply your changes.

To apply changes on the property sheet:

- ☐☐☐ Hold down the **middle** mouse button to see the Apply menu (Figure 10-2).



Figure 10-2. Apply menu

☐☐☐ Release the button to **Apply** your changes.

When you apply these changes, *stripes* becomes a two-column document with *Page i* replacing *Page 1*. Since *stripes* was not intended to be a two-column document, it will not look right because the illustration is too large. You can learn how to set up a multi-column document properly in the chapter *Page Makeup*.

Because the menu choices in the **Component** and **Frame** property sheets are more complex, they are considered separately in the section *Master Definitions*.

The final method for making changes on a property sheet involves using a list box. List boxes are used only when there are so many choices that toggle boxes would be cumbersome. Because there are no list boxes on the Page property sheet and the most important examples are on the Component property sheet, the list box is covered in the section *Master Definitions*.

Before proceeding, you need to change the *Columns* setting back to 1 and close the Page property sheet.

There are two property sheet popup menus, the Apply menu, which you have already used, and the Close menu. You see the Apply menu when you have made changes on the sheet you have not yet applied, and the Close menu when you have made no changes or have already applied the changes you have made.

To close a property sheet:

- ✓ Change the *Columns* setting to **1**, and **Apply**.
- ☐☐☐ Hold down the **middle** mouse button to see the Close menu.

In the Page property sheet, Close is the only choice on this menu. In all the other property sheets, it is one of several choices. However, Close is always the default, so you can just click the middle mouse button when you want to close a property sheet before you have made changes or after you have made changes and either applied or canceled them.
- ☐☐☐ Release the button to **Close** the property sheet.

Master Definitions

For the sake of clarity, component master definitions are used as the primary example in the following discussion. However, everything that is said about component master definitions applies also to frame master definitions. Since the properties of components and frames are quite different, you will find a discussion of many of the properties themselves in the chapters dealing specifically with components and frames.

Every component in a document has a name that it may share with other components in the document. Each unique component name appears on the **Create** submenu of the Component Nothing Selected popup menu. For each of the names on this menu, there is a *master definition*.

Usually, most of — if not all — the actual components with a particular name will have the same properties as the master definition, but the master definition exists completely apart from any of the actual components.

In preparation for the discussion in this section, you need to open a Component property sheet and make changes to the properties of a component. In the process, you will use the list box to make changes on a property sheet.

To open a Component property sheet:

- ✓ Select the first *paragraph* component.
- ☐☐ Hold down the **middle** mouse button to see the Component Selected popup menu.
- ☐☐ Release the middle button when **Props** is highlighted.

The Format sheet of the Component property sheet for the selected paragraph component opens in a window in the upper right-hand corner of the screen (Figure 10-3).

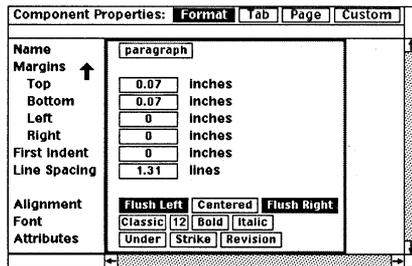


Figure 10-3. Format sheet of Component property sheet

The two left-hand boxes in the Font entry are list boxes because there are too many typeface families and sizes to display in toggle boxes.

To change the default font family of a component:

- ↑ Point the mouse cursor into the left-hand box which displays **Classic**.
- ⏪ Click the **left** button to move through the list in one direction.
- ⏩ Click the **right** button to move through the list in the other direction.
- ✓ Choose any family other than **Classic**.

You cycle through the sizes of typefaces in the same manner. When you use the left button, the point size gets larger until it becomes the largest size available. Then, it becomes the smallest point size available. The right button has the reverse effect.

How Applying Changes Affects Masters

When you are ready to apply changes on a Component property sheet or a Frame property sheet, you have more complex choices to deal with than when you apply changes on other property sheets because there are master definitions for each named component and each named frame.

Assume for the moment (as in fact is the case) that the master definition for the component named *paragraph* exactly matches the properties of the *paragraph* component whose property sheet is open, except for the change you have just made to the font.

You are now confronted with a choice: you can use the **Apply** command and change the font of this one *paragraph*, or you can

use the **Global Apply** command and change the font of all the components named *paragraph* and of the master definition for *paragraph* components (Figure 10-4).



Figure 10-4. Component property sheet apply menu

- If you use the **Apply** command, when you use the **Create** command to create a new *paragraph*, the font of the paragraph will be Classic 12 point roman because that is still the font in the master definition for *paragraph* components.
- If you use the **Global Apply** command, the font will change in all the *paragraph* components in the document and, when you use the **Create** command to create a new *paragraph* in the document, the font will be the new font you have chosen.
- If you want to change the font of only this one *paragraph* component, but you want to change the left margin of all *paragraph* components and of the master definition for *paragraphs*, you should use the **Apply** command for the font change and the **Global Apply** command for the margin change.

Once you have used any of the commands on the **Apply** menu (including **Cancel**), when you hold down the middle mouse button you see the **Close** menu, which gives you new options, **Reset** and **Unify** (Figure 10-5).

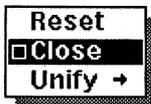


Figure 10-5. Component property sheet close menu

The following exercises show how **Apply**, **Global Apply**, **Reset**, and **Unify** work.

To apply a property change:

- ✓ Click the **middle** mouse button to apply the font change.

The text of the first paragraph is changed to the new family while the text of the second paragraph remains Classic 12 point roman.

- ✓ Do not close the property sheet.

To apply a property change globally:

- ✓ Change the *Left Margin* to *.5*.

- ✓ **Confirm** on the Global Apply submenu.

The text in both paragraphs is indented .5 inches, and a message in the status line of the property sheet tells you that the master definition has been updated.

At this point your menu choices are **Reset**, **Close**, and **Unify**.

How the Reset Command Works

If you change your mind about *both* the font family and the indentation, you can use the **Reset** command to put the properties back the way they were when you opened the property sheet.

To reset properties:

- ✓ Choose **Reset** on the Close menu.

A message in the status line of the property sheet asks you to apply or globally apply the reset.

- ✓ Use the **Global Apply** command, and **Confirm** on the Global Apply submenu.

*Since you used the **Global Apply** command for one of the changes, you will want to use it again. If you were to use **Apply** in this situation, the reset would apply only to the selected paragraph, while the other paragraph and the master definition for paragraph components would still have a left margin of .5 inches.*

- ✓ **Close** the property sheet.

The Unify Command

You should use the **Unify** command with caution because it may have more comprehensive effects than the **Global Apply** command or than you intend.

- First, it makes *all* properties of *every* component with the same name identical to the properties of the selected component.
- Second, if the properties in the master definition for a component are different from the properties of the selected instance of the component, **Unify** makes *all* properties in the master definition identical to the properties of the selected component.

Since you have to **Confirm** that you want to **Unify** properties, you are protected from using it inadvertently.

In the particular case under consideration, you could use **Unify** after **Apply** because the two *paragraphs* started out with identical properties, and this command will put them back in the same state. In long documents in which you may have changed such properties as **Begin New Page** on the Component Page property sheet for only a few components, **Unify** could cause trouble.

The table in Figure 10-6 summarizes the effects of these commands.

| | |
|--------------------------------|---|
| <u>Use. . .</u> | |
| Apply | when you want to apply change(s) only to the one component. |
| Global Apply | when you want to apply change(s) to all the components with the same name and to the master definition for the component. |
| Unify | when you want all the properties of every component with the same name identical to the properties of the selected component and all the properties of the master definition identical to the properties of the selected component. |
| Reset followed by Apply | when you want to reset the properties only for the selected component. |
| Reset followed by Global Apply | when you want to reset the properties for all the components with the same name and for the master definition. |
| <u>Be aware that. . .</u> | |
| Reset followed by Unify | often does not return all the components to exactly the state they were in before you used the Unify command. |

Figure 10-6. Applying changes to components

Finding Out the Properties of a Master Definition

When you use the **Create** command, the new component has properties that are identical to the properties in the master definition for the named component, so you always have immediate access to the masters.

To find out the properties of a master definition:

- ✓ Move the mouse cursor into the component bar, and make sure that no components are selected.
- ☐☐ Use the **Create** command on the Component Location Selected popup menu to create a component of any name you choose.
The new component will be selected.
- ✓ Choose the **Props** command on the Component Selected popup menu.
You will see the properties that apply to the master definition as well as to the selected component.

Chapter 11

Structuring a Template Document

As you work in the publishing software, you will find that it is very useful to have templates for document structures that you use often, so that you do not have to create each document from scratch. Interleaf supplies templates for commonly used documents like letters and memos, and these are accessible to you by using the Templates submenu of the Create submenu of the Desktop Nothing Selected popup menu.

The purpose of this chapter is to show you how to create a template of your own.

Once you have created this template, you can use it in one of two ways.

- In the next chapter, you will use the template as the basis for a document.
- In the chapter after that, you will take a document that has come into the publishing software as ASCII text and use the template to make it look the way you want it.

You will use the same text in both cases, so you will be able to compare the uses of the template in these two situations.

When you finish the exercises in the next two chapters, you will have two documents with text that looks like the text in Figure 11-1.

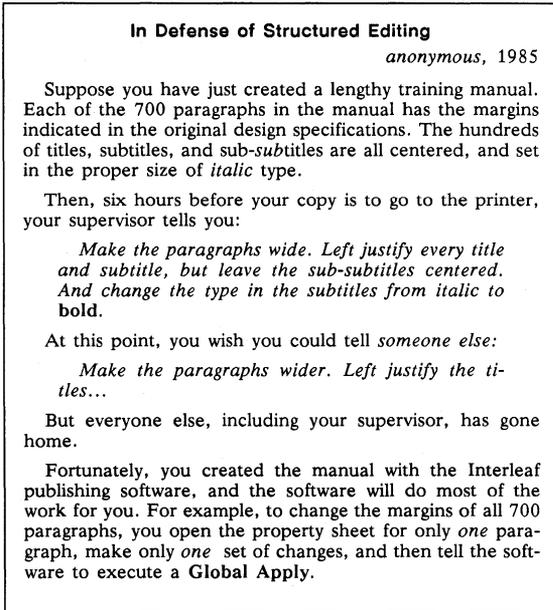


Figure 11-1. Sample text

To prepare for the exercises in this chapter, open your desktop.

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**, and slide it onto the Create submenu.
This menu gives a list of the objects you can create (Figure 11-2).

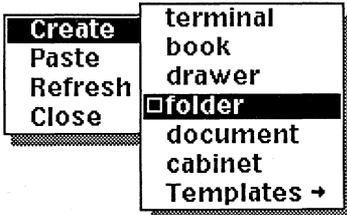


Figure 11-2. Create submenu

- ☐☐☐ Release the button when **document** is highlighted.

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

- ☐☐☐ Click the **middle** mouse button to **Deselect** the icon.

Naming a Document

The first thing to do with your newly created document is change its name so that you can distinguish this document icon from any other on your desktop. You change the name of an object you create on your desktop on its **Object property sheet**.

To open an Object property sheet:

- ✓ Select the newly created *document* icon.
- ☐☐☐ Hold down the **middle** button.
- ☐☐☐ Release the button when **Props** is highlighted.

The Object property sheet (Figure 11-3) appears in a window in the upper right-hand corner of your screen.

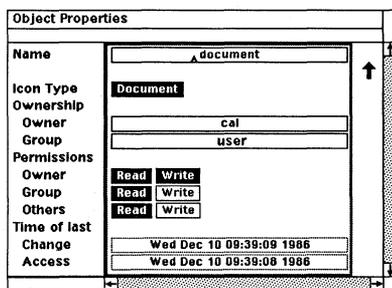


Figure 11-3. Object property sheet

Appropriate Icon 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. See the manual *System Administration* for information about characters with special meaning in UNIX.

Figure 11-4 lists some suitable object names and some problematic ones.

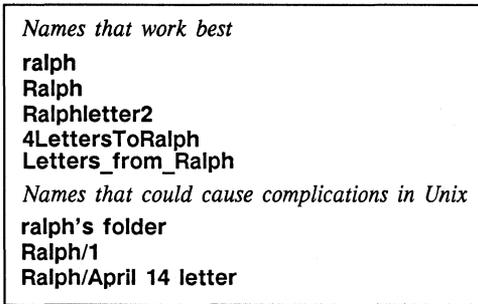


Figure 11-4. Sample desktop object names

Give each object a name that tells you essential information about the object without your having to open it. Since you are going to use this document as a template for other documents, *My_Template* is a logical name for it although you would probably want to give it a more descriptive name if you were going to use it later for real work.

To name the document:

- The text caret is already positioned in the Name field, so just type **My_Template**.
The name document is automatically erased when you start typing.
- Press the RETURN key to confirm the name.

There are two popup menus on this property sheet, and they are similar to the popup menus on other property sheets.

To apply your changes and close the property sheet:

- Hold down the **middle** button to see the Object property sheet Apply popup menu (Figure 11-5).



Figure 11-5. Object property Apply popup menu

- Release to **Apply**.
Note the change in the label below the document icon.

- Hold down the **middle** button to see the Object property sheet Close popup menu (Figure 11-6).

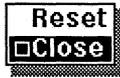


Figure 11-6. Object property sheet Close popup menu

- Release the button.

The icon for *My_Template* is still selected. You are now ready to open the document.

To open the document:

- Hold down the **middle** button.
- Release the button when **Open** is highlighted.

A blank document named *My_Template* opens in a document window on your desktop. It contains only the default *paragraph* component, three anchors for text strings in the header, and a page number and two anchors for text strings in the footer (Figure 11-7).

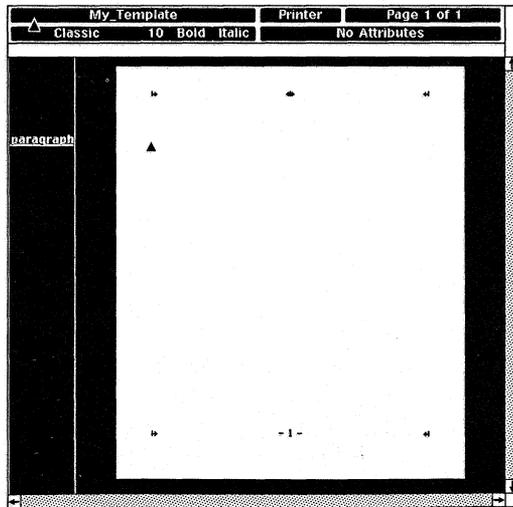


Figure 11-7. New document

Setting Page Margins

When you create a new document, you will usually want to assign its page margin sizes first. Often, you may want to change the page size and other page properties as well. Figure 11-8 shows the Page property sheet for the default document.

The screenshot shows the 'Page Properties' dialog box with the 'Normal' tab selected. The 'Custom' tab is also visible. The settings are as follows:

| | |
|-----------------|--|
| Orientation | <input checked="" type="radio"/> Portrait <input type="radio"/> Landscape |
| Columns | <input type="text" value="1"/> ↑ |
| Width | <input type="text" value="8.50"/> Inches |
| Height | <input type="text" value="11"/> Inches |
| Margins | |
| Top | <input type="text" value="1"/> Inches |
| Bottom | <input type="text" value="1.10"/> Inches |
| Left | <input type="text" value="1"/> Inches |
| Right | <input type="text" value="1"/> Inches |
| Starting Page # | Inherit <input type="text" value="1"/> |
| Page # Prefix | <input type="text"/> |
| Page # Style | <input checked="" type="radio"/> Arabic <input type="radio"/> Lowercase Roman <input type="radio"/> Uppercase Roman |
| Headers/Footers | |
| Page Layout | <input checked="" type="radio"/> Single Sided <input type="radio"/> Right 1st Page <input type="radio"/> Left 1st Page |
| Bleed | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Diff 1st Header | <input checked="" type="radio"/> No <input type="radio"/> Yes |
| Diff 1st Footer | <input checked="" type="radio"/> No <input type="radio"/> Yes |

Figure 11-8. Page property sheet for default document

To set the page margins of a document:

- ↑ Point the mouse cursor into the Page box in the document header.
- ☐☐☐ Click the **middle** button to display the Page property sheet.
- ↑ Point the mouse cursor into the box to the right of the label *Bottom*, and click the **left** button to position the text caret in the box.
- ☐ Type **1.5** and press the **RETURN** key.
- ☐☐☐ Click the **middle** button to **Apply**.
Apply is always the default on the property sheet menu you see after you have made changes.
- ☐☐☐ Since **Close** is always the default on the next menu, click the **middle** button to close the Page property sheet.

Structuring the Components for a Template

The Interleaf software is flexible enough to allow several approaches to constructing a document, but there is a general procedure that is particularly useful when you are creating a template. Using the software without following this procedure is comparable to using a power chain saw to cut wood without starting the engine.

The procedure is:

- Forecast as many of the types of components you will need as possible.
- Create a master component for each type.
- Save the template.
- Make a copy of the template.
- In the copy, *either* enter the text and graphics that constitute the document, creating new copies of master components as you need them, *or* paste a document with another structure (often an ASCII document) into the copy of the template and make the adjustments necessary to make the new document fit into the template.

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

- 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 a source document. For instance, a scan of the text in Figure 11-1 indicates that structuring *My_Template* will require four types of components: one for the title, one for the author's line, one for the five paragraphs of text, and one for the two italicized quotations.

You will name the component types *title*, *author*, *paragraph*, and *quote*. (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 these exercises.) In most cases, components with the same name — that is, components of the same *type* — should share all properties.

Creating Master Components

In this section, you will be told how to create master components, but we assume that you are familiar with the discussion of master definitions in the chapter *Property Sheets and Masters*, so there is no discussion of the rationale for the process.

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

The method used in the next exercise for creating duplicate components is one of several you will use as you proceed.

To create duplicate components using LINE FEED:

- ☐ Press the **LINE FEED** key.
A new paragraph component appears below the original. When you use the LINE FEED key, the new component always appears below the component with the text caret and is identical to it.
- ☐ Using the **LINE FEED** key, create two more components, so that you have four components named *paragraph*.

You now have four identical *paragraph* components. You will modify the properties of three of these components to create masters for *title*, *author*, and *quote* components.

You begin by turning the first *paragraph* into a *title* by changing its name and properties on the Component property sheet.

To change a component name:

- ✓ Select the first *paragraph* in the component bar.
- ☐☐ With the mouse cursor in the component bar, hold down the **middle** button.
- ☐☐ Release the button when **Props** is highlighted.
The Component property sheet is displayed in the upper right-hand corner of the screen (Figure 11-9).

| Component Properties: Format Tab Page Custom | |
|---|-------------------------------------|
| Name | paragraph ↑ |
| Margins | |
| Top | 0.07 Inches |
| Bottom | 0.07 Inches |
| Left | 0 Inches |
| Right | 0 Inches |
| First Indent | 0 Inches |
| Line Spacing | 1.31 lines |
| Alignment | Flush Left Centered Flush Right |
| Font | Classic 10 Bold Italic |
| Attributes | Under Strike Revision |

Figure 11-9. Component property sheet

- ⇧ ↑ Point the mouse cursor into the *Name* field on the property sheet, and click the **left** mouse button to position the text caret in the field.
- ☐ Type **title**.
- ☐ Confirm the new name by pressing the **TAB** key.
The text caret moves to the next field. Remember that you use the TAB when you want to confirm an entry and move the caret to the next field and the RETURN key when you want to confirm the entry without moving the caret.

You need to change only three additional items on the *title* component's property sheet : the *Bottom* margin, the *Alignment*, and the *Font*.

Since the only *title* component in this document comes at the top of the page, it does not matter whether you change the top margin or not. The Interleaf software uses *soft* top and bottom margins: when a component begins at the top of a page, its top margin is ignored in favor of the top margin setting for the whole document. Conversely, when a component ends at the bottom of a page, its bottom margin is ignored in favor of the bottom margin setting for the whole document.

To change the bottom margin of a component:

- ☐ Press the **TAB** key again to move the caret to the *Bottom* margin field.
- ☐ Type **.02** and confirm the entry.

To change the alignment of a component:

- ☰↑ Point the mouse cursor to the box labeled **Centered**.
- ☐☐☐ Click the **left** button.
Centered is highlighted. Left and Right are turned off automatically.

To change the font of a component:

- ☰↑ Point the mouse cursor into the box in the *Font* field that reads **Classic**.
- ☐☐☐ Click the **left** button until **Modern** is displayed in the box.
- ✓ Point the mouse cursor into the next box in the *Font* field, and click the **left** button until **18** is displayed.
- ☐☐☐ Click the **middle** button to **Apply** the changes.
The name of the first component is now "title".
A message appears in the status line: Created master definition for: 'title'.

Figure 11-10 shows how the Component property sheet looks after you apply the changes.

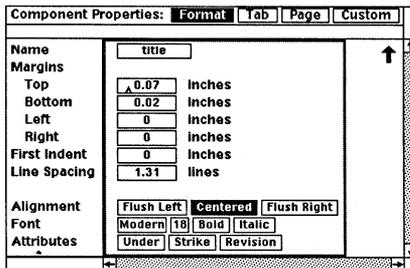


Figure 11-10. Component property sheet for title component

- ☐☐☐ Click the **middle** button to **Close** the property sheet.

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

In the next exercise, you will create a component named *author* by changing the name and other properties of the *paragraph* component below the *title* component.

To create the author master component:

- ✓ Select the second component, and display its property sheet.
- ✓ Change the *Name* of the component from *paragraph* to **author**.
- ✓ Change the *Bottom* margin to **.30** inches.
- ✓ Change the *Alignment* to **Flush Right** by pointing the mouse cursor into the **Flush Left** box and clicking the **left** mouse button.
- ✓ Change the font to **Classic 12 Italic**.
This is going to be a very brief component and there is only one like it in the document. Therefore, it does not matter much whether you make the default font of the component roman or italic. However, since the first word of the component is italicized, you will be ready to type the first word if you make italic the default font.
- ✓ **Apply** the changes, and **Close** the property sheet.

Now, you will change the next *paragraph* component to a *quote* master component and create the master definition for the *quote* 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 **0** 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.
- ✓ Change the *Font* size to **12**.
- ✓ Finally, turn on the **Italic** box.
- ✓ **Apply** the changes and **Close** the property sheet.

You have created master components for three component types, and the document contains a *paragraph* component that has the properties of the *paragraph* master definition.

You are ready to use *My_Template*. Since *My_Template* is intended to be a template, you will want to leave the document itself empty so that you can use its structure as the pattern for other documents. Therefore, save *My_Template*, and copy it for use in the next two chapters.

Save *My_Template* as it is with four empty components. In the future, if you like, you can create templates and cut *all* the components. The software will leave one empty component in the document. Since all the component names will still appear on the Create submenu of the Component Location popup menu, you will be able to reconstruct the same kind of document.

Maintaining Consistency in Document Structure

Generally, we recommend that you globally apply Component property sheet changes to ensure that all components with the same name have the same properties.

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

For instance, suppose you wanted one of the paragraphs in *My_Template* to be like the other paragraphs in all ways except you wanted it underlined. You could open the property sheet for the paragraph, turn **Under** on, change the name of this *paragraph* component to something appropriate like *underpara*, and apply the change (not globally).

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

Chapter 12

Entering Text in a Template

In this chapter, you will use the template you created in the previous chapter to enter the text of a document. As you do so, you will use some features of the publishing software that you might not otherwise notice for some time.

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

To correct a mistake when you are entering text:

- Use the **DEL** key to delete backward from the text caret one character at a time.
- or Hold down the **CTRL** key and press **d** to delete forward.

To prepare for the exercises in this chapter, copy *My_Template*, and paste it on your desktop. Name the copy *Defense1*, and open it.

To enter text in a document:

- ✓ Select the *title* component in *Defense1*, or position the component caret just above or below the word “title” in the component bar.
Either of these actions positions the text caret in the first text location in the component.
- Type **In Defense of Structured Editing**. Do not press **RETURN**.

When you enter or edit text in a document, it is seldom necessary or desirable to press the **RETURN** key at the ends of lines of text. After you type or insert enough text to fill one line, the caret automatically moves to the beginning of the next line.

You should not press **RETURN** when you have finished entering all the text you want in a particular *component*. When you want to move the text caret to a new component, just select that component using the *left* mouse button and begin typing.

If you have used returns, you can remove them the same way you remove any other text.

In the next exercise, you will enter “*anonymous*, 1985” in the *author* component.

To change the font of succeeding text using the keyboard:

- ✓ Move the text caret to the first text position in the *author* component.
- Type **anonymous**.
- Press the **F5** key to change the font from italic to roman.
- Type a comma, a space, and **1985**.

Creating Components with the Component Popup Menu

When you use **LINE FEED** to create a new component, the new component is created directly below the component with the text caret and is identical to it. Often, this is very useful, but it is not always what you want. When you want to create a different kind of a component or the same kind of component, but above the component with the caret, you will use the Component Location popup menu.

To create a component using the Component popup menu:

- ✓ Make sure the component caret is positioned below the *author* component name or above the *quote* component name.
- With the mouse cursor in the component bar, hold down the **middle** button.
- Slide the mouse cursor onto the Create submenu (Figure 12-1).

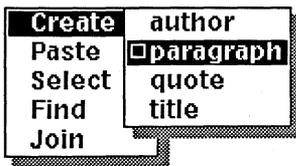


Figure 12-1. Component Create submenu for Defense1

Figure 12-1 shows a **dynamic popup menu**. The contents of a dynamic popup change to reflect currently available actions or options. This menu reflects the master components in *Defense1*.

☐☐☐ Release the button when **paragraph** is highlighted.

A paragraph component is created below the author component.

The new *paragraph* is identical to the master definition for a *paragraph* component.

Additional Methods for Changing Fonts

In the next exercises, you will enter the rest of *Defense1*. While doing so, you use several new methods for changing fonts. When you are working on your own, you will find that you prefer some methods and use them most of the time, but it is useful to know that there are other options.

Many simple font changes can be made using the keyboard even more easily than using popup menus. The keyboard alternatives are noted in the instructions. For more about the keyboard, see the appendix *The Keyboard*.

The Pick Up Command

You use the **Pick Up** command to change the font at the text caret position to the font of the text the mouse cursor is pointing at. The font you want to adopt must be in the same document.

The **Pick Up** command is useful *only* when there is an example of the font you want to use on the screen. If you have to scroll to find it, it is easier to use the Font submenus.

As you will see in the next chapter, you can also use the **Pick Up** command to change the font of selected text.

To use the Pick Up command to change fonts:

- ▲ Position the text caret in the *paragraph* component.

- ☐ Type the text that appears between horizontal lines changing from roman to *italic* using a method you already know.

Type only one space following a period. If you are accustomed to using a typewriter or word processor, you are probably used to entering two spaces after some marks of punctuation. Because you are using a proportional typeface with proportional spacing between words, you do not want the extra space.

To create the hyphen in sub-sub, press the ESC key first and then the minus sign/underline ☐ 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 text caret, point the *mouse cursor* at a word that is in 12 point roman type (“Each,” for example).
- ☐☐ Hold down the **middle** button, and slide the mouse cursor onto the Fonts submenu.
- ☐☐ Release the button when **Pick Up** is highlighted.
Italic is turned off in the document header because the Pick Up command adopts the font of the text at which the mouse cursor is pointing.
- ☐ Type the following:

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

The Last Font Command

The software keeps track of the font you used before switching to Classic 10 point roman to type the previous block of text. This font was Classic 10 point *italic*. Classic 10 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 the mouse cursor onto the Fonts submenu.

- ☐☐☐ Release the button when **Last** is highlighted.
Italic is turned on in the document header. Pressing the F3 function key has the same effect.
- ☐☐ Type **italic**.
- ✓ Change the current font from italic to roman.
- ☐☐ Type the last word in the paragraph: **type** and a period.
- ☐☐ Create another *paragraph* component by pressing **LINE FEED**.
- ☐☐ Type the next paragraph of *DefenseI*:

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

The next block of text is a long quotation and the next empty component in *DefenseI* is a *quote*, so you need not create a new component.

To enter text in the next component:

- ✓ Position the text caret at the beginning of the empty *quote* component.
- ☐☐ Type the quotation:

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 using a popup menu:

- ☐☐☐ Hold down the **middle** button and slide the mouse cursor onto the Fonts submenu.
- ☐☐☐ Move the cursor on the menu to **Bold**.
- ☐☐☐ Release the button.
Since Bold On is the default, Bold will be highlighted in the document header. The F4 function key would have had the same effect.

- Type the last word of the quotation: **bold**.
- Click the **middle** button.
Since **Bold Off** is now the default, the font will change to roman.
- 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 the indentation. By changing the properties of one *paragraph* and applying the changes globally, you can change the properties of all the *paragraphs* and of the master definition for the *paragraph* component.

To make global changes:

- ✓ Select one of the *paragraph* components in *Defense1*.
- Click the **middle** button to open the property sheet for this component.

On the property sheet, make the following changes, confirming each entry by pressing either **TAB** or **RETURN**. Remember that **TAB** is the better choice when you want to move the caret to the next field, and **RETURN** is the better choice when you want to stay in the same field (perhaps because you need to change the entry).

- 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 the mouse cursor onto the Global Apply submenu (Figure 12-2).

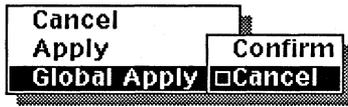


Figure 12-2. Global Apply submenu

- ☐☐☐ Release the button when **Confirm** is highlighted. *Both of the paragraphs you have entered reflect the changes you have applied. When you globally apply property changes, the changes are applied to all other components of the type — that is, all other components with the same name — and to the master definition for the component.*
- ✔ Close the property sheet. *You have changed the master definition for the paragraph component in Defense1 so that it is no longer like the master definition in My_Template. At the end of this chapter, there is a section on changing My_Template to reflect these improvements.*

To continue typing the text:

- ✔ In the empty *paragraph* component after the *quote* component, enter the following text:

At this point, you wish you could tell

- ✔ Change the font to italic.
- ☐ Type **someone else**.
The text appears in italics.
- ✔ Change the font back to roman.
- ☐ Type a colon.

To enter the remaining text:

- ✔ Create a new *quote* component.
- ☐ Enter the text of the second quotation:

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

- ✓ Create a new *paragraph* and enter the following text:

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

- ☐ Press **LINE FEED** to create a new *paragraph*.
- ☐ Enter the following text changing fonts where necessary:

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 **Global Apply**.

Changing the Type of Components

Sometimes you create a component of one type and then decide that it should be another type. The next exercise shows you how to change a component from one type to another.

To change a component from one type to another:

- ☐☐ Select a *paragraph*.
- ☐☐ With the mouse cursor in the component bar, hold down the **middle** button, and slide the mouse cursor onto the Change submenu (Figure 12-3).

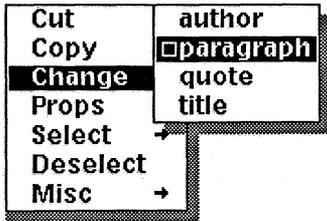


Figure 12-3. Change submenu

☐☐☐ Release the **middle** button when *quote* is highlighted.

Notice how the component changes.

✔ Change the *quote* back to a *paragraph*.

Which Method to Use for Creating Components

You now know two methods for creating new components:

- using the **LINE FEED** key
- using the Create submenu of the Component Location 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 particularly convenient when you are typing text and want to follow a component with another component with the same name and properties (a *paragraph* with a *paragraph*, for example). As soon as you press **LINE FEED**, you are ready to type text into the new component because the text caret is positioned at its beginning.

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*.

Create is also useful when you want to place the new component above the component in which the text caret is located.

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

When you use the Create or Change submenu, the component takes on all of the properties of the *master* definition for the component with this name.

The completed text of your document now looks like the text in Figure 12-4.

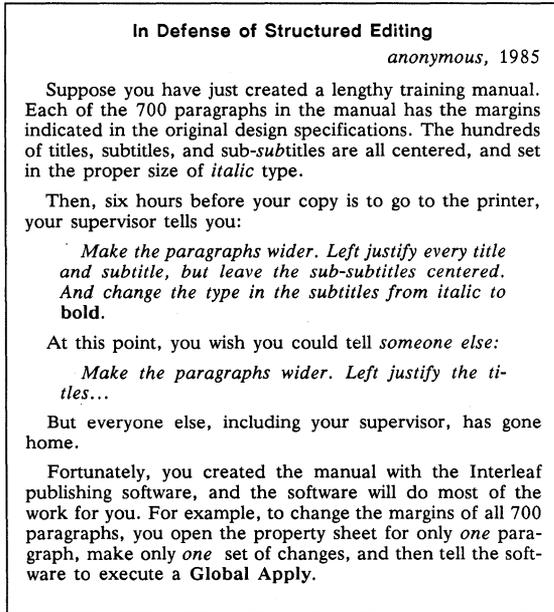


Figure 12-4. Completed text of document

Updating the Template Document

The properties of the *paragraph* component in *Defense1* are the ones you want in *My_Template*, so you need to update *My_Template*.

To update *My_Template*:

- ✓ Create a new *paragraph* component in *Defense1*.
- ✓ **Cut** it.
- ✓ Open *My_Template*, and paste the *paragraph* component from *Defense1* into it.
- ✓ Open its Component property sheet.
- ✓ Hold down the **middle** mouse button.
- ✓ Slide the mouse cursor onto the **Unify** submenu, and release when **Confirm** is highlighted.
The Unify command makes the properties of the master definition for the paragraph component and for any paragraph components in the document just like the properties for this paragraph.
- ✓ Close the property sheet, and **Cut** the *paragraph*.
- ✓ **Close** and **Save** *My_Template*.
You can also close and save Defense1 before continuing.



Chapter 13

Formatting an ASCII Document

Some users enter the text of documents on ASCII terminals and use communication programs to move the documents to a workstation that is running the Interleaf publishing software. Then, with the publishing software, they format the ASCII text and add graphics. There are two manuals, *File Formats* and *Data Transfer*, devoted to ASCII files and their communication to the publishing software. In this chapter, we show you only what you can do with the text of a simple ASCII document once it is on your desktop.

To prepare for the exercises in this chapter, copy *My_Template*, which you created two chapters back, name it *Defense2*, and open it. In the *Training* folder, there is a document named *ascii* that looks like a piece of computer paper. You are going to paste *ascii* into *Defense2*. You must paste *ascii* into *Defense2* rather than the other way around, so that the page and component properties of the resulting document are those of *Defense2*.

To paste an icon into an open document:

- ✓ Cut the icon for *ascii*.
- ✓ Position the component caret before the first component in *Defense2* or after the last.
You could paste ascii in the middle of the template components. However, at the end of this chapter, you will cut the empty components, and you will be able to do this more efficiently if they are together at the beginning or the end of the document.
- ☐☐ With the mouse cursor in the component bar, hold down the **middle** mouse button to see the Component Location Selected popup menu.
- ☐☐ Release the button when **Paste** is highlighted.
The text of ascii is converted by the publishing system to paragraph components. If you positioned the component caret before the component named title, these paragraph components would be Modern 18 point roman. On the other hand, if you positioned the component caret after the component named paragraph, these paragraph components would be Classic 12 point roman. When you paste a plain ASCII document into a document created with the publishing software, all the components become paragraphs, and the font is the font displayed in the

Font box in the document header when you execute the Paste command.

If you had pasted ascii in text rather than in the component bar, the result would have been one long paragraph.

In the first group of exercises in this chapter, you will restructure the components. Then, in the second group of exercises, you will edit the text to remove tabs, returns, and quotation marks and to change fonts.

In the next exercise, you are going to make the *paragraph* components from *ascii* conform to the master definition for a *paragraph* in *Defense2*.

To make the paragraphs conform to master definition:

- ✓ Select the names of the components that are going to be *paragraph* components in the finished document (the ones beginning: “Suppose you have. . .”; “Then, six hours. . .”; “At this point. . .”; “But everyone else. . .”; and “Fortunately. . .”).
- ☐☐ Hold down the **middle** mouse button to see the Component Selected popup menu.
- ☐☐ Move the mouse cursor to **Change**.
- ☐☐ Slide the cursor onto the submenu.
In this case, it is not necessary to slide the mouse cursor onto the submenu since paragraph is the default. However, this will not always be true, so it is a good idea to look at the menu and see what you will get when you release.
- ☐☐ Release the button when *paragraph* is highlighted.
All of the selected components take on the properties of the master definition for a paragraph.

The rest of the changes you need to make to components are not difficult, but they are not quite as straightforward as making the *paragraph* components from *ascii* like the master definition for *paragraph* components in *Defense2*. For example, you need to split a component in order to have a *title* component and an *author* component. You can split the component while it is a *paragraph*, and then change the first of the two resulting *paragraphs* to a *title* component and the second to an *author* component; or you can change the first *paragraph* to a *title*, split it, and change the second *title* to an *author*.

To split a component:

- ✔ Position the text caret right before the word *anonymous*.
- ☐☐ Hold down the **middle** mouse button to see the Text Location popup menu.
- ☐☐☐ Slide the cursor onto the Misc submenu.
- ☐☐☐ Release the button.
Split is the default on the menu. There are now two paragraphs in place of one.

To change the rest of the components:

- ✔ Select the second of the *paragraph* components you created with the **Split** command, and change it to an *author* component.
- ✔ Select the other *paragraph* component you created with the **Split** command, and change it to a *title* component.
The text of the component that becomes a title component has tabs in it. When you change the component from a paragraph to a title, you see messages in the status line complaining about tabs since centered components do not know how to deal with tabs, and a title component is centered. For the moment, just ignore these messages.
- ✔ Select the remaining two *paragraph* components, and change them to *quote* components.
*If you select one with the left mouse button and the other with the right, you can use the **Change** command on both of them at one time.*

To remove the tabs in the title component:

- ✔ Position the text caret before the first tab in the component.
- ☐☐☐ Hold down the **right** mouse button, and move the mouse to select both the tabs before the text.
- ☐☐☐ Release the button.
- ☐☐☐ Hold down the **middle** mouse button.
- ☐☐☐ Release the button when **Cut** is highlighted.
*You will see the same error messages about tabs that you saw before because there are still tabs in the component, and the component has been reformatted in response to the **Cut** command.*
- ✔ Position the text caret after the text.

- ✓ Hold down the **right** mouse button, select the tabs after the text in the component, and cut them.

You will not get any more error messages because there are no longer any tabs to cause formatting problems.

On some ASCII terminals, you have to use the RETURN key at the ends of lines instead of having the software move the caret automatically to the next line when the current line is filled. The text of *ascii* was entered on such a terminal.

To remove the returns from a whole document:

- ✓ Position the text caret at the beginning of the document.
- ✓ Holding down the **right** mouse button, move the mouse through the document to select all the text.

If this were a document with several pages in it, you could accomplish the same thing more efficiently by using the Last command on the Page pulldown menu. When the end of the document was on the screen, you could point the mouse cursor after the last character, and click the right mouse button to select the text of the entire document.

- ☐☐ Hold down the **middle** mouse button.
- ☐ On the Text Selected popup menu, slide the mouse cursor onto the Misc submenu and the Returns submenu.
- ☐☐ Release the button when **Delete** is highlighted (Figure 13-1).

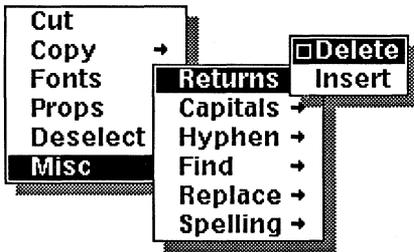


Figure 13-1. Return submenu

All of the quotation marks in the document are right quotation marks. Whenever you move text from an ASCII terminal to your desktop, this will be the case. If you wanted to replace the opening quotation marks with left quotation marks, you could

use the **Search** and **Replace** operations. Please see the chapter *Search and Replace* for more information. In the present instances, quotation marks are no longer necessary because the quotations are italicized; therefore, you can remove them.

To remove the quotation marks:

- ✓ Position the text caret before one of the quotation marks.
- ☐ Hold down the **CTRL** key, and press **d**.
- or ✓ Position the text caret after one of the quotation marks, and press the **DEL** key.

The next thing you need to do is change the fonts of several words. Figure 13-2a shows the document as it now looks on your screen with the words underlined that should have their fonts changed. Figure 13-2b shows the document as it will look after the changes have been made.

By now you are familiar with a number of ways to change fonts and you can practice using whichever popup commands and function keys you choose.

The last thing you need to do is select the empty components at the beginning or the end of the document and cut them. You may also want to reopen *Defense1* and compare it to *Defense2*.

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-subtitles 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 wider. 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 the property sheet for only one paragraph, make only one set of changes, and then tell the software to execute a Global Apply.

(a)

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-subtitles 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 wider. 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 the property sheet for only *one* paragraph, make only *one* set of changes, and then tell the software to execute a **Global Apply**.

(b)

Figure 13-2. Document before and after font changes

Chapter 14

Combining Autonumbers and Tabs

In this chapter, you will learn how to combine the publishing software's autonumbering and tab features to create a simple numbered list, a numbered list with multi-line, indented text, and an outline.

Both autonumbers and tabs are discussed more extensively in Volume 1 of the *Reference Manual*, autonumbers in the chapter *Autonumbering and Referencing* and tabs in the chapter *Text Processing*.

To prepare for the exercises in this chapter, open *tabs* in the *Training* folder on your desktop.

The exercises in this chapter assume that you know how to change settings on property sheets. If you do not, please see the chapter *Property Sheets and Masters*.

Autonumbers

With the autonumbering feature of the software, you can number a series of objects, such as items in a list. If you change the order of the items or add or subtract items in the middle of the list, the software automatically renumbers the list.

The software has two default autonumber streams — *List* and *Outline*. You can change these default streams to suit your needs, and you can make as many new streams as you need using the ****NEW**** command on the *Auto #* submenu of the *Create* submenu (Figure 14-1).

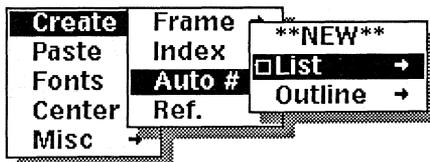


Figure 14-1. Autonumber submenu of Text Location menu

Tabs

The tab feature allows you to specify up to 30 tab settings for each component. You can use these settings to line up text for various purposes, such as tables. Figure 14-2 shows part of the Tab sheet of the Component Property sheet for the default paragraph.

| Location | | Tab Type | | | | |
|----------|--------|----------|--------|-------|------|--------|
| 0 | Inches | Left | Center | Right | Dec. | Remove |
| 0.75 | Inches | Left | Center | Right | Dec. | Remove |
| 1.50 | Inches | Left | Center | Right | Dec. | Remove |
| 2.25 | Inches | Left | Center | Right | Dec. | Remove |
| 3 | Inches | Left | Center | Right | Dec. | Remove |
| 3.75 | Inches | Left | Center | Right | Dec. | Remove |
| 4.50 | Inches | Left | Center | Right | Dec. | Remove |
| 5.25 | Inches | Left | Center | Right | Dec. | Remove |
| 6 | Inches | Left | Center | Right | Dec. | Remove |
| 6.75 | Inches | Left | Center | Right | Dec. | Remove |
| 7.50 | Inches | Left | Center | Right | Dec. | Remove |
| 8.25 | Inches | Left | Center | Right | Dec. | Remove |
| 9 | Inches | Left | Center | Right | Dec. | Remove |
| 9.75 | Inches | Left | Center | Right | Dec. | Remove |
| 10.50 | Inches | Left | Center | Right | Dec. | Remove |
| 11.25 | Inches | Left | Center | Right | Dec. | Remove |
| 12 | Inches | Left | Center | Right | Dec. | Remove |
| 12.75 | Inches | Left | Center | Right | Dec. | Remove |
| 13.50 | Inches | Left | Center | Right | Dec. | Remove |
| 14.25 | Inches | Left | Center | Right | Dec. | Remove |
| 15 | Inches | Left | Center | Right | Dec. | Remove |

Figure 14-2. Default tab sheet

Creating a Simple Numbered List

You can create the list in Figure 14-3 using the *List* autonumber stream.

- | |
|---|
| <ol style="list-style-type: none">1. desks2. typewriters3. pencils4. notebooks |
|---|

Figure 14-3. Numbered list

There are two basic ways to create a list:

- create each component and the autonumber and text you want in it
- create one component and the autonumber you want in it; then, copy and paste this component as many times as necessary for your list

To create a list item by item:

- ✓ Below the first *title* component in *tabs*, create a *list* component.
- ☐☐☐ With the mouse cursor in the text area of *tabs*, hold down the **middle** mouse button to see the Text Location Selected popup menu.
- ☐☐ Slide the mouse cursor onto the Create submenu, the Auto # submenu, and the List submenu (Figure 14-4).

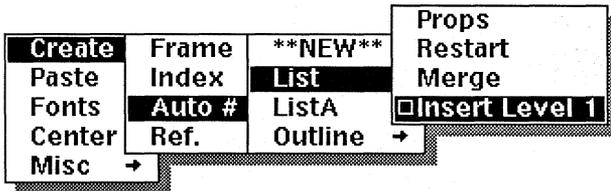


Figure 14-4. List submenu

- ☐☐☐ Release the button when **Insert Level 1** is highlighted.
The autonumber 1 is inserted followed by a period.
- ☐ Press the TAB key to insert a tab, and type **desks**.
- ☐ Press LINE FEED to create another *list* component.
- ✓ Create another *list* autonumber, insert a tab, and type **typewriters**.
- ✓ Continue creating components and autonumbers and adding text until the list is complete.

In the next exercise, you are going to use the same autonumber stream beginning with *1* again.

To create a list by copying:

- ✓ Below the second *title* component in *tabs*, create a *list* component.
- ☐☐ With the mouse cursor in the text area of *tabs*, hold down the **middle** mouse button to see the Text Location Selected popup menu.
- ☐☐ Slide the mouse cursor onto the Create submenu, the Auto # submenu, and the List submenu.
- ☐☐ Release the button when **Restart** is highlighted.
*The autonumber 1 is inserted followed by a period. If you had released when **Insert Level 1** was highlighted, the previous List stream would have continued.*
- ☐ Insert a tab.
- ✓ **Copy** the *list* component you just created and immediately **Paste** it in the component bar.
The autonumber in the copied component becomes 2.
- ✓ Continue copying and pasting until you have as many components as you need for the list.
- ✓ Position the text caret after the tab in the first *list* component in this set, and enter the text.
- ✓ Repeat the last step for each item in the list.

Because of the way the *list* component is structured, the first nine autonumbers in this list will line up properly. If you had a list with double-digit items in it, you would need to set a new tab and insert tabs before the digits, so that the periods after the numbers would line up.

To use tabs with double-digit lists:

- ☐ Press the TAB key to insert a tab before each of the autonumbers in the list you created in the previous exercise.
Since you have not yet set the new tab on the property sheet, the text is pushed temporarily onto a second line.
The tabs you insert will make it possible for you to see the effect of the new tab setting without closing the property sheet first.
- ✓ Copy the *list* components, and paste them.
- ✓ Repeat the previous step until you have a list with both single- and double-digit autonumbers.

- ✓ Select one of the *list* components, open its property sheet, and display the Tab sheet.
- ✓ Position the property sheet caret in the first *Location* field.
- ☐ Type `-.10`, and press the **TAB** or **RETURN** key to confirm the entry.
The tab must have a negative setting because the list component has a negative First Indent.
- ☐☐ Point at the **Right** box opposite the number you just typed, and click the left button to turn on the setting.
- ✓ **Global Apply** the change.
Because you used a right tab setting, the characters line up from the right to the left.
Since you globally applied the new tab setting for the list component, you should insert a tab before each autonumber in the first list you created.

Creating a Numbered List with Indented Text

There are a number of different ways to create a list that looks like the one in Figure 14-5. We will go through one sequence; but as you use the feature, you will find other combinations that work as well. In the following exercises, we give particular settings for a **Right** tab and the **First Indent** settings. You may want to try other settings to see how to get different results.

- 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 14-5. Numbered list with text

In *tabs*, there is a list of seven autonumbers followed by three components with text in them. In the following exercises, you will

- change the period after the autonumber to a hyphen

- insert autonumbers in the components with text in them
- reorder the items in the list
- make the numbers line up as they do in Figure 14-5
- arrange the text as it is arranged in Figure 14-5

Finally, you will add another item to the list, so that you can see the complete process.

To change the period after the autonumber to a hyphen:

- ☐☐ With the mouse cursor in text and nothing selected, hold down the **middle** mouse button to see the Text Location popup menu.
- ☐☐ Slide the mouse cursor onto the Create submenu, the Auto # submenu, and the ListA submenu.
*If you did not know or were not told that this list is made up of the ListA stream of autonumbers, you could find out by selecting one of the autonumbers, holding down the middle mouse button to see the Text Selected popup menu, and releasing when **Props** is highlighted. The name of the autonumber stream appears on the Autonumber Token property sheet.*
- ☐☐ Release the button when **Props** is highlighted.
The Autonumber Stream property sheet appears in a window in the top right-hand corner of the screen (Figure 14-6).

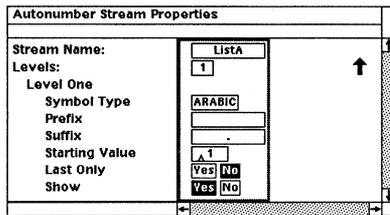


Figure 14-6. Autonumber Stream property sheet

- ✓ Position the caret in the box opposite *Suffix*.
- ☐ Press the ESC key, type a minus sign, and press the TAB or RETURN key to confirm.
- ✓ **Apply** the change.
The periods after the autonumbers in the ListA stream are changed to hyphens.
- ✓ **Close** the property sheet.

To insert autonumbers and reorder the list:

- ▲ Position the text caret before the word *Add* in the eighth *listA* component.
- ☐ Press the TAB key.
- ☐☐ Hold down the **middle** mouse button to see the Text Location Selected popup menu.
- ☐☐ Slide the mouse cursor onto the Create submenu and the Auto # submenu.
- ☐☐ Release the button when **ListA** is highlighted.
The number 8 and a hyphen are inserted because Insert Level 1 is the default.
- ☐ Press the TAB key.
- ✓ Repeat these steps with the caret positioned at the beginning of the first line of text in the next two *listA* components.
- ✓ Move the mouse cursor into the component bar, and **Cut** the last *listA* component.
- ✓ **Paste** it between the two components with text in them.
The component that you pasted becomes 9, and the one that used to be 9 becomes 10.

To make your list look like the list in Figure 14-5, you must change the tab settings and the **First Indent** setting for *listA* components. These changes will realign the text of the components and place the autonumbers in the left margin.

To change the First Indent:

- ✓ Select a *listA* component, and open its property sheet.
- ✓ Display the Format sheet.
- ✓ Position the caret in the box opposite First Indent, and type **-.35**.
- ✓ Press the TAB key to confirm.
- ✓ **Global Apply** the change.

To change a tab setting:

- ✓ Display the Tab sheet.
- ✓ Point the mouse cursor at each of the **Remove** boxes except the top three, and click the left button to remove the settings.
It is not necessary to do this, but removing the tab settings you do not need makes it much easier to see the settings on the sheet that you are interested in.
Since you have already inserted tabs with .75 and 1.50 settings, you will leave these two settings as markers. You will need the 0 setting.
- ✓ **Global Apply** the change.
- ✓ Position the property sheet caret in the box with 0.75 in it.
- ✓ Set a *Right* tab at -.10.
- ✓ **Global Apply** the change.
The hyphens after the numbers line up. The text lines up at the left component margin.
The tab set at 1.50 is no longer necessary and you can remove it if you like.
- ✓ **Close** the property sheet.

Finally, you will add an item to the list.

To create a new instruction:

- ✓ Create a *listA* component at the end of the series.
- ✓ Press the TAB key.
- ✓ Create a *ListA* autonumber.
- ✓ Press the TAB key.
- ✓ Type **Let cakes cool in pan for 20 minutes before turning them out onto cake racks.**

Creating an Outline

The outline in Figure 14-7 was created using three different types of components.

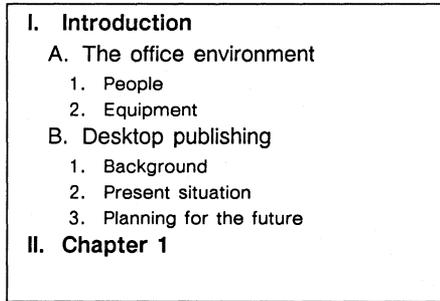


Figure 14-7. Outline

Each of the three types of components is associated with one of the three levels of the outline.

- The *Level1* components have 0 margins all around and a First Indent of 0. Their font is Modern 10 point bold, and they have a tab set at 0.25.
- The *Level2* components have the same settings except for a Left Margin of .15 and a font of Modern 10 point roman.
- The *Level3* components have the same settings except for a Left Margin of .30 and a font of Modern 8 point roman.

To create components with new properties:

- ✓ Create a *list* component below the fourth *title* component, and open its property sheet.
- ✓ Replace the Tabs sheet with the Format sheet.
- ✓ Change its name to *Level1*, and change the settings to reflect the ones listed for *Level1*.
- ✓ **Apply** the changes.
Only this one component is changed to a Level1.
- ✓ **Close** the property sheet.
- ✓ Create another *Level1*, change its name to *Level2*, and change its Left Margin and font to reflect the ones listed for *Level2*.

- ✓ **Apply** the changes.
- ✓ **Close** the property sheet.
- ✓ Create another *Level1*, change its name to *Level3*, and change its Left Margin and font to reflect the ones listed for *Level3*.
- ✓ **Apply** the changes.
- ✓ **Close** the property sheet.

Before your outline will be set up to look like the one in Figure 14-7, you need to change the way the autonumber stream you are going to use is represented. First, though, you will enter the stream as it now is, so that you can see what the change means.

To enter autonumbers for different levels:

- ✓ With the text caret positioned at the beginning of the *Level1* component, hold down the **middle** mouse button to see the Text Location Selected popup menu.
- ✓ Slide the cursor onto the Create submenu, the Auto # submenu, and the Outline submenu.
- ✓ Release the button when **Insert Level 1** is highlighted.
The autonumber looks just as the Level 1 number does in Figure 14-7.
- ✓ With the text caret positioned at the beginning of the *Level2* component, hold down the **middle** mouse button to see the Text Location Selected popup menu.
- ✓ Slide the cursor onto the Create submenu, the Auto # submenu, and the Outline submenu.
- ✓ Release the button when **Level 2** is highlighted.
This autonumber does not look as the Level 2 number does in Figure 14-7.
- ✓ Repeat the last three steps for a **Level 3** outline autonumber.

In order to make the autonumbers look like the ones in Figure 14-7, you need to change two settings on the Autonumber Stream property sheet.

To open the Autonumber Stream property sheet and change autonumber properties:

- ✓ With nothing selected, hold down the **middle** mouse button, and slide the cursor onto the Create submenu, the Auto # submenu, and the Outline submenu.
- ✓ Release the button when **Props** is highlighted.
The Autonumber Stream property sheet appears on your screen (Figure 14-8).

| Autonumber Stream Properties | |
|------------------------------|-------------|
| Stream Name: | Outline |
| Levels: | 3 |
| Level One | |
| Symbol Type | UPPER ROMAN |
| Prefix | |
| Suffix | . |
| Starting Value | 1 |
| Last Only | Yes No |
| Show | Yes No |
| Level Two | |
| Symbol Type | UPPER ALPHA |
| Prefix | |
| Suffix | . |
| Starting Value | 1 |
| Last Only | Yes No |
| Show | Yes No |
| Level Three | |
| Symbol Type | ARABIC |
| Prefix | |
| Suffix | . |
| Starting Value | 1 |
| Last Only | Yes No |
| Show | Yes No |

Figure 14-8. Autonumber Stream property sheet

- ✓ Change the *Last Only* setting for Level Two and Level Three to **Yes**.
- ✓ **Apply** the changes.
The autonumbers in the Level2 and Level3 components will have only the numbers at their own level and not those at the levels above them.
- ✓ Close the property sheet.

You are now ready to enter the text. Remember to press the TAB key after each autonumber. Finish the outline by using the same method you used to create a list item by item.

Chapter 15

Text-Anchored Frames

A *frame* is an area in a document set aside for diagramming activities. There are two basic types of frames, text-anchored frames and header/footer frames. In this chapter, you will learn about text-anchored frames. The primary topics are

- creating text-anchored frames
- creating frame master definitions
- using the **Shared Contents** property

For a full discussion of all the properties of text-anchored frames and their effect on page makeup, please see the chapter *Text-Anchored Frames* in Volume 1 of the *Reference Manual*. Header/footer frames are discussed later in this manual in a chapter of their own and in Volume 1 of the *Reference Manual* in the chapter *Header and Footer Frames*.

To prepare for the exercises in this chapter, open the document *frames* in the *Training* folder. So that you can see the frames in the document, the content of each frame is a box.

The exercises in this chapter assume that you are familiar with the discussion of master definitions in the chapter *Property Sheets and Masters*.

Frame Anchors

A *frame anchor* is the reference point in text for a frame, and it changes position if you add or delete text before it. A frame anchor looks like this: . The effect of the movement of an anchor on its frame depends on the *Placement* property of the frame.

There are five possible placements for text-anchored frames:

- At Anchor
- Following Anchor
- Following Text
- Top
- Bottom

Because At Anchor frames are placed at their anchors, you never see their anchors.

All other kinds of text-anchored frames are placement frames; i.e., Following Anchor frames are placed after their anchors, Bottom (of Page or Column) frames are placed at the end of a page or column, and so on. By default, the anchors of placement frames are visible on your screen although they are not printed. Following Anchor, Following Text, and Bottom frames are always placed after their anchors. Top frames can come before or after their anchors depending on where their anchors are and where there is room for them.

In the document *frames*, there are frames with three placements: At Anchor, Following Anchor, and Bottom.

To select a frame:

- ✓ Point the mouse cursor into the frame you want to select, and click the **left** mouse button.
The selected frame is black. This selection method works for At Anchor and page placement frames alike. The alternative method works only with page placement frames.

or ✓ Position the text caret on one side of a visible anchor, hold down the **right** mouse button, and move the mouse to highlight the frame anchor. Release the button.

Creating Frame Master Definitions

Frames, like components, have names. Each newly created frame inherits the properties of the master definition for frames of its name.

The document *frames* that you have opened is the default document with text and three frames in it.

When you create a default document, it does not contain any actual frames, but it does include the master definitions for six frames, and the names of these six frames appear on the Frame submenu of the Text Location menu for the default document (Figure 15-1).

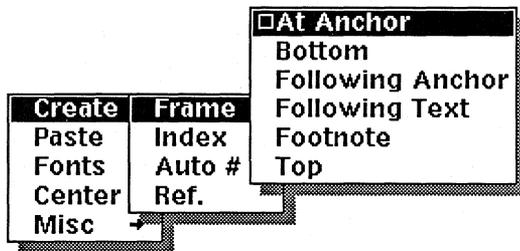


Figure 15-1. Frame submenu

Just as you can use the one *paragraph* component in the default document to construct components with different names and varied properties, you can use the default frames to create frames with different names and varied properties.

When you give a new name to a frame on its Frame property sheet, this name will subsequently appear on the Frame submenu. For example, in some organizations, all technical illustrations must be the same size and appear in the same relationship to the text. The writer can name one frame *techillo* and specify its precise dimensions and placement. The name change creates a new master definition. From then on, the name *techillo* will appear on the Frame submenu. Whenever the writer creates a *techillo* frame, it will have the correct dimensions and be in the correct relationship to the text.

If, at some later time, there is a decision to change the size or the placement of *techillo* frames, the writer can make the change on the property sheet for one *techillo* and globally apply the change. All *techillo* frames and the master for *techillo* frames will change accordingly.

You could create a new master frame by changing the name and properties of one of the frames already in *frames*. However, to see the process from the beginning, you will create a new frame and change its name and its size. We shall assume that you want to create a frame that will always be placed at the top of a page or column.

To create a new frame master:

- ✓ Position the text caret at the beginning of the third *paragraph* component.
- ☐☐ Hold down the **middle** mouse button.
- ☐☐☐ Slide the mouse cursor onto the Create submenu and the Frame submenu.
- ☐☐☐ Release the button when **Top** is highlighted.
The anchor and the frame are highlighted to show that the frame is selected.
- ☐☐☐ Hold down the **middle** mouse button to see the Text Selected popup menu.
- ☐☐☐ Release when **Props** is highlighted.

Figure 15-2 shows the property sheet for the frame named Top.

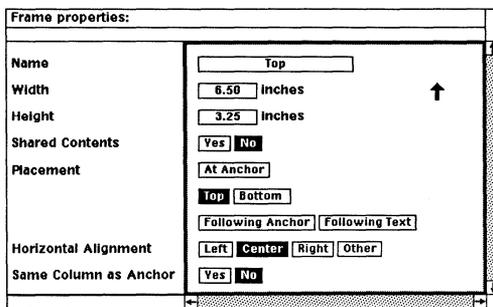


Figure 15-2. Frame property sheet

- ✓ Position the property sheet text caret in the name field.
- ☐ Type **techillo**.
When you start typing, Top is automatically erased.

If you begin the names of your own frames with lower-case letters, they will appear on the Create Frame submenu below the names of the default frames. Then you will have to look only at the top of the menu when you want to create a default frame and only at the bottom when you want to create one of your own frames.

- ☐ Press the **TAB** key to confirm the entry and move the caret to the *Width* field.
- ☐ Type **4**, and press the **TAB** key to confirm the entry and move the caret to the *Height* field.
- ☐ Type **2**.
- ☐ Press the **TAB** or **RETURN** key to confirm the entry.

*It does not matter which of these keys you use since there are no additional fields into which you can type. The **TAB** key will move the caret back to the Name field while the **RETURN** key will leave it in the height field.*

- ☐☐☐ Click the **middle** button to apply the changes.
A message appears in the status line: Created the master definition for: 'techillo'.
- ☐☐☐ Click the **middle** button again to **Close** the property sheet.
- ☐☐☐ Hold down the **middle** button again.
- ☐☐☐ Release the button when **Deselect** is highlighted.

To see the new entry on the frame submenu:

- ☐☐☐ Hold down the **middle** mouse button, and slide the cursor onto the Create submenu and the Frame submenu.
- ✓ Slide the cursor off the menus, and release the button.

Relationship between Names and Placement of Frames

A document can have a large number of component and frame names, but there are only three **Alignment** settings for components and five **Placement** settings for frames.

In the beginning, the names of the frames on the Frame submenu represent the five possible placements for frames (a Footnote frame is just a special kind of Bottom frame). That is, if you create a Top frame, its placement will be at the top of the page or column, and if you create a Bottom frame, its placement will be at the bottom of the page or column.

However, the names of frames are separable from their placement, so that — although we do not recommend it because of the confusion it would almost inevitably cause — you *could* name a frame that always appears at the top of a page *Bottom*.

Text-Anchored Frames

Since the six initial frame names are easily associated with their placement, we recommend that you change neither their names nor their placements and that you not purge any of their masters even if you do not expect to use them. It is fairly easy to reconstruct all these frames, but it is a little like reinventing the wheel.

Because the settings on all Frame property sheets are entirely under the control of users, you can change the default size of the default frames if you know that another size is more typical of the illustrations you will use.

The Location of Frames

When you create a frame, an anchor is placed at the location of the text caret. Frames are always placed as close to their anchors as possible.

The exact location of a frame is determined by the location of its anchor and the **Placement** setting on its property sheet and by the location of the anchors for other nearby frames.

A frame with an At Anchor placement is indistinguishable from its anchor. If there is not room for a frame with At Anchor placement on the page or in the column where the **Create Frame** command is issued, the frame and everything that follows it will move to the next page or column.

It may not always be possible for frames with other placements to be on the same page or in the same column with their anchors. Unless the **Same Column As Anchor** setting on its property sheet is turned on, a frame may be on the page after or in the column after its anchor.

To see how frames and anchors are related:

- ✓ Position the text caret after the anchor for the Footnote frame.
- ☐☐ Hold down the **middle** mouse button to see the Text Location popup menu.
- ☐☐☐ Slide the mouse cursor onto the Create submenu and the Frame submenu.
- ☐☐☐ Release the button when **Bottom** is highlighted.
The anchor for the Bottom frame stays on page 1, but the frame is placed on page 2.
- ✓ Cut the anchor for the Bottom frame, and paste it before the anchor for the Footnote frame.
Both anchors and both frames move to the next page because the anchor for the Footnote frame must be on the same page with its anchor, so everything that follows it moves.

Frame Property Sheet

The properties of a frame are determined by the settings on its Frame property sheet. Figure 15-3 shows the property sheets for two of the default frames.

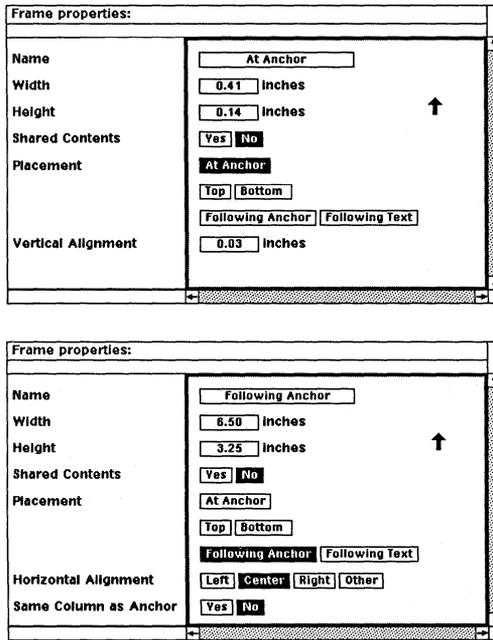


Figure 15-3. Frame property sheets

The property sheets for frames with a **Placement** setting of **At Anchor** look like the top sheet, while the property sheets for frames with all other **Placement** settings look like the bottom sheet.

Because **Shared Contents** is the most complex property of frames, we deal with it in some detail.

Shared Contents for Frames

A frame can share its contents with other frames of the same name. For example, on the first page of this chapter there is a note with a horizontal line above and below it. These lines are in frames that share the same contents — a horizontal line.

There are a number of advantages to sharing contents:

- When you create a frame whose master has **Shared Contents** turned *on*, the contents of the master automatically become the contents of each new frame with the same name, so you do not have to look around for a frame with the contents you want and copy them.
- If you change the contents of one frame with **Shared Contents** turned *on*, you change the contents of all the frames with the same name that have **Shared Contents** turned *on* and of the master definition for that frame if the master has **Shared Contents** turned *on*.
- Sharing contents saves space on the disk where your documents are stored. If there were 20 identical horizontal lines in this document and we could not share contents among them, all 20 lines would have to be stored individually. With **Shared Contents**, only one line has to be stored.
- Sharing contents saves time when a document is being loaded and when it is being saved since the contents of only one frame must be loaded and saved.

Any changes you make to the *settings* on a Frame property sheet can be canceled or reset. However, when you change the **Shared Contents** setting, you may be irrevocably changing the *contents* of one or more frames of the same name and of the master definition for the frame. Stickup menus inform you of exactly what will happen when you choose a particular course.

Before you use *Shared Contents* for serious work, become familiar with the implications of using this feature.

The diagram in Figure 15-4 shows you how frames and their masters are initially related.

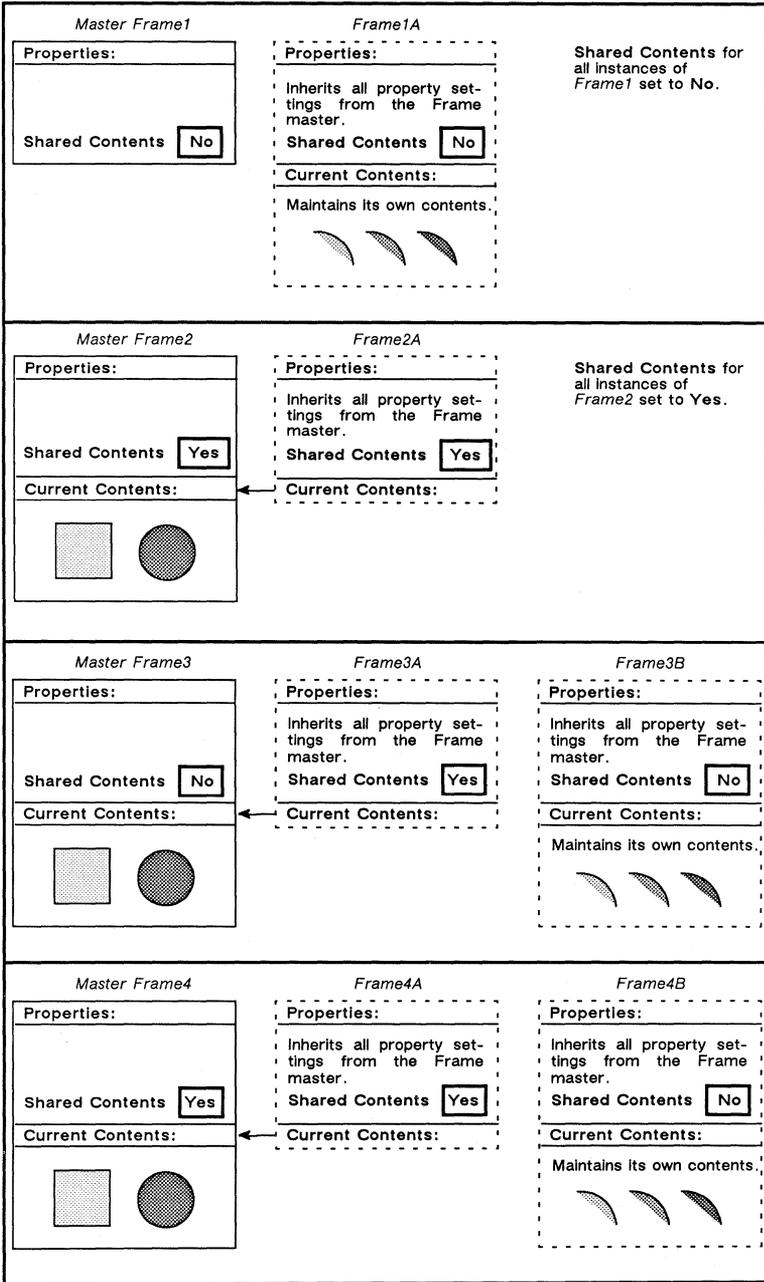


Figure 15-4. Master frame definitions with frames

Chapter 16

Introduction to Diagramming

There are too many complex aspects to the diagramming system to cover them all — even in passing — in the training manual. In this chapter and the two that follow, you will find a discussion of the basic concepts of the system and exercises using many of the commands. When you are ready to add to your diagramming repertoire, please see the diagramming section in Volume 2 of the *Reference Manual*.

This chapter deals with creating individual objects and using the following commands:

- **GridAlign**
- **Gravity**
- **Size**
- **Move**
- **Dup(licate)**
- **Rotate**
- **Fill**
- **Width**

In the next chapter *Modifying Diagrams*, you will take existing diagrams and modify them using the following commands:

- **Group and Ungroup**
- **Undo**

You will also use the **Create Poly**, **Front and Back**, and **Locks** commands and several selection methods.

In the chapter *Text in Frames*, you will learn to handle text in diagrams. For additional information about text in diagrams, please see the chapters *Text in Frames* in Volume 1 and *Text as a Diagramming Object* in Volume 2 of the *Reference Manual*.

The exercises in this chapter assume that you know how to create a frame and change its dimensions. If you do not, please see the chapter *Text-Anchored Frames*. They also assume that you know about the clipboard. If you do not, see the chapter *The Clipboard*.

To prepare for the exercises in this chapter, open *diagrams* which is in the *Training* manual folder on your desktop. *Diagrams* contains one empty component, one component with an illustration of a ship in it, and one with the illustration from *stripes* in it. *Diagrams* was saved with the ship illustration open. An open frame is surrounded by a thick grey border.

Opening and Closing Frames

The two frames in *diagrams* are placed At Anchor. You select a frame with At Anchor placement by pointing the mouse cursor at it and clicking the left mouse button one time. You open a selected frame with At Anchor placement by pointing the mouse cursor at it and clicking the left mouse button a second time.

This is always the quickest way to select any kind of frame if the frame is visible on your screen. However, if a frame has an anchor and only the frame anchor is visible on your screen, you can use the left and right buttons to select the anchor, and then point the mouse cursor at the anchor and click the left button. The document will scroll to the open frame.

You can open the illustration from *stripes* without closing the ship illustration.

To open a frame without first closing another:

- ▲ Point the mouse cursor at the illustration from *stripes*.
- ☐☐ Click the **left** button once to select the frame. *The frame with the ship illustration in it is automatically closed and deselected.*
- ☐☐ Click the left button again to open the frame.

Sometimes, you do want to close a frame and deselect it because you want to do something like add text right next to the frame and closing and deselecting the frame is the easiest way to position the cursor where you want it.

To close and deselect a frame:

- ☐☐☐ With the illustration from *stripes* open, hold down the **middle** mouse button to see the Diagramming Nothing Selected popup menu (Figure 16-1).

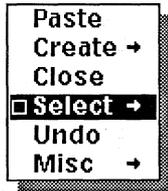


Figure 16-1. Diagramming Nothing Selected popup menu

- ☐☐☐ Release the button when **Close** is highlighted. *The frame is in reverse video to show it is still selected.*
- ☐☐☐ Hold down the **middle** mouse button again.
- ☐☐☐ Release the button when **Deselect** is highlighted.

Preparing to Create a Diagram

Because the diagramming system lets you control the location and size 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. Therefore, 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 16-2.

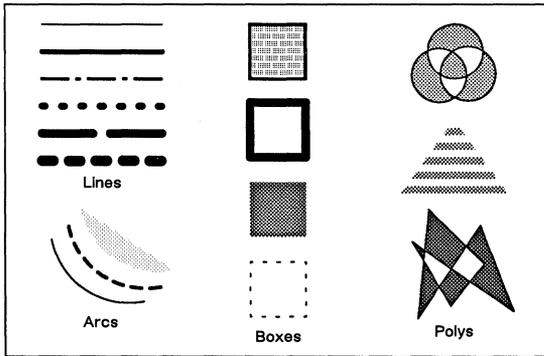


Figure 16-2. Collection of objects in a diagram

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:

- ✓ In the empty *user* component in *diagrams*, create a frame, and give it a width of at least 4 inches and a height of at least 3 inches.
- ☐☐☐ With the mouse cursor in the frame, click the **left** button.
The frame is opened.

Using Grid, GridAlign, and Gravity

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

By default, the grid is *off*, i.e., not visible, and GridAlign and Gravity are both *on*. This is their state in the two diagrams in *diagrams*.

So that you can see how Grid and GridAlign work as you do the exercises in this chapter, display the grid in the frame you have just created.

To turn the grid on:

- ✓ Hold down the **middle** button and slide the mouse cursor onto the Misc submenu and the Grid submenu (Figure 16-3).

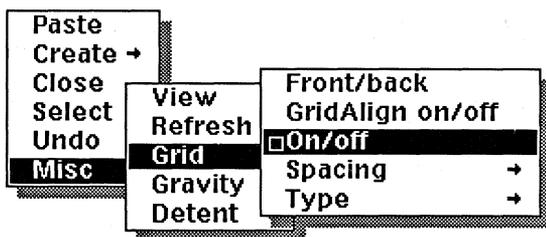


Figure 16-3. Grid submenu

- ☐☐☐ Release the button when **On/off** is highlighted. A grid appears in the frame (Figure 16-4). By default, the grid will be on top of the objects you create. If you find this distracting while you work, use the **Front/back** command on Grid submenu to put the grid behind the objects.

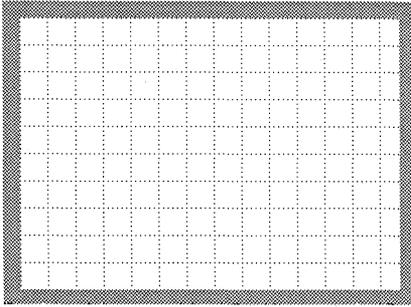


Figure 16-4. Frame with Grid on

The default grid has more points than you can see because the grid on your screen actually displays only one out of every six grid points. You can change the number and spacing of grid points and the type of grid, but that will not be necessary for the exercises in this manual.

You can have the grid visible — without having `GridAlign` on — and use it only as a visual aid for aligning objects. When `GridAlign` is turned on, the grid gives you more aid because objects align to the grid each time they are moved or sized. This is true whether or not the grid is visible.

Gravity helps you align objects by forcing two objects that are very near each other to connect. When you want to ensure that the closely placed ends of two lines connect, make sure `Gravity` is *on* before moving one towards the other. Because the diagramming system works best with `Gravity` on, turn it off only with good reason.

Because **Grid Align** and **Gravity** were both on for the frame you closed before you created your new frame, they are on for your frame. When you need to turn them on, follow these instructions.

To turn `GridAlign` and `Gravity` on:

- ☐☐ Hold down the **middle** mouse button.
- ☐☐ Slide the cursor onto the `Grid` submenu of the `Misc` submenu.
- ☐☐ Release the button when **`GridAlign on/off`** is highlighted.

This is a toggle command. When `GridAlign` is off, executing this command turns it on. When `GridAlign` is on, executing this command turns it off.

☐☐ Hold down the **middle** button again.

☐☐ Move the cursor back to the Misc submenu, and release it when **Gravity** is highlighted.

*This is also a toggle command. When **Gravity** is off, executing this command turns it on. When **Gravity** is on, executing this command turns it off.*

For more information about grids, Grid Align, and Gravity, see the *Basic Diagramming Concepts* in Volume 2 of the *Reference Manual*.

Creating Lines, Boxes, Ovals, and Arcs

To create objects in your diagram, you will use the Create submenu of the Nothing Selected popup menu (Figure 16-5).

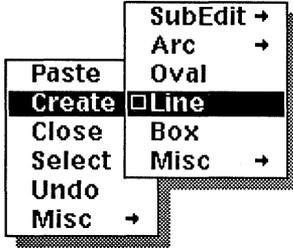


Figure 16-5. Create submenu

Though there are six choices on the submenu, for now you are interested only in *lines*, *boxes*, *ovals*, and *arcs*. In the next chapter, you will use the **Poly** command on the SubEdit submenu, and in the chapter *Text in Frames*, you will use the **Text** command on the Misc submenu.

To create an object:

- ↖ Point the diagramming cursor at the place where you want the object.
- Hold down the **middle** button, and slide the mouse cursor onto the Create submenu.
- ☐☐☐ When **Line** is highlighted, release the button.

When you first create an object, it appears in its simplest form, and it is still selected. If you were to move the mouse without holding down any of the mouse buttons, you could change the size of any newly created object. At the moment, you want to *create* and *deselect* one line, one box, one oval, and one arc along the top of the frame (Figure 16-6).

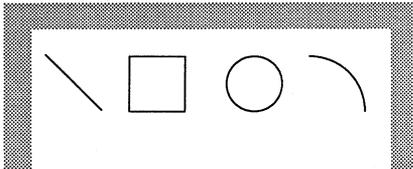


Figure 16-6. Newly created objects near top of frame

To deselect a newly created object:

- ☐☐☐ Click the **middle** mouse button.

Since Deselect is the default on the Object Selected popup menu when you have just created an object, you can click the button rather than hold it down to see the menu.

Sizing Objects

Objects can be sized in a variety of ways as the Size submenu in Figure 16-7 suggests. But the basic process is the same regardless of which particular command you choose.

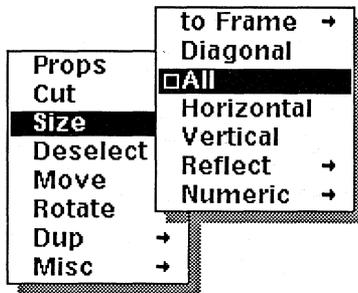


Figure 16-7. Size submenu

Where the mouse cursor is pointing when you choose one of the **Size** commands determines how the object is controlled and anchored.

- **Control points** are places on an object that can be used to control changes to the object. The **active control point** is the particular point on an object through which changes are controlled. The active control point is represented by the symbol ☐. Basically, the control point nearest the cursor when you select the **Size** command becomes the active control point.
- The **anchor point** marks the point on an object that is stationary when you size an object. A control point that is complementary to the active control point is chosen by the system as the anchor point. The anchor point is represented by the symbol ><.

There are many subtleties to the control and anchor points, particularly as they apply to arcs and complex objects. See *Modifying Diagrams* in Volume 2 of the *Reference Manual* for more information.

To size an object in the diagramming system:

- ✓ Point the mouse cursor at the line, and click the **left** button to select it.
The line blinks to show that it is selected.
- ↙ Make sure the cursor is pointing closer to the lower end of the line than the higher, so that you can size it from the lower end.
- ☐☐☐ Hold down the **middle** button and move the mouse cursor on the menu until **Size** is highlighted.
- ☐☐☐ Slide the cursor onto the submenu.
- ☐☐☐ Release the button when **All** is highlighted.
The line is anchored at its upper end, and you can size it from its lower end.
- ☐☐☐☐ Move the mouse on the pad until the line is horizontal.
Depending on how you move the mouse, the length of the line may be changed.
- ☐☐☐☐ Click the **middle** button to **Deselect**.
*After a **Size** command, **Deselect** is always the default.*

Duplicating Objects

One way to create the rest of the lines, boxes, ovals, and arcs in Figure 16-2 is to duplicate the ones you have created. Follow the procedures given below for duplicating objects to make the diagram resemble the one in Figure 16-8.

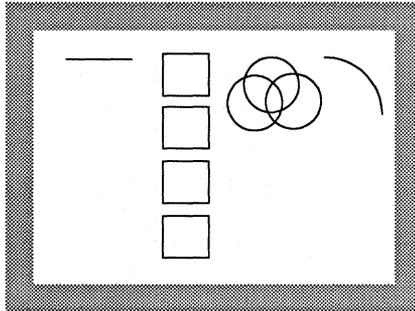


Figure 16-8. Duplicated objects

To duplicate an object:

- ↖ Select the oval by pointing at its border and clicking the left mouse button.

The default objects have no fill pattern and must be selected somewhere on their borders. Filled objects can be selected by pointing into the fill.

- ✓ Display the Dup submenu (Figure 16-9).

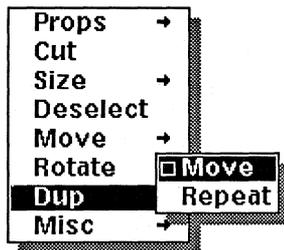


Figure 16-9. Dup submenu

- ☐☐☐ Release the **middle** button when **Move** is highlighted.

The first oval is automatically deselected, and a duplicate of it is created exactly on top of the first oval. Because the duplicate is on top of the first oval, neither oval is visible. Only the control point of the duplicate oval is visible. The duplicate is selected and ready to be moved. It moves as you move the mouse.

- ✔ When the oval is where you want it, **Deselect** it.
- ✔ Repeat this procedure to make another duplicate of the oval.

When you know that you are going to make multiple copies of an object, you do not need to deselect the objects as you duplicate them.

To make multiple duplicates of an object:

- ✔ Select the box, and display the Dup submenu.
- ☐☐☐ Release the **middle** button when **Move** is highlighted.
- ☐☐☐ Move the mouse to move the duplicate box down in the diagram.
- ☐☐☐ When the box is where you want it, hold down the middle button again.
- ☐☐☐ On the Dup submenu, release the button when **Repeat** is highlighted.

*This command duplicates the box and repeats the last command, in this case **Move**.*
- ✔ Move this duplicate box down in the diagram.
- ☐☐☐ When this box is where you want it, click the **middle** button to **Repeat** the command.
- ✔ Move this duplicate box further down in the diagram.
- ☐☐☐ When this box is where you want it, hold down the **middle** button.
- ☐☐☐ Move the mouse cursor to **Deselect**, and release the mouse button.

A number of the **Move** commands give you more control than **Move All**. In the next exercise, you will duplicate the line in your diagram and move the duplicate along only one axis. After you finish, your diagram will look like the diagram in Figure 16-10.

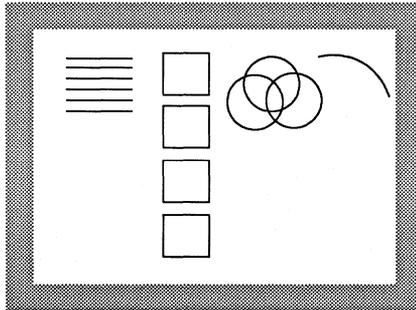


Figure 16-10. Adding objects to diagram

To limit the movement of objects:

- ✓ Select the line and **Dup** it, but do not move the mouse yet.
- ✓ Hold down the **middle** mouse button, and slide the mouse cursor onto the Move submenu.
- ☐ Release the button when **Vertical** is highlighted (Figure 16-11).

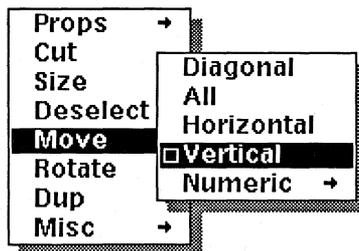


Figure 16-11. Move submenu

- ☐ Move the mouse.
Regardless of how you move the mouse, the line moves only up and down.
- ☐ When the duplicate line is where you want it, hold down the **middle** button.

- ☐☐☐ Release the button when **Repeat** on the Dup submenu is highlighted.
A duplicate of the line is created, and the last command you used is repeated. Since the last command was Move Vertical, you will again be able to move the mouse only up or down.
- ☐☐☐ When the duplicate line is where you want it, click the **middle** mouse button.
Dup Repeat is the default, so a line that you can move only up or down is created.
- ☐☐☐ Move the mouse until this duplicate line is where you want it.
- ✓ Repeat the previous two steps two more times.
- ✓ Hold down the **middle** mouse button, and slide the mouse cursor back onto the main menu.
- ☐☐☐ Release the button when **Deselect** is highlighted.

Changing the Properties of Objects

The three commands on the Props submenu that you will use in this section are **Fill**, **Width**, and **Dashes** (Figure 16-12).

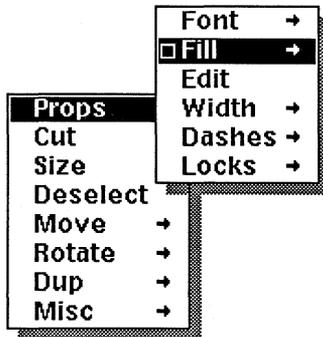


Figure 16-12. Props submenu

To change the fill pattern of an object:

- ✓ Select the top box.
- ☐☐ Move the mouse cursor to **Props**.
- ☐☐ Slide the mouse cursor onto the Props submenu and from there onto the Fill submenu (Figure 16-13).

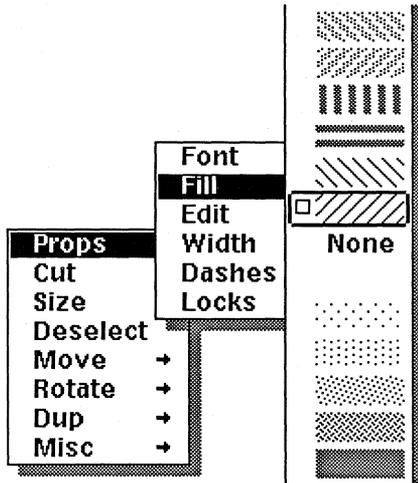


Figure 16-13. Fill submenu

- ☐ Choose a texture for the box, and release the mouse button.

The box now has the Fill you assigned it, and the box is automatically deselected. While many of the other diagramming commands leave the object selected, all the commands on the Props submenu automatically deselect the object.

- ✓ Select the other boxes, and give them fills.

To change the width of a line:

- ✓ Select the second line from the top.
- ✓ Hold down the **middle** mouse button, and slide the mouse cursor onto the Props submenu and the Width submenu (Figure 16-14).

Notice that the lines are not highlighted as other commands are because highlighting would obscure the entries on this menu.

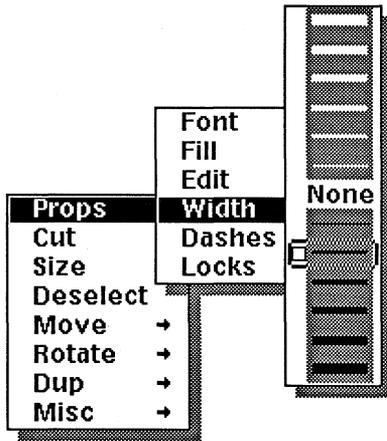


Figure 16-14. Width submenu

- ☐☐☐ Release the button when the second thinnest black line is selected.

The width of the line changes and the line is automatically deselected.

To change the width of a line and make it a dashed line:

- ✓ Select the third line from the top.
- ✓ Hold down the **middle** mouse button, and slide the mouse cursor onto the Props submenu and the Width submenu.
- ☐☐☐ Release the button when one of the thickest black lines is selected.
The width of the line changes, and the line is automatically deselected.
- ✓ Select the line again.
- ✓ Hold down the **middle** mouse button, and slide the mouse cursor onto the Props submenu and the Dashes submenu (Figure 16-15).

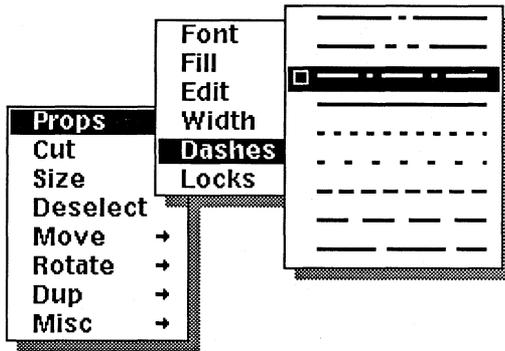


Figure 16-15. Dashes submenu

- ☐☐☐ Release the button when the third line of dashes from the top is highlighted.
- ✓ Select the other three lines and change their widths and give them different dashed patterns.
- ✓ Select each of the boxes, and change the width and dashes of its lines.

Combining Diagramming Commands

As you have already seen, there are commands — such as **Fill**, **Width**, and **Dashes** — that automatically deselect the object and others — such as **Dup** — that do not. As you have also seen, you can use these commands in combinations. It is sometimes worthwhile to think ahead and figure out how to do the greatest number of operations before deselecting.

The arc that is in the upper right-hand corner of the diagram needs to be moved to the lower left and duplicated twice. The three arcs need to be rotated. The middle one needs to have its **Width** and **Dashes** changed, and the bottom one needs to have its **Width** and **Fill** changed.

You cannot do all these things without a pause, but the following exercise shows how to get one selection to accomplish three of the tasks.

To combine commands:

- ✓ **Move** the arc until it is below the lines on the left of the diagram.
- ☐☐☐ Hold down the **middle** mouse button.

- ☐☐☐ Release the button when **Dup** is highlighted.
- ☐☐☐ Move the mouse until the second arc is where you want it.
- ☐☐☐ Hold down the **middle** mouse button again.
- ☐☐☐ Release the button when **Dup** is highlighted.
- ☐☐☐ Move the mouse until the third arc is where you want it.
- ✓ Hold down the **middle** mouse button, and slide the mouse cursor onto the Props submenu and then the Fill submenu.
- ☐☐☐ Select a fill pattern for the arc, and release the button.
The arc is filled and deselected.

The rest of the commands you need to use on the arcs automatically deselect them. The only command that is new to you is **Rotate**, so it is the only one for which you will be given instructions.

To rotate objects:

- ✓ Select the three arcs.
Remember that you use the left button to select the first object and the right button to select additional objects.
- ✓ Hold down the **middle** mouse button, and slide the cursor onto the Rotate submenu (Figure 16-16).

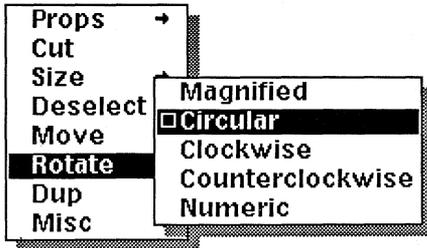


Figure 16-16. Rotate submenu

You could use any of the commands except **Magnified** to reverse the direction of the arcs. But the quickest and most efficient is **Numeric**.

- ✓ Release the button when **Numeric** is highlighted. You will see a stickup menu in which to type the angle of rotation.
- ✓ Type **180**, and **Confirm**. In response, the three arcs change direction.

When you have finished changing the fill patterns, widths, and dashes, your diagram will look something like the one in Figure 16-17.

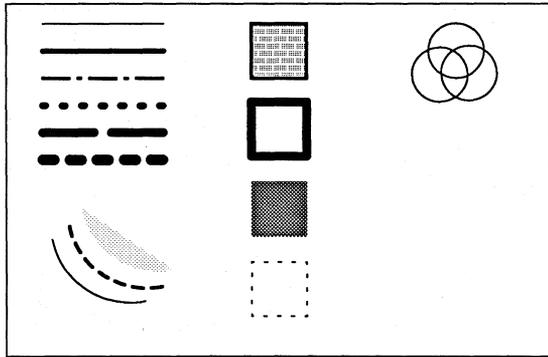


Figure 16-17. Collection of objects in a diagram

You will use this same diagram for the some of the exercises in the next chapter, so **Save** the document when you **Close** it.

Chapter 17

Modifying Diagrams

In this chapter, you will take existing diagrams and modify them. The commands you will use are

- **Undo**
- **Group and Ungroup**
- **Create Poly**
- **Front and Back**
- **Locks**

To prepare for these exercises, open the document *diagrams*. There are three diagrams in this document: the one you created during the exercises in the last chapter, an illustration of a ship, and the illustration from *stripes*. You will use all three.

Reversing Changes to Objects

In the diagramming system, it is possible to reverse certain changes. For example, if you move an object and then decide you do not like the new placement, you can cancel the change by using the **Undo** command on the Nothing Selected popup menu. **Undo** works on only the most recent operation(s).

To reverse a command:

- ✓ Select and **Open** the frame with the ship in it.
- ↘ Select one of the smokestacks.
- ☐☐☐ Hold down the **middle** button to display the Object Selected popup menu.
- ☐☐☐ Release the button when **Move** is highlighted.
Move All is the default command.
- ✓ Move the smokestack into a corner of the diagram.
- ☐☐☐ Hold down the **middle** button again.
- ☐☐☐ Release the button when **Deselect** is highlighted.
Deselect is the default after Move, Size, and Rotate commands that do not automatically deselect the object. In the future you can click the middle button.

- ☐☐☐ 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.

You can use **Undo** after you have performed more than one operation, just as long as you have not deselected the object(s) in between commands. The following exercise shows how **Undo** works with multiple commands.

To reverse more than one command:

- ✓ Select one of the smokestacks, and move it into a corner.
- ☐☐☐ Hold down the **middle** mouse button.
- ☐☐☐ Release the button when **Rotate** is highlighted.
- ☐☐☐ Move the mouse to rotate the smokestack.
The default command on the Rotate submenu is Circular, so the smokestack rotates around an anchor in the center.
- ✓ Hold down the **middle** mouse button again, and move the mouse cursor to **Size**.
- ☐☐☐ Release the button.
- ☐☐☐ Move the mouse to size the smokestack.
The default command on the Size submenu is All, so the smokestack grows or shrinks both horizontally and vertically.
- ☐☐☐ Click the **middle** mouse button to deselect the smokestack.
- ☐☐☐ 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 and at its original angle and size.

Grouping Objects

When two or more objects have been grouped together, 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. They may be adjacent or overlapping or scattered anywhere in a diagram.

In the *ship* diagram the three portholes have already been grouped.

To select grouped objects:

- ↖ Point the mouse cursor at any of the portholes and click the **left** button.
All three portholes flash to indicate that the group is selected.
- ✓ Use the **middle** button to choose actions (**Move**, **Size**, etc.) to perform on the group.
- ✓ Deselect the group.

To ungroup objects:

- ✓ Select the portholes.
- ☐☐ Hold down the **middle** button to see the Object Selected menu.
- ☐☐ Slide the mouse cursor onto the Misc submenu (Figure 17-1).

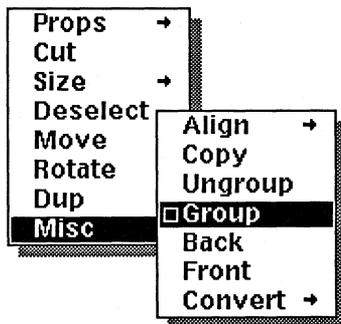


Figure 17-1. Misc submenu

- ☐☐ Release the button when **Ungroup** is highlighted.

- ✓ To see that the portholes are no longer grouped, select one of them.
Only that porthole will flash.
- ✓ Deselect the porthole.

In the next exercise, you will use a **selection box** to select the ovals in the diagram you created. Then, you will group the ovals.

Every object or group that is *completely* inside the selection 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, but not close to other objects you do not want to select.

To group objects:

- ✓ Select and open the diagram you created.
You do not need to close and deselect the ship diagram. When you point at the other diagram and click the left mouse button, the ship diagram will be automatically closed and deselected.
- ↖ Position the mouse cursor above and to the left of the ovals (Figure 17-2).

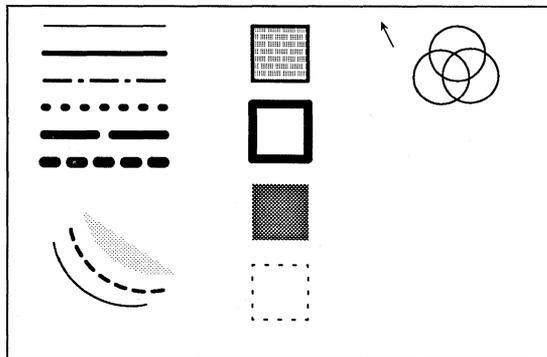


Figure 17-2. The ovals and the mouse cursor

- ☐☐☐ Hold down the **left** mouse button.
The cursor becomes a black triangle.
- ☐☐☐ Continuing to hold down the **left** button, move the mouse to create a box with the three ovals inside.
- ☐☐☐ Release the button.

- ☐ Hold down the **middle** button.
- ☐ Slide the mouse cursor onto the Misc submenu.
- ☐ Release the button when **Group** is highlighted.
Group is the default command on the Misc submenu.
 Therefore, when you want to group objects, you can release the button when **Misc** is highlighted on the main menu.

After you learn about polys in the next section, you will modify this group.

Polys

As you have already seen, individual objects — such as boxes and arcs — can be filled. It is also possible to arrange a group of objects in such a way that they can be filled as a single object. Such a group forms a *poly*.

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

Other objects besides lines can create polys. Figure 17-3 shows polys made with lines and with arcs.

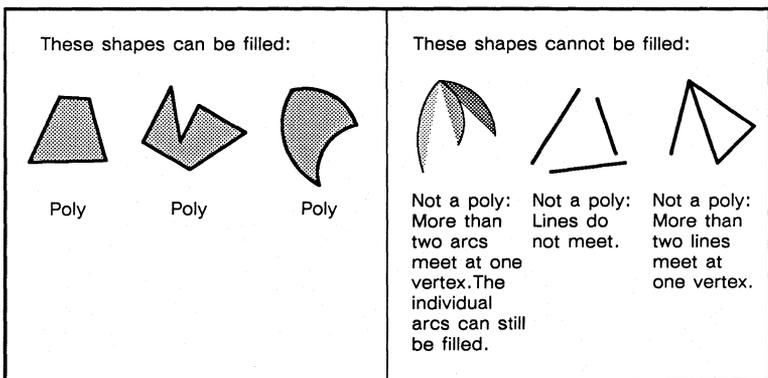


Figure 17-3. Polys and non-polys

If a shape is made up of at least two connected and grouped lines, but two of the end points are not connected to another

line, the system draws an imaginary straight line closing the open end to make the shape a true poly (Figure 17-4).

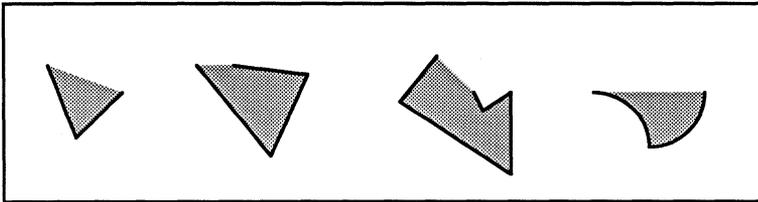


Figure 17-4. Some open-ended polys

In the ship diagram, the triangle on the flagpole is a poly (Figure 17-5).

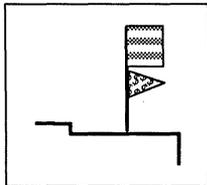


Figure 17-5. Triangular flag in ship diagram

One of the requirements of a poly is that the lines forming it must be grouped. If a collection of objects meets all other requirements for a poly, the objects will be *automatically* grouped if you select and fill them. If you ungroup a poly that is filled, it will lose its fill, as illustrated in the next exercise.

To ungroup a poly:

- ✓ Select and open the frame with the ship in it.
- ✓ Select the triangular flag.
- ☐☐ Hold down the **middle** button, and slide the mouse cursor onto the Misc submenu.
- ☐☐ Release the button when **Ungroup** is in reverse video.

The triangle loses its fill because the ungrouped lines no longer make up a poly.

To fill the triangle again:

- ✓ Select the three lines again.
- ☐☐ Hold down the **middle** button, and slide the mouse cursor onto the Props submenu.

- Slide the mouse cursor onto the Fill submenu, and choose a fill.

If you want the same texture, choose the third fill from the top of the menu.

- ☐☐☐ Release the button.

The diagram you are creating has three polys in it — two made up of lines and one of ovals (Figure 17-6).

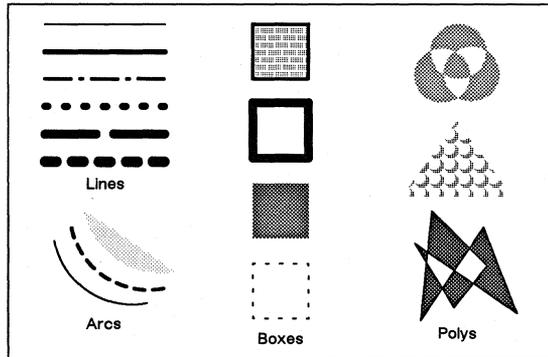


Figure 17-6. Completed diagram

Where parts of a poly overlap, a hole is created that does not fill. This feature is responsible for the holes in the top and bottom polys in Figure 17-6.

In the following exercises, you will create the two polys made up of lines and fill all three polys.

There are several ways to create a poly: you can create shapes and group them (although you did not create the triangular flag in the ship diagram yourself, you did turn the lines back into a poly by grouping them); you can create lines, select them, and fill the space they encompass; or you can use the **Poly** command on the SubEdit submenu of the Create submenu.

To create a poly with individual lines:

- Select and open the diagram you are creating.
- Make sure **Gravity** is *on*, so that lines attach to each other.
- ↘ Point the mouse cursor below the three ovals 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** the line. Do not move the mouse.
- ☐☐☐ Create another line parallel to the bottom of the diagram 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. Size it to connect the other end to the beginning of the first line.
- ☐☐☐ Click the **middle** button to deselect the line.
- ✓ Select the three lines, and choose a fill for them.
Since the lines meet the other requirements for a poly, the software automatically groups the lines when you fill them.

The **Poly** command on the SubEdit submenu of the Create submenu is the easiest way to create a polygon though there are a couple of things for you to be aware of as you use the command:

- Because SubEdits are considered advanced techniques, when you issue the **Poly** command, you will see a stickup menu asking you to confirm that you really want to proceed. For the following exercise, **Confirm**. However, before you use SubEdits for important work, please read the section *The Edit and SubEdit Commands* in the chapter *Advanced Diagramming Concepts* in Volume 2 of the *Reference Manual*.
- When you create a polygon with individual lines, you have to create each line and deselect it. When you use the **Poly** command, every time you click the middle button, the system deselects the current line and creates a new line; therefore, from time to time, it is likely that you will create one more line than you want. If this happens, hold down the middle button, and **Cut** the extra line before you close the SubEdit.

The poly you are going to make should look something like the one in Figure 17-7. The arrow indicates where you should point the mouse cursor when you begin.

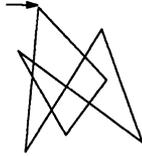


Figure 17-7. A poly

To use the Poly command:

- ↖ Position the cursor below the triangle.
- ☐☐ Hold down the **middle** mouse button to see the Diagramming Nothing Selected popup menu.
- ☐☐ Slide the cursor onto the Create submenu and the SubEdit submenu (Figure 17-8).

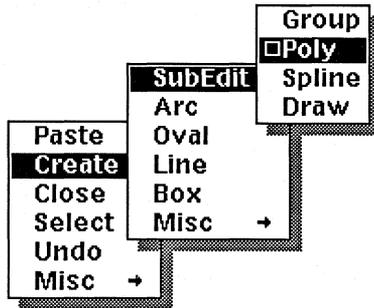


Figure 17-8. SubEdit submenu of the Create submenu

- ☐☐ Release the button when **Poly** is highlighted.
- ↑ **Confirm** that you do want to enter the SubEdit.
The message: Level 1 SubEdit (Use 'Close' to exit): GridAlign on, Gravity on, Detent 15.0 degrees appears in the status line, and the first line of the polygon is created.
- ☐☐ Click the **middle** mouse button.
The first line is deselected, and the second line is created.
- ✓ Size the second line and click the **middle** button.
- ✓ Continue sizing and clicking until you have a polygon resembling the one in Figure 17-7.

- ☐☐☐ Hold down the **middle** button.
- ☐☐☐ Release the button when **Close** is highlighted.
No more lines are created, and the SubEdit message disappears from the status line.
- ✔ Point the cursor at any of the lines, and click the **left** mouse button.
Because the lines were created with the Poly command, they are automatically grouped.
- ✔ Choose a fill for the shape.
Because the lines create intersections that enclose overlapping areas, some parts of the figure do not fill.

In the last exercise, you created a poly with lines that intersected one another somewhat randomly. You can create other polys and fill them in the same way, but more deliberately. You have already grouped the three overlapping ovals in the diagram you created. Now you can make them look like the ovals in the model diagram (Figure 17-9).



Figure 17-9. The ovals

To fill the ovals and give them a line width of none:

- ✔ Select the ovals.
- ✔ Choose a fill for them.
- ✔ Select the ovals again, and give them a line width of **None**.

Using the Front and Back Commands

When you create an object in a diagram, it is put in front of all existing objects. You cannot see that this is true unless the front object is filled and overlaps another object. Then, the one in front will at least partially cover the other. Sometimes you will find objects in back of other objects difficult to select. Other times, you will want to reorder objects for aesthetic reasons.

You can change the order at any time by using the **Front** and **Back** commands on the Misc submenu of the Object Selected popup menu (Figure 17-10).

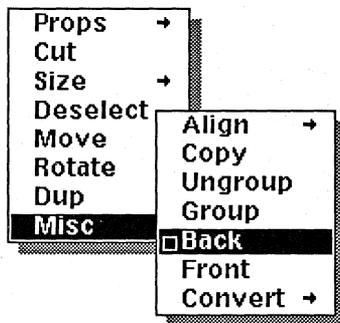


Figure 17-10. Misc submenu of the Object Selected popup menu

To use the Front and Back commands:

- ✓ Select and open the frame with the illustration from *stripes* in it.
- ✓ Point the mouse cursor at a white place, and click the **left** mouse button.
The box blinks to show it is selected.
- ☐☐☐ Hold down the **middle** mouse button.
- ☐☐☐ Slide the mouse cursor onto the Misc submenu.
- ☐☐☐ Release the button when **Front** is highlighted.
The white box comes to the front and completely obscures the black stripes.
- ✓ Select the box again.
- ✓ Hold down the **middle** button again, and release when **Back** is highlighted.

Locks

You can *lock* the ways in which you can change objects. For example, if you want a box always the same size, you can lock its size, so that no one inadvertently makes it larger or smaller. There are more than a dozen locks you can impose on objects, and these are explained in detail in the chapter *Advanced Diagramming Concepts* in Volume 2 of the *Reference Manual*. In this manual, you will learn just the concept of locking.

To set a lock on an object:

- ✓ Select and open the diagram you created.
- ✓ Select one of the boxes.
- ✓ Hold down the **middle** mouse button, and slide the mouse cursor onto the Props submenu, the Locks submenu, and the set submenu (Figure 17-11).

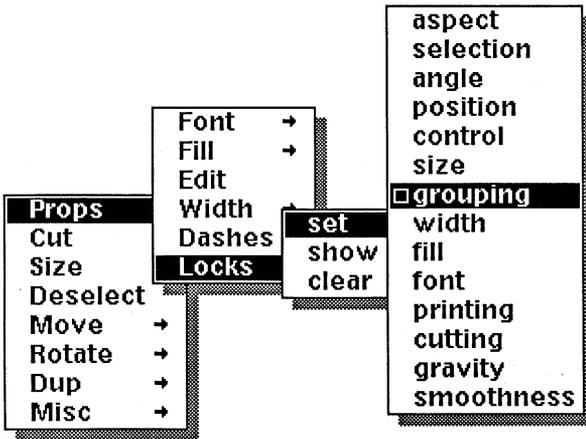


Figure 17-11. Locks submenu

- ✓ Release the button when **size** is highlighted.
- ✓ Select the box again, and **Size** it.
The control point will move in response to your moving the mouse, but the box will remain the same size.

When you clear a lock, you can again change the property that was locked. Graphic designers, particularly, will find many uses for locks.

In the folders in the *Graphics* cabinet in the *Systems* cabinet, there are many documents with useful shapes you can put into your own documents. All of these shapes are locked against cutting, which means that when you cut them to paste them into your document, the **Cut** command acts like a **Copy** command.

A Summary of Diagramming Selection Methods

In this section, there is a review of the selection methods you have already used as well as instructions for other methods.

For convenience, the first two selection methods are followed by appropriate deselection methods, but these deselection methods can be used with any of the selection methods.

Selecting Objects or Groups 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 or group 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.

This method is most useful in the following cases:

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

Deselecting Objects One by One

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

To deselect objects or groups one by one:

- ☐☐☐ Point the mouse cursor at the object or group you want to deselect, and click the **right** button.

Selecting Everything

This method is useful when you want to perform the same action on every object (including text objects) in your diagram. It is also useful when you want to select more objects in a diagram than you want to leave unselected. For example, instead of selecting 97 of 100 objects one by one, you would select them all, and then deselect the three you do not want one by one.

There are two ways to select everything, one using the Object Selected popup menu and the other using the left and right mouse buttons.

To select everything using the Select menu:

- ☐☐☐ Hold down the **middle** button and follow the arrow from **Select** onto the submenu (Figure 17-12).

Again is the default command.

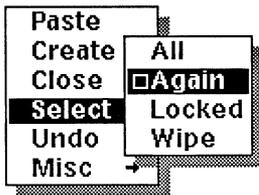


Figure 17-12. Select submenu

- ☐☐☐ Release the button when **All** is in reverse video.
Everything in the diagram blinks to show that it is selected.

To select everything using the mouse buttons:

- ☐☐☐ Hold down the **left** mouse button.
- ☐☐☐ Click the **right** mouse button.
- ☐☐☐ Release the left button.

Deselecting Everything

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

To deselect everything:

- ↖ Keep the cursor inside the diagram, but do not point at any of the objects.
- ☐☐☐ Click the **left** button.
All the objects are now deselected.

Selecting Using the Selection Box

When you hold down the *left* button in diagramming, 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 the mouse was originally pointing, and it can be sized in any direction around this anchor point.

To use the selection box:

- ↖ Position the mouse cursor above and to the left of the top box.
- ✓ Holding down the **left** button, move the mouse down and to the right.
- ☐☐☐ When the top two boxes are inside the selection box, release the mouse button.
- ✓ **Deselect** the boxes.

Select Again

- ✓ Select one of the lines, and **Size** it.
- ✓ **Deselect** the line.
- ☐☐☐ Select the line again by holding down the **middle** button and choosing the **Again** command on the Select submenu (Figure 17-13).

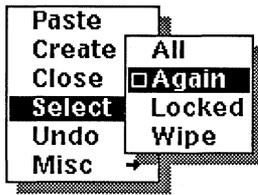


Figure 17-13. Select submenu

The **Select Again** command selects the last object(s) you changed in some way. If you select an object and deselect it without doing anything to it, **Select Again** will have no effect.

Chapter 18

Text in Frames

You can create two types of text objects in frames: *microdocuments* and *text strings*. In this chapter, we deal with:

- creating and editing microdocuments
- copying and pasting between a microdocument and another document
- changing the size of microdocuments

Text strings are discussed in the chapter *Creating a Line Chart*. Both microdocuments and text strings are discussed in full in the chapter *Text in Frames* in Volume 1 of the *Reference Manual* and in the chapter *Text as a Diagramming Object* in Volume 2.

To prepare for the exercises in this chapter, open the document *microdocs* in the *Training* folder on your desktop. The first frame is open.

The Definition of a Microdocument

A microdocument is, quite simply, a document in a frame. When a microdocument is closed, you use diagramming commands to manipulate it. Once you open a microdocument, you edit it the same way you edit any other document. There are two distinctions between microdocuments and other documents.

- The page properties for a microdocument are a subset of document page properties.
- You cannot create or paste a frame in a microdocument.

There are two kinds of microdocuments, variable-width and fixed-width. As the name suggests, the width of a *variable-width microdocument* changes as you add or delete text. The width of a *fixed-width microdocument* cannot be changed by adding or deleting text though it can be resized using the diagramming system or its Page property sheet.

Creating Microdocuments

There are several ways to create a microdocument.

- You can type in an open frame to create a *variable-width* microdocument.
- You can execute the **Create Misc Text** command on the Diagramming Nothing Selected popup menu to create a *fixed-width* microdocument.
- You can paste something that is represented by a document icon on the clipboard into an open frame. This method creates a *fixed-width* microdocument.
- You can paste a microdocument that is represented by a diagramming icon from the clipboard either into an open frame or into ordinary text. Whether this method creates a *variable-width* or a *fixed-width* microdocument depends on which kind of microdocument the icon contained.

In the exercises in the next two sections, you will use the first two methods. You will use the other two methods when you copy and paste microdocuments and portions of microdocuments later in the chapter.

Variable-Width Microdocuments

When you open a frame and just start typing, you create a microdocument that is left-justified and has variable width. This microdocument consists of a *caption* component in the font displayed in the document header when you start typing. As long as this microdocument is no more than one line, its width increases horizontally to accommodate new text you type. If you delete text, the width decreases.

As soon as a microdocument is longer than one line, it becomes a fixed-width microdocument. Its fixed width is the width of the first line.

There are various ways to change a variable-width microdocument to a fixed-width microdocument:

- insert a **RETURN**
- create a second component with either the **Create** command on the Component Location Selected popup menu or **LINE FEED**
- type until the one line is 24 inches wide

- paste enough text into the microdocument so that the microdocument exceeds the 24-inch limit
- use the **Paste** command on the Component Location Selected popup menu
- **Apply** any change on either the Page property sheet or a Component property sheet
- use the **Change** command on the Component Selected popup menu

To create a variable-width microdocument:

- ✓ Change the font in the document header to 12-point Modern roman.
- ↖ Place the diagramming cursor about half an inch below the upper left-hand corner of the open frame.
- ☐ Type your name.
When you begin typing, the message: Microdocument Edit appears briefly in the status line. Because caption is the name of the default component in microdocuments, this name appears in the component bar.
As you type, the bounding box around the microdocument grows horizontally to accommodate text.
- ▣ Hold down the **middle** mouse button.
- ☐ Release the button when **Close** is highlighted.
The Microdocument Edit closes. The frame remains open.

Fixed-Width Microdocuments

A fixed-width microdocument has a fixed page width and cannot be converted to a variable-width microdocument. However, you can change its width by using the **Size** command on the Diagramming Object Selected popup menu or by changing the **Width** setting on the Page property sheet for the microdocument.

The first *caption* component in the first microdocument — fixed- or variable-width — in a document is in the font that is displayed in the document header when the microdocument is created. This font becomes the default font for *caption* components in fixed-width microdocuments.

To create and open a fixed-width microdocument using the popup menu and to enter text in it:

- ↖ Move the diagramming cursor into the middle of the open frame.
- ☐☐ Hold down the **middle** mouse button to see the Diagramming Nothing Selected popup menu.
- ☐☐ Move the mouse cursor on the menu until **Create** is highlighted.
- ☐☐ Slide the mouse cursor onto the Create submenu.
- ☐☐ Move the mouse cursor until **Misc** is highlighted.
- ☐☐ Slide the mouse cursor onto the Misc submenu.
- ☐☐☐ Release the button when **Text** is highlighted.

A gray bounding box three inches wide is displayed. The text object remains selected, so you could immediately size it horizontally if you wanted to. This is an empty fixed-width microdocument. If you deselected it without entering text, the gray bounding box would remain visible on the screen so that you could select it again.

Text is the default on the Create Misc submenu. In the future, when you want to create a microdocument, you can release the button when Misc is highlighted.
- ☐☐ Hold down the **middle** mouse button.
- ☐☐ Move the mouse on the Object Selected menu until **Props** is highlighted.
- ☐☐ Slide the mouse cursor onto the Props submenu.
- ☐☐☐ Release the button when **Edit** is highlighted.

The message: Microdocument Edit appears in the status line. Because caption is the name of the default component in microdocuments, this name appears in the component bar.
- ☐☐☐ Type the following text: **The width of this microdocument is fixed. When the text caret reaches the end of the bounding box, the text wraps to the next line.**

The text is left- and right-justified because this is the default alignment setting for the caption component in fixed-width microdocuments.
- ☐☐ Hold down the **middle** mouse button.
- ☐☐☐ Release the button when **Close** is highlighted.

The Microdocument Edit closes. The frame remains open.

Editing a Microdocument

There are two ways to open a microdocument you want to edit.

- You can select the microdocument and execute the **Props Edit** command.
- When you want to add text, you can point the diagramming cursor where you want to make the addition, select the microdocument, and start typing. The microdocument will open automatically.

In the next exercise, you will open a microdocument using the **Props Edit** command and then you will edit it. The editing will change this variable-width microdocument to a fixed-width microdocument.

To open and edit a microdocument using the Props Edit command:

1. Point the diagramming cursor at the microdocument with your name in it. Click the **left** mouse button.

The bounding box and the text blink alternately to show that you have selected a microdocument. If this had been a text string, only the text would have blinked.

2. Hold down the **middle** mouse button.
3. Move the mouse cursor on the Object Selected menu until **Props** is highlighted.
4. Slide the mouse cursor onto the Props menu.
5. Release the button when **Edit** is highlighted.

*The caret is positioned where the cursor was pointing when you executed the **Edit** command. At this point, the microdocument still has a variable width.*

*Because **Edit** is the default on the Props submenu, in the future, you can click the middle button when **Props** is highlighted.*

6. Press the **RETURN** key.
7. Delete the **RETURN**.

*By pressing **RETURN** and making the microdocument more than one line long, you change the variable-width microdocument to a fixed-width microdocument. This is an irreversible change.*

- ☐ Type a space and **lives at** followed by another space and your address.

Do not be concerned if your address wraps to the next line in an awkward way. You will learn how to correct this in the section Changing the Width of a Microdocument.

- ☐☐ Hold down the **middle** mouse button.
- ☐☐ Release the button when **Close** is highlighted.
The Microdocument Edit closes. The frame remains open.

To open and edit a microdocument using the cursor and the keyboard:

- ↖ Point the diagramming cursor after the word **this** in the first sentence of the microdocument that describes how fixed-width microdocuments work, and click the **left** mouse button.

- ☐ Insert a space and type **sample**.
When you start typing, the software automatically opens the microdocument.

- ☐☐ Hold down the **middle** mouse button.
- ☐☐ Release the button when **Close** is highlighted.
The Microdocument Edit closes. The frame remains open.

Copying and Pasting Text

It is possible to interchange text between microdocuments and main documents in several different ways. How the interchange is accomplished depends on whether the icon on the clipboard when you use a **Copy** or **Cut** command is a document icon or a graphic icon.

The following exercises will be clearer if you open your clipboard and purge what is already on it, so that you can see what is being put on the clipboard in each instance.

To copy text from a document and paste it into a frame:

- ✓ Select the *paragraph* component, and **Copy** it.
A document icon appears on the clipboard.
- ✓ Open the frame below the text, and **Paste** the text.
A new microdocument is created. It is fixed-width and has the default width of three inches.
- ✓ Open the microdocument.
Paragraph is the name of the only component because the component you copied was a paragraph component. While you can have the same component names in the main part of a document and in the microdocuments within it, it is often a good idea to distinguish between the components in frames and those outside in case you want to make a global change to the components in one situation without affecting components with the same name in the other. For example, you could name the paragraph component in frames framepara.
- ✓ Close the microdocument and the frame.

To copy text from a document and paste it into a microdocument:

- ✓ Select the first sentence of the *paragraph* component, and **Copy** it.
A document icon appears on the clipboard.
- ✓ Open the frame below the *paragraph*, and open the microdocument.
- ✓ Position the text caret in the middle of the microdocument.
- ✓ **Paste** the text.

You can also copy or cut text from a microdocument and paste it in the text of another document, in another microdocument, or in another frame.

- When you copy or cut text from a microdocument and paste it in the text of another document, it becomes part of the main document.
- When you copy or cut text from one microdocument and paste it into another microdocument, the text becomes a part of the microdocument.
- When you copy or cut text from a microdocument and paste it in a frame — but not in a microdocument — a new microdocument is created.

To copy text from a microdocument and paste it in the text of another document:

- ✓ Select the first sentence of the microdocument, and copy it.
A document icon appears on the clipboard.
- ✓ Close the microdocument and the frame.
- ✓ Move the mouse cursor into the component bar, and paste the text.
A new paragraph component is created below the frame component.

Copying and Pasting a Microdocument

When you use the diagramming **Copy** command to copy a microdocument, the icon that represents it on the clipboard is a diagramming icon. You can paste this icon in another document or in an open frame, but you cannot paste it in a microdocument. If you paste the icon in the main document, the software creates a frame for it. Although the following instructions tell you to paste the object on the text page, you can paste a text object either on the text page or in the component bar.

To copy a microdocument and paste it in text:

- ✓ Open the top frame, and select the microdocument with your name and address in it.
- ✓ Hold down the **middle** mouse button to see the Diagramming Object Selected popup menu.
- ✓ Slide the mouse cursor onto the Misc submenu, and release the button when **Copy** is highlighted.
A diagramming icon appears on the clipboard.
- ✓ Close the microdocument and the frame.
- ✓ Position the text caret in the middle of the text of the *paragraph* component, and paste the microdocument.

The software creates a frame for the microdocument. In this case, it creates a fixed-width microdocument. If the microdocument you copied had had variable width, the new microdocument would also have had variable width, though you would have had to resize the frame if you wanted to add text.

To copy a microdocument and paste it in a frame:

- ✓ Open the top frame, select the microdocument with your name and address in it, and **Copy** it.
- ✓ Point the mouse cursor into another frame.
- ✓ Click the **left** button twice to select and open the frame.
- ✓ Hold down the **middle** mouse button to see the Diagramming Nothing Selected popup menu.
- ✓ Release the button when **Paste** is highlighted.
Since Paste is the default on this menu, in the future, you can just click the middle button.
- ✓ Click the **middle** button to deselect the microdocument.

Changing the Width of Microdocuments

While the *only* ways you can change the width of a variable-width microdocument are by typing text into it or deleting text from it, typing and deleting text have *no* effect on the width of a fixed-width microdocument. You can change the width of a fixed-width microdocument *only* by using the **Size** command on the Diagramming Object Selected popup menu or by changing the **Width** setting on the Page property sheet for the microdocument.

Using the **Size** command is usually preferable because you can see how the sizing affects the arrangement of text and adjust the size accordingly. Use the Page property sheet setting when the microdocument must be a particular width to suit your layout.

To change the width of a fixed-width microdocument using the diagramming **Size** command:

- ✓ Select the microdocument that describes how fixed-width microdocuments work.
- ✓ Use the **Size Horizontal** command to make the microdocument 9 or 10 lines long.
- ✓ Deselect the microdocument.

To change the width of a fixed-width microdocument using the Page property sheet:

- ✓ Select and open the microdocument that describes how fixed-width microdocuments work again.
- ✓ Open the Page property sheet for the microdocument (Figure 18-1).

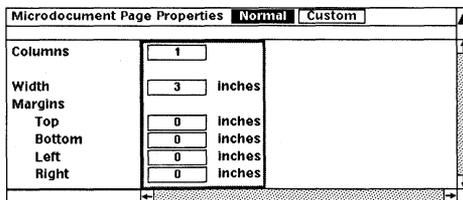


Figure 18-1. Page property sheet for a microdocument

- ✓ Change the **Width** to 5 inches.
The microdocument changes from 9 or 10 lines long to 2 lines long.
- ✓ Close the property sheet and the microdocument.

Chapter 19

Introduction to Charts

Charts, like any other diagramming objects, are created in frames. They are edited by means of the Edit Chart property sheets.

The exercises in this chapter assume that you are familiar with the information in the chapters *Property Sheets and Masters*, *Text-Anchored Frames*, and *Introduction to Diagramming*.

In preparation for the exercises in this chapter, open the document *charts* in the *Training* folder on your desktop.

At first glance, the sample bar chart in Figure 19-1 looks like a collection of diagramming objects — lines, boxes, and text.

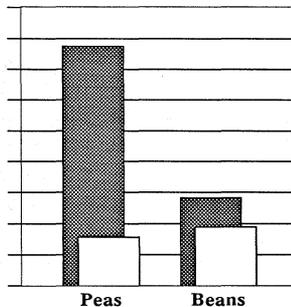


Figure 19-1. Bar chart

Indeed, you could make a similar looking chart by creating some lines and boxes. But, in the Interleaf publishing software, a chart is itself a single diagramming object constructed *automatically* by the software in response to data you enter and style choices you make.

In this chapter, you will edit this sample chart:

- by entering data about a third item
- by making some style changes

By the time you are finished, the chart shown in Figure 19-1 will look like the one shown in Figure 19-2.

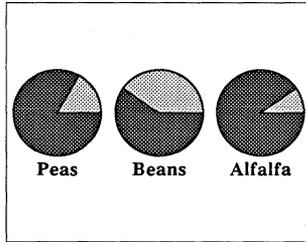


Figure 19-2. Pie Chart

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:

- ▲ Point the mouse cursor anywhere in the sample chart.
- ☐☐☐ Click the **left** button once to select the frame.
The frame is highlighted.
- ☐☐☐ With the mouse cursor in the highlighted area, click the **left** button a second time to open the frame.

A chart is selected in the same way any other diagramming object is.

To select a chart:

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

You can modify a chart using most of the diagramming commands, but you edit its data and style using 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 the mouse cursor onto the Props submenu. *Edit* is the default on this menu and is highlighted (Figure 19-3).

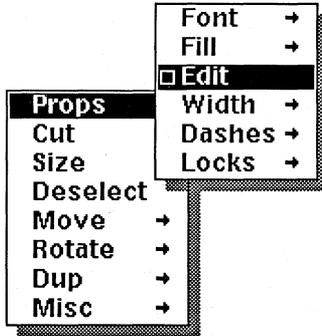


Figure 19-3. Props submenu

- ☐ Release the button. The Edit Chart Data sheet appears in a window in the upper right-hand corner of your screen (Figure 19-4).

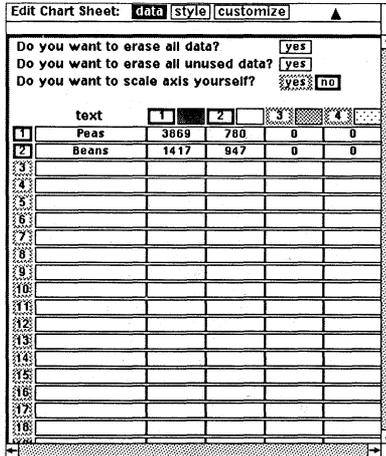


Figure 19-4. Edit Chart Data sheet

There are three Edit Chart sheets:

- The Data sheet is used to edit the contents of a chart.
- The Style sheet controls how the data are displayed.

- The Customize sheet allows finer style adjustments.

Only a few of the settings on the Style sheet are discussed in the *Training Manual*, and the Customize sheet is not discussed at all since most users never need the control this sheet gives. See the section *Charts* in Volume 2 of the *Reference Manual* for details about the settings on these two sheets.

Entering Chart Data from the Keyboard

There are two ways to enter chart data:

- using the keyboard
- using the **Paste Data** command

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

The **Paste Data** command is discussed in the chapter *Making Charts* in Volume 2 of the *Reference Manual*.

To enter data for a chart:

- ↑ Point the mouse cursor at **3** in the column of numbers down the left edge of the sheet. Click the **left** button to turn it on.
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 property sheet caret.
- ☑ Type **Alfalfa** and press the **TAB** key.
The entry is confirmed, and the caret moves to the next field. You can also use the RETURN key to confirm an entry on a property sheet. However, when you do so, the caret stays in the same box. Use the RETURN key when you expect to change what you have just typed in the current box.
- ☑ Type **5612** in column 1, and confirm the entry with the **TAB** key.
- ☑ Type **598** in column 2, and confirm the entry with the **TAB** key.

Since you will be making additional changes to this chart in the next exercise, you could wait and apply all your changes when

you are finished. However, you may want to see what the chart looks like now, with only the changes you have made on the Data sheet.

To apply changes to a chart:

- ☐☐ Hold down the **middle** button to see the Data sheet Apply popup menu (Figure 19-5).

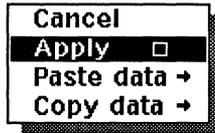


Figure 19-5. Data Sheet Apply popup menu

Apply is the default on all property sheet Apply menus, so, in the future, you can just click the middle mouse button when you want to apply changes.

- ☐☐ 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 make choices about the way your chart will look.

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:

- ▲ Point the mouse cursor into the box labeled **style** in the Edit Chart sheet window header, and click the **left** button.

The Style sheet (Figure 19-6) appears.

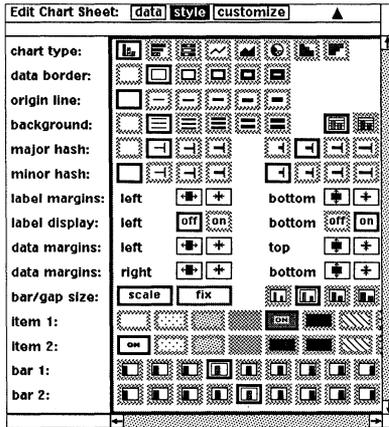


Figure 19-6. Style sheet

↑ 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 border around the horizontal bar chart icon becomes black to show that it is turned on, and the vertical bar chart icon is automatically turned off.

☐☐☐ Click the **middle** mouse button to **Apply**.

The chart is now a horizontal bar chart (Figure 19-7).

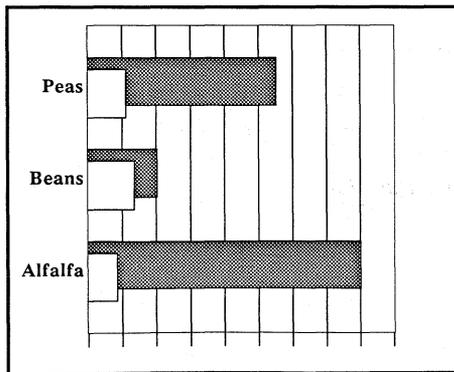


Figure 19-7. Horizontal bar chart

To display labels along the bottom margin of the chart:

-  Move the mouse cursor down the sheet to *label display: bottom* and across to **on**.
-  Click the **left** button.
-  Click the **middle** button to **Apply** the change.

The chart now has numbers displayed across the bottom. However, these numbers are too close to one another to read, and they are cut off at the base and along the right-hand edge.

To make the numbers readable, you must make the chart wider using the diagramming **Size** command. You can size the chart while the Edit Chart sheet is open.

To make the chart wider:

-  Point the mouse cursor at the chart, and click the **left** mouse button.
-  With the mouse cursor pointing at the left-hand side of the chart, hold down the **middle** mouse button to see the Diagramming Object Selected popup menu.
-  Slide the mouse cursor onto the **Size** submenu.
-  Release the button when **Horizontal** is highlighted.
Only the diagramming bounding box of the chart is visible.
-  Move the mouse to the left as far as the control point on the box will go.
-  Click the **middle** button to **Deselect** the chart.

The numbers are now readable, but they are still cut off. To bring the numbers into full view, you must make the bottom and right **data margins** larger.

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 once.
Although the change will not show until you apply it, one click of the left button increases the size of the margin by a fairly substantial amount.

- ☐☐☐ Use the **middle** button to **Apply** the change.
- ☐☐☐ Move the mouse cursor over to *data margins: bottom* and across to .
- ☐☐☐ Click the **right** button once.
While the left button changes the size of a margin substantially, the right button changes it very slightly.
- ☑ Apply the change.

The entries labeled *item* determine the fill patterns of the bars. At the moment, *item 1* is gray and *item 2* is white. You cannot see all the fills, so resize the window to make it as wide as the screen. The chapter *Windows* explains resizing.

To change the texture of the bars on the chart:

- ☑ Point the cursor at the second box from the right opposite *item 1*, and click the **left** button.
- ☑ Point the cursor at the third box from the left opposite *item 2*, and click the **left** button.
- ☐☐☐ Click the **middle** button to **Apply** these changes.
Your chart reflects the style changes you made (Figure 19-8).

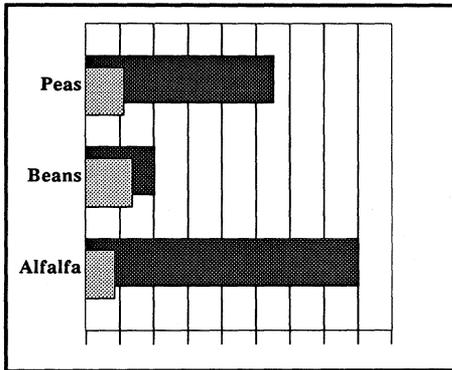


Figure 19-8. Chart with data and style changes

To change the chart type again:

- ☐☐☐ Point the mouse cursor at the pie chart icon in the row labeled *chart type*.
- ☐☐☐ Click the **left** button to turn on the pie chart icon.

- ☐☐☐ Click the **middle** button to **Apply**.
The chart is now a pie chart, with one pie replacing each column of data. It looks like the chart in Figure 19-2.
- ☐☐☐ Click the **middle** button to **Close** the Edit Chart sheets.
- ✓ **Close and Save charts** unless you want to go on to the next chapter immediately.

The data for the chart you have edited in this chapter is appropriate for a bar and pie chart, but not for a line chart. In the next chapter, you will learn how to construct a line chart.

Chapter 20

Creating a Line Chart

In this chapter, you will create the line chart shown in Figure 20-1.

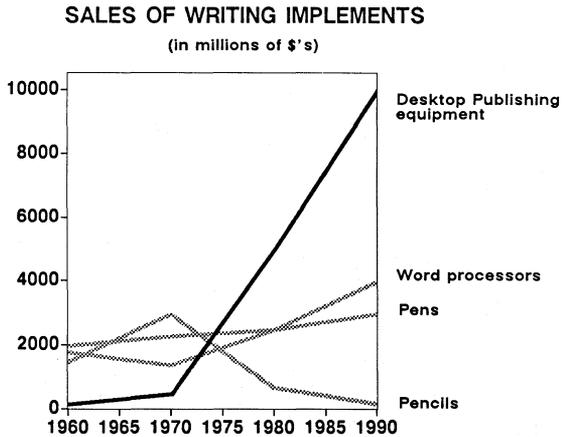


Figure 20-1. Completed line chart

The exercises in this chapter assume that you are familiar with the information in the previous chapter *Introduction to Charts* and in the chapters *Property Sheets and Masters* and *Text-Anchored Frames*.

In preparation for these exercises, open *charts* in the *Training* folder on your desktop.

The first step will be to create a frame for the chart.

Once you have a frame, there are two basic methods for creating a chart.

- You can execute the **Chart** command on the Create submenu of the Diagramming Nothing Selected popup menu and edit the default chart this command creates.

- You can copy a chart that is similar to the one you want to create, paste it in your document, and edit it.

In the *System* cabinet on your desktop, there is a document that already contains a chart similar to the one in Figure 20-1, so you will use the second method. In the process, you will see how easily the system lets you move objects from one document on your desktop to another.

Copying a Sample Chart

In the empty *chart* component in *charts*, create a frame with a width of at least 5 inches and a height of at least 4 inches.

In the *Graphics* cabinet in the *System* cabinet on your desktop, there is a folder called *Charts*. The *Charts* folder contains four documents:

- *Bars*
- *Lines*
- *Pies*
- *AllCharts*

These documents present a collection of chart styles. When you need to create a chart, you can look through these documents and choose a chart that is similar to the one you want to produce. *AllCharts* is a compilation of the charts in the other three documents.

To gain access to the Charts folder:

- ✓ Open the *System* cabinet.
- ✓ Open the *Graphics* cabinet.
Figure 20-2 shows the open *Graphics* cabinet.

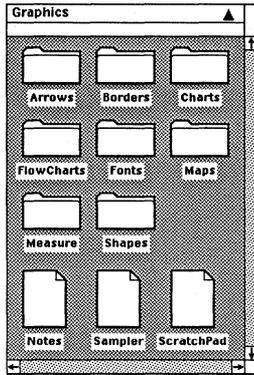


Figure 20-2. Open Graphics cabinet

- ✓ Open the *Charts* folder.

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

The chart you will use in your document is *L3* (Figure 20-3).

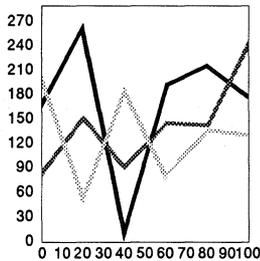


Figure 20-3. Sample line chart, *L3*

The charts in these documents are locked against cutting, so you can use the **Cut** command to copy *L3* without affecting the original in *Lines*.

To cut and paste a line chart into your document:

- ✓ Select *L3*.
The outline of the chart flashes to show that it is selected.
- ☐☐☐ Hold down the **middle** button.
- ☐☐☐ Release the button when **Cut** is highlighted.
- ✓ Open the frame you created in *charts*.

- ✓ Point the mouse cursor at the middle of the open frame, and hold down the **middle** button.
- ☐☐ Release the button when **Paste** is highlighted.
An outline of the chart appears.
- ☐☐ Click the **middle** button to **Deselect** the chart.

You no longer need the *Lines* document, the *Charts* folder, the *Graphics* cabinet, or the *System* cabinet open, so you can close them to reduce the clutter on your desktop.

Using the Size Numeric Command

So that you will be able to see details while you are editing the chart, it is a good idea to **Size** the chart now. You will use the **Size Numeric** command to make the chart 50% larger than its present size.

To increase the size of the chart:

- ✓ Select the chart.
- ✓ Hold down the **middle** button, and move the mouse cursor to **Size**.
- ☐☐ Slide the mouse cursor onto the submenu and down to **Numeric**.
- ☐☐ Slide the mouse cursor in the direction of the arrow and release the button when **Diagonal** is highlighted.
A stickup appears (Figure 20-4).

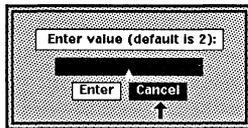


Figure 20-4. Scaling stickup

- ☐☐ Type **1.5**.
- ↑ Move the mouse cursor to **Enter**, and click the left button.
- ✓ If part of the chart is not visible, select it again, **Move** it until the outline is completely visible, and **Deselect** it.

Editing the Line Chart

You are ready to edit this line chart. To do this, you will need to access the Edit Chart sheet. You already know the steps from the previous chapter. However, we go through them again because it is possible that circumstances have changed.

To access the Edit Chart sheet:

- ✓ Select the chart.
- ☐☐ Hold down the **middle** button.
- ☐☐ Slide the mouse cursor onto the Props submenu. *Edit is the default.*
- ☐☐ Release the button.

The last Edit Chart sheet that you accessed in the current editing session 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 20-5).

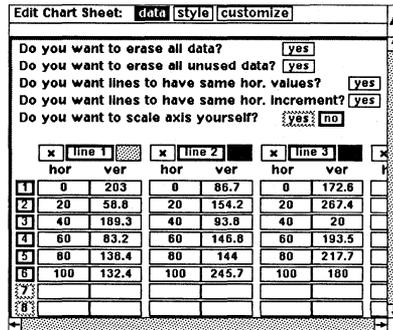


Figure 20-5. Data sheet

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

The Data Sheet

Before entering data for 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* should be turned off.

To turn rows and columns on or off:

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

Figure 20-6 shows how this column looks after you have turned off the boxes you will not be using.

| | x | line 1 | |
|---|-----|--------|--|
| | hor | ver | |
| 1 | 0 | 203 | |
| 2 | 20 | 58.8 | |
| 3 | 40 | 189.3 | |
| 4 | 60 | 83.2 | |
| 5 | 80 | 138.4 | |
| 6 | 100 | 132.4 | |

Figure 20-6. 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** mouse button.
The data in all the fields are cleared, 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.

Entering Data

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.

To delete part of an entry:

- ☐ If you make a mistake while you are typing, use the **DEL** key to delete one or more digits from a number.

To delete an entire entry after you have confirmed it:

- ✓ Move the mouse cursor into the field where you want to erase the entry, and click the **left** button.
- ☐ Press the **SPACE BAR** and then the **TAB** key.

The following table shows the data for the chart:

| | 1960 | 1970 | 1980 | 1990 |
|--------------------------------------|------|------|------|-------|
| Desktop Publishing equipment (line1) | 175 | 500 | 5000 | 10000 |
| Word processors (line2) | 1800 | 1400 | 2500 | 4000 |
| Pens (line3) | 2000 | 2300 | 2500 | 3000 |
| Pencils (line4) | 1500 | 3000 | 700 | 200 |

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

To assign the horizontal values:

- ➦ Point the mouse cursor into the first **hor** box (Figure 20-7).

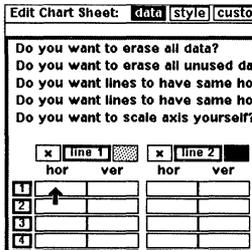


Figure 20-7. Cursor in first horizontal box

- ☐ Click the **left** button to position the property sheet caret in this box.
- ☐ Type **1960**.
- ☐ Hold down the **CTRL** key, and press **n**.
This key sequence confirms the entry and moves the caret down to the next row.
- ☐ Type **1970**, 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:

- ✓ Point the mouse cursor into the **yes** boxes next to the third question from the top of the Data sheet, and click the **left** button.
- ✓ Repeat for the fourth question (Figure 20-8).

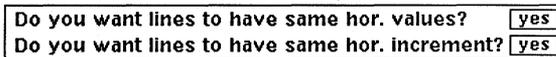


Figure 20-8. Data sheet questions

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 chapter *Making Charts* in the *Reference Manual*, Volume 2, for information on other methods of entering data for your chart.

To enter the vertical values:

- ✓ Point the mouse cursor into the first box under **ver** in the column labeled **line 1** (Figure 20-9).

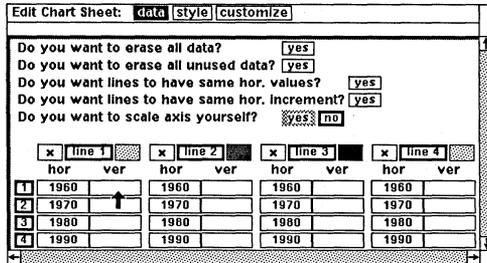


Figure 20-9. Cursor in first vertical box

- ☐ Click the **left** button.
The property sheet caret moves to this box.
- ☐ Type **175** (the value of the desktop publishing equipment sold in 1960).
- ☐ Press the **TAB** key twice to move the caret into the first **ver** box under **line 2**.
The TAB key both confirms the entry and moves the caret.
- ☐ Type **1800** (the value of the word processors sold in 1960).
- ☐ Press the **TAB** key twice to move the caret into the first **ver** box under **line 3**.
- ☐ Type **2000** (the value of the pens sold in 1960).
- ☐ Press the **TAB** key twice and type **1500** (the value of the pencils sold in 1960).
- ☐ Press **RETURN** or **TAB**.
- ☐ Move the mouse cursor down to the first **ver** box in the next row (under **175**).
- ☐ Click the **left** button to move the caret to this box.
- ☐ Continue entering the rest of the vertical values (the columns of numbers under the years on page 20-7) 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.

Because the chart has been automatically scaled, the data do not appear at all. This is probably not the result you want!

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 (1960,0) 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?"

In response, four additional boxes appear under the questions.

- ✓ Position the caret in the box labeled *vertical axis: minimum*.
- ☐ Type **0**.
- ☐ Press the **TAB** key to move the caret to the box for the *maximum* on the *vertical axis*.
- ☐ Type **10500**.
- ☐ Use the **TAB** key to confirm the entry and move the caret to the next field.
- ✓ For the *horizontal axis*, make the *minimum* **1960** and the *maximum* **1990**.

Figure 20-10 shows how the completed Data sheet looks.

| | hor | ver | hor | ver | hor | ver | hor | ver |
|---|------|-------|------|------|------|------|------|------|
| 1 | 1960 | 175 | 1960 | 1800 | 1960 | 2000 | 1960 | 1500 |
| 2 | 1970 | 500 | 1970 | 1400 | 1970 | 2300 | 1970 | 3000 |
| 3 | 1980 | 5000 | 1980 | 2500 | 1980 | 2500 | 1980 | 700 |
| 4 | 1990 | 10000 | 1990 | 4000 | 1990 | 3000 | 1990 | 200 |
| 5 | | | | | | | | |
| 6 | | | | | | | | |

Figure 20-10. Completed Data sheet for line chart

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

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, 1965).

Making Font and Style Changes

The chart looks better now, but there is still a bit of work left to do before you have a finished chart like the one in Figure 20-1.

Changing the Font of the Labels

The labels to the left and at the bottom of the chart are too small for the current size of the chart. Because these labels are considered part of the chart itself, you change their font by changing the font of the chart. You do not need to close the Edit Chart sheet to do this.

To change the font of the chart labels:

- ✓ Select the chart.
- ☐☐☐ Hold down the **middle** button.
- ☐☐☐ Slide the mouse cursor onto the Props submenu and then onto the Font submenu and the Size submenu.
- ☐☐☐ Release the button when **10** is highlighted.
- ✓ Select the chart again.
- ☐☐☐ Hold down the **middle** button.
- ✓ Slide the mouse cursor onto the Font submenu, and release the button when **Bold** is highlighted.
The labels are now Modern 10 point bold. The labels at both the left and bottom of the chart are not entirely visible, but leave them as they are until you have made some other changes.
- ✓ Replace the Data sheet with the Style sheet.

Making Hash Marks Visible

In this chart, a black border called the **data border** encloses the data area. You will want to add **major hash** marks along the left side and the bottom of the data border to indicate the vertical and horizontal increments on each axis.

To turn on major hash marks and make them longer:

- ✓ Point the mouse cursor at the second box in the left-hand group on the line labeled *major hash*, and click the **left** button.
- ✓ Point the mouse cursor at the second box in the right-hand group, and click the **left** button.
The two boxes now have black borders (Figure 20-11).

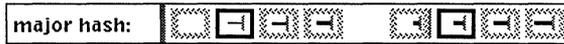


Figure 20-11. Major hash thickness and length settings

- ✓ **Apply** the changes.

Changing Margins

The bottom hash marks are a little close to the labels. To make some room for these hash marks and to make the labels completely visible, you must adjust both 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).

When you increase or decrease a data margin, the corresponding dimension of the data area is sized inversely by the same amount. For example, when you *increase* the left or right data margin, the width of the data area is *decreased* by the same amount.

To change the margins:

- ⇧ Move the mouse cursor down the Style sheet to *data margins: left* and across to .
- ☐☐☐ Click the **left** button once.
- ☐☐☐ Use the **middle** button to **Apply** this change.
You have increased the left data margin (the area to the left of the data border). Therefore, the labels on the left side of the chart are completely visible.
- ⇧ Move the mouse cursor over to *data margins: bottom* and across to .
- ☐☐☐ Click the **left** button once.

 Use the **middle** button to **Apply** this change.
You have increased the bottom data margin (the area below the data border). Therefore, the labels at the bottom of the chart are completely visible though they are still very close to the hash marks.

 Move the mouse cursor over to *label margins: bottom* and across to .

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

 Use the **middle** button to **Apply** this change.
You have increased the bottom label margin (the area between the bottom labels and the data border). Therefore, the labels are moved away from the hash marks.

By applying each change individually, you have seen the effect of sizing on each margin. You could have adjusted the two margins and applied all of the changes at once.

Changing Line Textures

Towards the bottom of the sheet, on the left, there are 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 make the data about **desktop publishing equipment** stand out, you will make the texture of the line representing them black.

To change the textures of lines:

- ✔ For this chart, turn on the *black* box (sixth from left) for the first item (**line 1, desktop publishing equipment**) and the *light gray* box (third from left) for the second and third items.

On the screen, the texture that prints as light gray looks like dots. Light gray is the texture that is turned on already for the fourth item.

- ✔ **Apply** the 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.

Text on a Chart

There can be two kinds of text in frames: *microdocuments* and *text strings*. You could use either kind for the captions on the line chart; however, since microdocuments are the primary subject of the chapter *Text in Frames*, you will learn how to use text strings in this chapter.

The text strings you enter around the chart will be in the type font displayed in the document header.

To change the font a text string will adopt:

- ✓ Make sure the frame in which you want the text string is open.
- ▲ Point the mouse cursor into the family name part of the Font box in the document header.
- ☐☐ Hold down the **middle** mouse button.
- ☐☐ Move the mouse cursor until the name of the family you want is highlighted, and slide the mouse cursor onto the Size submenu.
- ☐☐ Release the button when the size you want is highlighted.
If the family is correct and you want to change only the size, you can access the size menu by pointing the mouse cursor at the size display in the Font box and holding down the middle mouse button.
- ✓ If you want the text string to be bold or italic, make sure the appropriate box is highlighted.

Entering Text

Figure 20-12 shows what the chart will look like when you finish. Each line of text is a separate text string.

The text is in various sizes of the Modern bold typeface: the heading is in 12 point; (*in millions of \$'s*), *Desktop publishing equipment*, *Word processors*, *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. However, you need not be precise since you can use an alignment command after you have entered all the text.

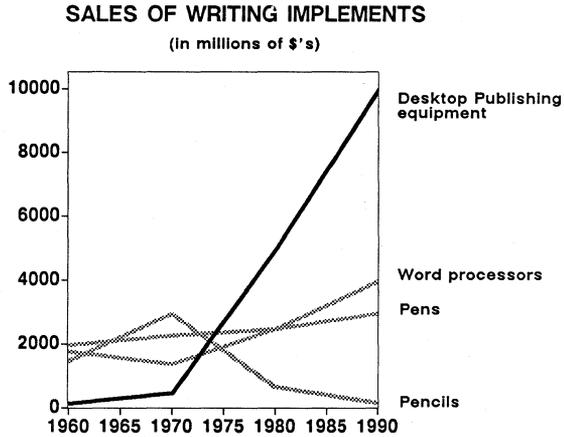


Figure 20-12. Completed line chart

To enter text:

- ✓ Make sure the font you want is displayed in the document header.
- ↖ Point the mouse cursor where you want one label.
- ☐ Hold down the **CTRL** key, and press the **o** key.
- ☐ Hold down the **CTRL** key, and press the **l** (for left) key.
*When you want to enter centered text, press the **c** key.
When you want to enter right-aligned text, press the **r** key.*
- ☐ Type the text you want.
- ☐ If you do not want the label where it is, hold down the **middle** button while the text is still selected.
- ☐ Slide the mouse cursor onto the Move submenu.
*Sometimes, it is easier to move objects **Horizontally** and then **Vertically**, rather than in **All** directions at once.
Try these various options as you enter and edit the text.*
- ✓ Deselect the text, and move the mouse cursor to the next place you want a label, and type it in.
- ✓ Repeat these steps until you have entered all the labels.
*When you enter the label Desktop Publishing equipment, insert a **RETURN** after Publishing.*

Editing Text

A text string can be edited only by deleting text from the right-hand end.

To edit a text string:

- ✓ Select the text string.
- ✓ Press the **DEL** key to delete text from the end of the string.
- ✓ When the diagramming caret is pointing where you want the change to begin, enter the altered text string.

You can erase the text string entirely, but leave the text anchor.

To erase a text string but leave the text anchor:

- ✓ Select the text string.
- ✓ Hold down the **CTRL** key, and press the **d** key.

Aligning Text

Once you have entered all the labels to the right of the chart, you may need to align them so that they appear in a neat column.

To align text:

- ✓ Select all the text strings to the right of the chart.
- ☐☐☐ Hold down the **middle** mouse button.
- ☐☐☐ Slide the mouse cursor onto the **Misc** submenu and onto the **Align** submenu.
- ☐☐☐ Release the button when **Left sides** is highlighted.

All of the text strings will be aligned to the string that is furthest to the left. If the text strings are too close to the chart or too far away, select them all again, and move them horizontally.

Chapter 21

Controlling Page Makeup

There are a number of ways to control page makeup with the Interleaf software. The two basic means involve the settings on the Page property sheets and on the Component Page property sheet.

In this chapter, we briefly discuss the **Column** setting on the Normal Page property sheet, the **Vertical Justification** setting on the Custom Page property sheet, and all the settings on the Component Page property sheet. Headers and footers are discussed in the chapter *Header and Footer Frames*. The other settings on the Normal Page property sheets sheet and all the settings on the Custom Page property sheet are covered in detail in the chapter *Page Design* in Volume 1 of the *Reference Manual*.

To prepare for the exercises in this chapter, open the document *Widgets_Revisited* in the *Training* folder on your desktop.

Using the Revert Command

In this chapter, you will often be told to use the **Revert** command to restore the document you are working on to its original state. The **Revert** command on the Document Name pulldown menu allows you to look at other versions of your document. Figure 21-1 shows one version of this menu.

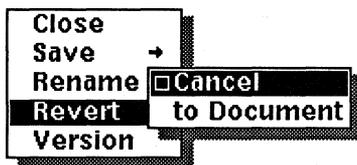


Figure 21-1. Revert submenu

If you have made changes to a document, you will see a stickup menu after you use the **Revert** command (Figure 21-2).

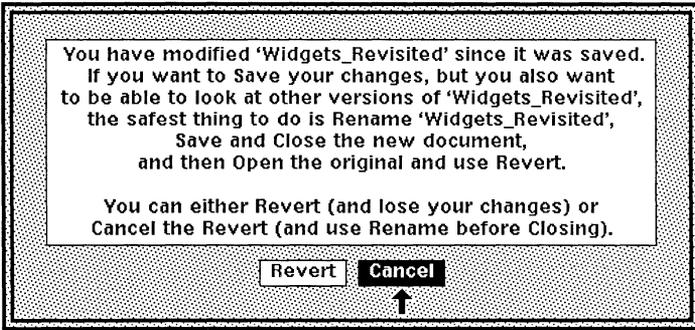


Figure 21-2. Revert stickup menu

For the exercises in this chapter, you want to revert *without* saving your changes.

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 appears 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 this 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 will not change with revision. For example, you will probably always want each *subheading* attached to the component that follows it and each *heading* to begin a new page.

Multiple Columns

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 typeface, and the size of the column gutters (the white space between the columns). In the next exercises, you will turn *Widgets_Revisited* from a one-column to a three-column document.

To change the number of columns in a document:

- ✔ On the Page property sheet for *Widgets_Revisited*, change *Columns* from 1 to 2.
- ✔ **Apply** the change.
Without closing the property sheet, you can use the left scroll bar to scroll through the document and see the effect of this change. The text on page 3 is in a frame, so it is not affected; see the chapter Text in Frames for information about the layout of this text.
- ✔ Change *Columns* from 2 to 3, and **Apply** the change.
- ✔ **Close** the property sheet.

The *title* component, which was centered over the text of the document, is now centered over the first column. This arrangement does not look bad when the document is two-column, but it does when the document is three-column. Fortunately, components in a multicolumn document can be made to straddle columns of text.

To make a component straddle columns:

- ✔ Select the *title* component, and open the Component property sheet.
- ✔ On the Component page property sheet, change the *Straddle Columns* setting to **Yes**, **Apply** the change, and **Close** the property sheet.

If you were going to print this document, there are other changes you would probably want to make. For example, the first page would look better if the *author* component also straddled columns so that it would be on the right-hand side of the page, and the *subhead* on the second page would look better if it were a smaller font.

When *Widgets_Revisited* was a one-column document, the names of the 8 components that began on the first page appeared in the component bar. Now that *Widgets_Revisited* is a three-column document, the component bar displays only the names of those components that begin in column 1.

To see component names that begin in another column:

- ✔ Move the text caret to column 2.
The names of the components that begin in column 1 disappear from the component bar, and the names of the components that begin in column 2 are displayed. The name of the title component is still displayed because the component straddles all three columns.
- ✔ **Revert** to the Document (that is, the original) version of *Widgets_Revisited*.

Component Page Properties

You can set properties for one kind of component that will affect the appearance of many individual pages. For example, when you want every *heading* component to appear at the top of a page, you can make this a property of *heading* components.

The settings on the Component Page property sheet allow you to make many page makeup decisions (Figure 21-3).

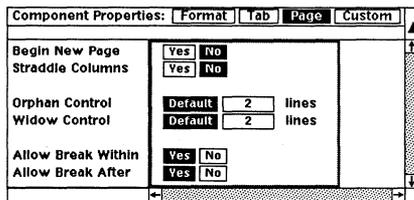


Figure 21-3. Component Page property sheet

Some page makeup features can be better demonstrated with the software's vertical justification feature turned off. Vertical justification ensures that the text of a document fills the pages uniformly by, if necessary, shrinking and expanding the space between lines and the top and bottom margins of components.

To turn Vertical Justification off:

- ✔ Open the Page property sheet.
- ☐☐☐ On the Custom sheet, turn *Vertical Justification Off*.

- ✓ **Apply** the change and **Close** the property sheet.

The exercises in this section all require that vertical justification remain off. To avoid having to turn the feature off each time you reopen *Widgets_Revisited*, save the current version of the document.

To save a document without closing it:

- ✓ Display the Document Name pulldown menu.
- ✓ Move the mouse cursor down to **Save** and slide it onto the Save submenu (Figure 21-4).

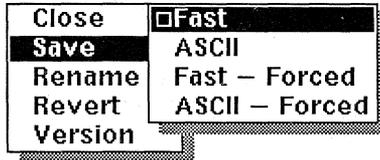


Figure 21-4. Save submenu

- 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 *Widgets_Revisited* 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 start at the top of a page.

You can apply this property to one component to make particular pages look better. You can also apply the property globally so that each of the components with the same name — *title* components, for example — will *always* appear at the top of a new page.

To use the **Begin New Page** feature:

- ✓ Select the third *paragraph* component, and open its Component property sheet.

- ✓ On the Page sheet, turn on **Yes** for *Begin New Page*.
- ✓ **Apply**.
The third paragraph component and everything that followed it disappear from Page 1, and the Page box in the document header indicates that the document is now four pages long.
- ✓ To see the *paragraph* component in its new location, scroll 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*.
- ✓ **Global Apply** the change.
Widgets_Revisited is now fourteen pages long with each paragraph component appearing at the beginning of a page.
You can scroll through the document to see the results.
- ✓ **Close** the property sheet.
- ✓ **Revert** to the Document version of *Widgets_Revisited*.

Orphan and Widow Control

In this section, references are made to page breaks. Everything that applies to a page break also applies to a column break. That is, if there must be at least 2 lines of text at the bottom of a page to satisfy the orphan condition, there must be at least 2 lines of text at the bottom of a column in a multicolumn document.

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.

You can use the *Widow* and *Orphan Control* settings to prevent *widows* and *orphans* from occurring in your documents. 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. The components in *Widgets_Revisited* have the default settings.

You can test this for yourself. The *paragraph* component that begins at the bottom of the first page has six lines in it. Four of these 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 this paragraph, a line will move from the first page to the second page in order to satisfy the widow condition.

To use orphan/widow settings:

- ✓ Select the last line of text in the paragraph at the top of the page (Figure 21-5)

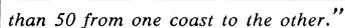


Figure 21-5. Text from *Widgets_Revisited*

- ✓ **Cut** the selected text block.
The fourth line of the paragraph component is moved from the first to the second page. The widow condition is satisfied because more than one line is at the top of the second page.
- ☐☐☐ Click the **middle** button to **Paste** the text you cut.
The paragraph is returned to its original appearance.
- ✓ **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 at the bottom of a page if there is insufficient room for them there. In this case, the entire component moves to the next page.

To practice using orphan/widow settings:

- ✓ Open the Component property sheet for the sixth paragraph of *Widgets_Revisited*.
- ✓ On the Page sheet, change the *Orphan Control* setting to 5 lines, and **Apply** the change.
The entire component moves to the second page because there is not enough room for all six lines of the component at the bottom of the first page.
- ✓ **Close** the property sheet.

- ✓ Open the Page property sheet for the document.
- ✓ Change the top page margin to **.5** inches. **Apply** the change.
The entire 6-line component moves to the bottom of the first page.
With a smaller top margin, there is sufficient room not only to satisfy the orphan setting of 5 lines, but also to move the entire component to the first page.
- ✓ Change the top page margin back to **.9** inches and **Apply** the change.
The component moves back to the top of the second page.
- ✓ **Close** the Page property sheet.
- ✓ Open the property sheet for the sixth *paragraph* again.
- ✓ Turn on the Default box next to *Orphan Control*.
- ✓ **Apply** the change.
The sixth paragraph returns to its original appearance with a break after the first four lines.
- ✓ Change the *Widow Control* to **5** lines, and **Apply** the change.
The entire component moves to the next page. In order for five lines to appear on the second page, three lines have to be taken from the previous page. If the software took three lines to satisfy the widow setting, one line would be left on the first page, violating the orphan setting.
- ✓ **Close** the property sheet.
- ✓ **Revert** to the document version of *Widgets_Revised*.

Allow Break Within

In this section and the next, references are made to page breaks. Everything that applies to a page break also applies to a column break. That is, if a component cannot be broken across *pages*, it also cannot be broken across *columns*.

If *Allow Break Within* is set to **Yes**, the system is allowed to put part of a 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:

- ✓ Select the sixth *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 sixth paragraph move to Page 2.
- ✓ **Revert** to the Document version of *Widgets_Revisited*.

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 on the same page do appear there.

For example, if the subheading for this section, **Allow Break After**, had appeared all alone at the bottom of a page, the relationship between the subheading and the text following it would have been obscured. In order to avoid this kind of break between a subheading and the section it heads, the *Allow Break After* property for the *subheading* components in this document was set to **No**.

If the subheading had fallen naturally at the bottom of a page and there had been no room after it for at least two lines of the next component (the *orphan* setting for *paragraph* components in this document), the subheading would have automatically moved to the top of the next page.

To see how Allow Break After works:

- ✓ **Create** a *paragraph* between the fifth and sixth *paragraphs*.
- ✓ Enter a couple of lines of text.
The component following the one you just created moves to page 2.
- ✓ 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 page break does not fall between the new component and the component following it.

There is now a large gap between the last line of text on Page 1 and the footnote at the bottom of the page. Usually, results like this are not desirable. One way the software lets you maintain a balanced page is through the vertical justification feature.

To turn on Vertical Justification:

- ✓ Open the Custom sheet of the Page property sheet for the document, and turn vertical justification back **On**.
The new paragraph and the first two lines of text following it fit on Page 1. When you applied vertical justification, the software shrank line spaces and component margins proportionally throughout the document; therefore, more lines could fit on a page.
- ✓ **Apply** the change, and **Close Widgets_Revisited** without saving it.

Chapter 22

Header and Footer Frames

A *frame* is an area in a document set aside for diagramming activities. There are two basic types of frames, text-anchored frames and header/footer frames.

In this chapter, we deal primarily with text strings in header and footer frames. There are instructions for using microdocuments in header and footer frames in the chapter *Header and Footer Frames* in Volume 1 of the *Reference Manual*. Text-anchored frames are discussed in the chapters *Text-Anchored Frames* in this manual and in Volume 1 of the *Reference Manual*.

While working in *stripes* or *Widgets Revisited*, 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. The page numbers and the anchors are in special frames in which you create headers and footers.

The information in header and footer frames is intended to orient the reader to the contents of a document and to the location of a particular page within this document. For instance, on the sample page in Figure 22-1, the header displays the name of the chapter, and the footer displays the page number.

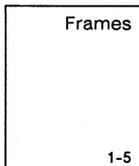


Figure 22-1. Sample page

To prepare for the exercises in this chapter, open the document *shortpages* in the *Training* folder on your desktop. This document consists of four empty pages. These pages are short enough that you can see two sets of headers and footers at once on your screen.

How Header and Footer Frames Differ from Text-Anchored Frames

Header and footer frames differ from text-anchored frames 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 these frames, and you can change their size by changing the size of the top and bottom page margins).
- 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 frame is the height of the top page margin).
- The software duplicates them appropriately on new pages.
- When you select a header or footer frame, it opens automatically.

Page Layouts

There are three possible page layouts: single-sided, double-sided with a right first page, and double-sided with a left first page (Figure 22-2). This property is determined by a setting on the Page property sheet for the document. The default is single-sided.

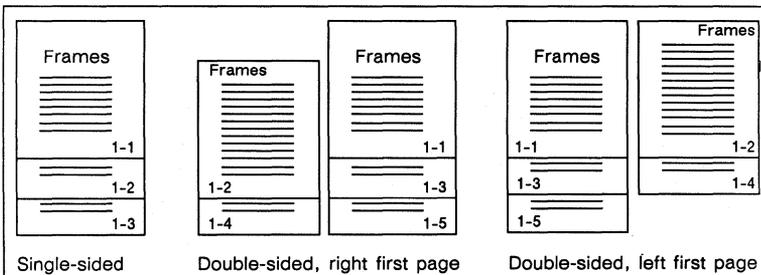


Figure 22-2. Page layouts

When you want the same information to appear in the headers and footers on every page of a document, you enter this information with the single-sided setting on. Then, if you want the

document to be double-sided, you switch to the appropriate double-sided setting. The contents of the header and footer frames will be automatically exchanged to reflect the setting. At the moment, *shortpages* is in single-sided layout.

Page Number Tokens

When you want page numbers to appear on every page, you enter a *token* in one header or footer frame. On each page, this token is translated into the page number for that particular page. 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.

To modify footers:

- ▲ Position the mouse cursor in the bottom margin of *any* page.
- ☐☐☐ Click the **left** button to select and open the frame.
The changes you make to this frame will be applied automatically to every footer frame in the document.
- ↘ Point the mouse cursor at the page number.
- ☐☐☐ Click the **left** button to select the text.
- ☐ Delete the page number text by holding down the **CTRL** key and pressing the **d** key.
A small text anchor will appear where the text was. It is still selected and will blink when you move the mouse. If you had used the diagramming Cut command instead of CTRL d, you would have cut the text anchor as well as the text.
- ↘ Point the mouse cursor at the text anchor at the right edge of the footer frame.
- ☐☐☐ Click the **left** button to select the anchor.
The right text anchor blinks to indicate that it is selected, and the center text anchor stops blinking.
- ☐ Type **page** and a space.
The text grows to the left of the anchor.
- ☐ Create a page number token by pressing and releasing the **ESC** key, and then holding down the **SHIFT** key while pressing the #3 key.
Many users remember this key sequence as "escape pound sign".
The page number appears in the footer.

- ✓ Deselect the text.
Unless you moved the mouse cursor, the text did not blink to show that it was selected.
- ✓ Close the frame.
The publishing software automatically duplicates this footer on each page.

Scroll through the document to see the results of your modifications in all of the footers.

Changing to a Double-Sided Layout

Footers of the type you just created — with all of the page numbers on the right — are generally used in documents that 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 successive pages.

This manual is called a **Right 1st Page** document because the odd-numbered pages fall to the right when the binder is opened, and the even-numbered pages fall to the left.

The opposite occurs in a **Left 1st Page** document, where the odd-numbered pages fall to the left, and the even-numbered pages fall to the right.

To change single-sided layout to double-sided:

- ✓ Open the Page property sheet for *shortpages*.
- ✓ Point the mouse cursor into the **Right 1st Page** box opposite **Page Layout**, and click the **left** button.
- ✓ **Apply** the change.
- ✓ Use the scroll bar on the right to scroll through the document.
The text now appears on the right side of odd-numbered pages and on the left side of even-numbered pages.
- ✓ On the Page property sheet, point the mouse cursor into the **Left 1st Page** box, and click the **left** button.
- ✓ **Apply** the change.

- ✓ Use the scroll bar on the right to scroll through the document.
The text in the headers and footers has been symmetrically exchanged.
- ✓ Change the layout back to **Right 1st Page**, Apply the change, and Close the property sheet.

Creating Unique Footers

In many 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 unique prototype footers for right- and left-falling pages in *shortpages*.

To create unique footers:

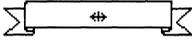
- ✓ Open the footer frame on an even-numbered page.
The changes you make to this frame will apply to the footer frames on even-numbered pages.
- ✓ Select the page number text, and use **CTRL d** to delete it (do not use the **Cut** command).
The text disappears, but the anchor remains and is still selected.
- ☐ Type **left foot** and a space.
- ✓ Insert a page number token.
- ✓ Open the footer frame on an odd-numbered page.
Opening this footer frame automatically closes the footer frame on the even-numbered page.
- ✓ Select the page number text and delete (do not use the **Cut** command).
- ☐ Type **right foot** and a space.
- ✓ Insert a page number token, deselect the text, and **Close** the frame.
- ✓ Scroll through the document, and look at the footers.

Creating a Different First Header

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, the first page of each chapter in this manual has no header since the name of the chapter is prominently displayed on the page.

In the exercise below, you will create a fancy header for the first page of *shortpages*, using one of the objects in the *Graphics* cabinet.

To create a different first header:

- ✓ On the Page property sheet, change the *Diff 1st Header* setting to **Yes**. **Apply** the change and **Close** the property sheet.
- ✓ Open the header frame on page 1 of *shortpages*.
- ✓ Select the three text anchors, and **Cut** them.
The first header is now empty.
You do not have to cut these anchors. However, it will be easier to see what happens in this exercise if the frame is clear.
- ✓ Open the *System* cabinet on your desktop.
- ✓ Open the *Graphics* cabinet, the *Borders* folder, and the *Highlighters* document.
- ✓ Select the first object, which consists of a banner and a text anchor , and **Cut** it.
Because all the objects in the documents in the Graphics cabinet are protected against cutting, the banner does not disappear from Highlighters. Instead, a copy of the banner is put on the clipboard.
- ✓ **Paste** the copy of the banner object into the header frame on the first page of *shortpages*.
- ✓ While the banner is still selected, align it to the frame using the **L/R center** command.
The L/R Center command centers the selected object(s) between the left and right edges of the frame (Figure 22-3).

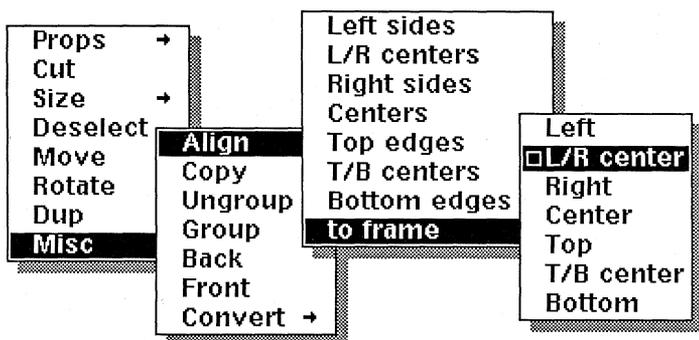


Figure 22-3. Align to frame submenu

- ✓ Size the banner to the frame horizontally (Figure 22-4).

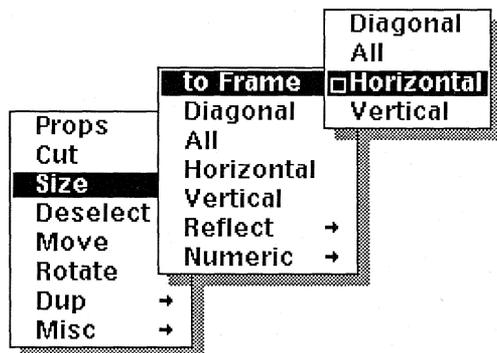


Figure 22-4. Size to frame submenu

The banner stretches to the left and right margins of the page.

- ✓ Select the banner again, and type your name.
- ✓ Size the frame vertically to make it tall enough for the text.
- ✓ With the banner still selected, align it to the frame using the **T/B center** command.
- ✓ **Close** the header frame.
- ✓ **Close** the *Highlighters* document, the *Borders* folder, the *Graphics* cabinet, and the *System* cabinet.

Extending Headers and Footers into the Margins

By default, the width of a header or footer frame is the width of the page minus the width of the left and right page margins. In other words, default header and footer frames do not extend into the left and right page margins of the page.

The **Bleed** feature lets you create headers and footers that extend into the right and left margins.

To use the Bleed feature:

- ✓ Open the Page property sheet. Point the mouse cursor into the **Yes** box next to *Bleed*, and click the **left** button.
- ✓ **Apply** the change.
The banner and the text move to the left.
- ✓ **Close** the property sheet.
- ✓ Open the header frame on the first page of *shortpages*.
- ✓ Select the banner, and size it to the frame horizontally.
The banner now stretches to the edges of the page with the text in the middle.

Appendix A

The Keyboard

This chapter presents methods of using the keyboard to perform some basic functions, many of which can also be performed using the mouse and menus. These methods include:

- creating components
- changing fonts and attributes
- inserting hard returns
- inserting characters that do not appear on the keyboard
- interrupting the publishing software
- cutting and deleting text
- moving the text caret

Creating components, changing fonts, cutting text, and moving the text caret represent keyboard alternatives to the mouse and menus. Inserting hard returns and special characters can be accomplished *only* by using the keyboard.

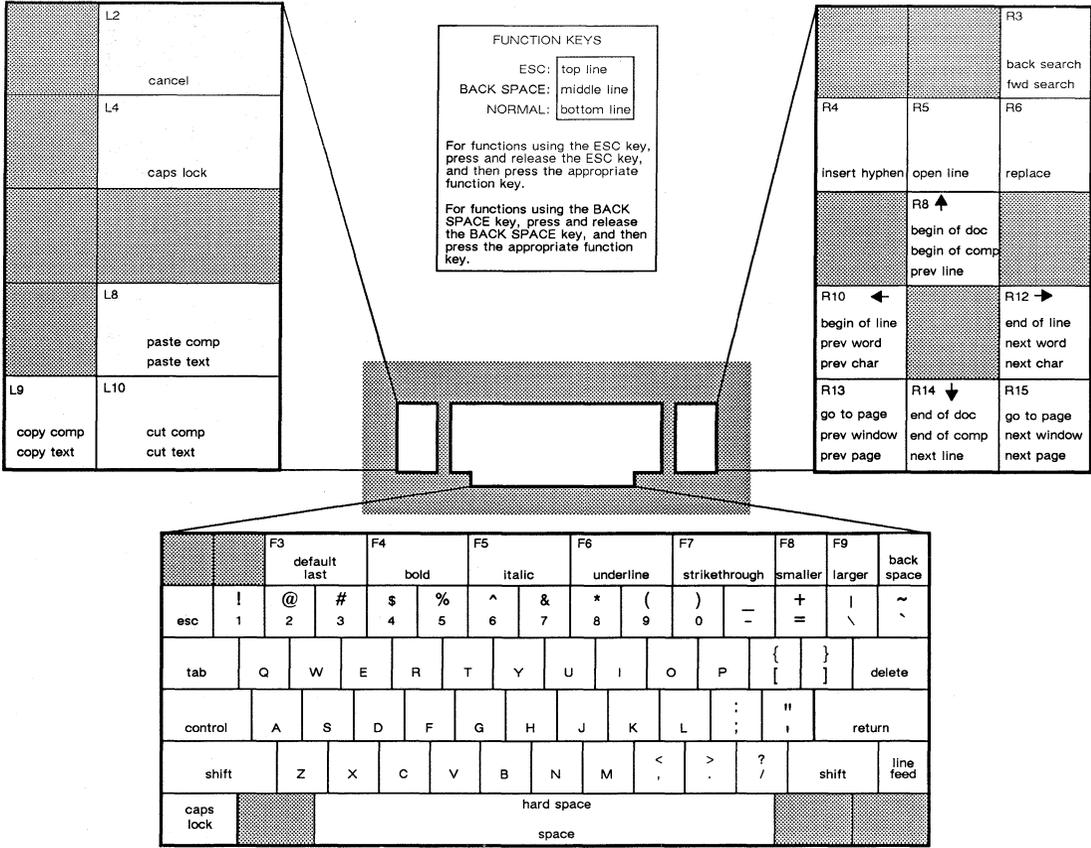
This chapter contains a compilation of the most useful keyboard commands. You may have already used some of the procedures when you did the exercises in the chapter *Text Editing*.

This chapter contains general procedures rather than specific examples, but you can use a copy of *stripes* for practice. Several special characters have been omitted from *stripes*, and you will be told where you can add them.

There are so many different ways to use the keyboard that the range can easily be overwhelming for a new user. In addition, many commands are more easily issued using the mouse and menus. Therefore, we have chosen to present only a few of the possibilities in the *Training Manual*. Later, when you want to know other keyboard commands, you will find more information in the chapter *The Keyboard* in Volume 1 of the *Reference Manual*.

Figure A-1 shows the keyboard of the SUN3. The keyboard of the SUN2/50 and SUN2/120 is only slightly different. If you have a SUN2/50 or SUN2/120, you do not have a CAPS LOCK key and must use L4 instead.

Figure A-1. SUN3 keyboard



Creating Components

You can use the **LINE FEED** key to create new components. There are two differences between using the **Create** command on the Component Location popup menu and using the **LINE FEED** key that you should keep in mind:

- When you use the **Create** command, you can create any kind of component and the new component will be identical to the master component of the same name. When you use the **LINE FEED** key, the new component will be identical to the component in which the text caret is positioned.
- When you use the **Create** command, the position of the component caret determines whether the new component goes before or after the component in which the text caret is positioned. When you use the **LINE FEED** key, the new component will be *after* the component in which the text caret is positioned regardless of whether the component caret is above or below the name of that component.

To create a new component identical to and following the one in which the text caret is positioned:

 **LINE FEED**

Changing Fonts and Attributes

On the keyboard above the alphanumeric keypad is a row of function keys that you can use to change fonts and the underlining and strikethrough attributes associated with text.

Most of the keyboard commands can be used to change the font at the text caret position or to change a block of text that you have used the mouse buttons to select. The two exceptions are **LAST** and **DEFAULT**, which only change the font at the caret position, not a block of text.

Changing fonts or attributes are functions almost always more quickly accomplished using the keyboard rather than the menus or the font box in the header bar. Therefore, it is worthwhile to learn the placement of these keys (Figure A-2).

| | | | | | | | | |
|--|-----------------------|------------|--------------|-----------------|--------------|---------------|--------------|--|
| | F3 default last | F4 bold | F5 italic | F6 underline | F7 strike | F8 smaller | F9 larger | |
|--|-----------------------|------------|--------------|-----------------|--------------|---------------|--------------|--|

Figure A-2. Function keys for changing fonts

To change the font at the text caret position to the last font used before the current font:

- F3

To change the font at the text caret position to the default font of the component:

- Press and release the BACK SPACE key.
- F3

To change from roman to bold or from bold to roman:

- F4

To change from roman to italic or from italic to roman:

- F5

If the font is roman, pressing both **F4** and **F5** (not necessarily at the same time) will change the font to bold italic, provided that the typeface you are using includes a bold italic font. If the font is bold italic, pressing both will change the font to roman.

To underline text:

- F6

To strikethrough text:

- F7

To decrease the point size:

- F8

To increase the point size:

- F9

Inserting a Hard Return

A hard carriage return makes it possible for you to determine line breaks for yourself and override the automatic line break feature of the publishing software.

To insert a hard carriage return:

 <RETURN>

A bent arrow appears at the end of the line if the Show Hard Return feature is turned on. The text caret moves to the beginning of the next line.

Inserting Characters That Do Not Appear on the Keyboard

There are several often-used characters that are available through a combination of key sequences. In the following procedures, ESC followed by a **character** means that you should press and release the ESCAPE 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 an opening double quotation mark (“):

 ESC 

Even though the double closing quotation mark is in the shift position, it is not necessary to hold down the SHIFT key for the opening quotation mark.

In the second line of the second paragraph of *stripes*, the word *stripes* should have double quotation marks around it. It is missing the opening mark, which you can insert using this key sequence.

Several lines down the word *default* needs a single opening quotation mark. Although the single opening quotation mark appears on the keyboard, it is easy to overlook. It is on the key with the tilde just below the BACK SPACE key .

To insert a natural hard space in text so that two words will be treated as one word:

 ESC <SPACEBAR>

There are several other hard spaces of different sizes. See The Keyboard in Volume 1 of the Reference Manual for details.

To insert a hyphen (-):

 ESC 

This hyphen is the same width as the hyphen the software uses when it hyphenates a word at the end of a line. Use it in hyphenated words like right-hand.

To insert an em dash (—):

 ESC 

Use the em dash to set off parenthetical matter — i.e., information that is not essential — from the rest of a sentence.

To insert a cent sign (¢):

 ESC 

It is not necessary to hold down the SHIFT key.

To insert a British pound sign (£):

 ESC 

To insert a bullet (•):

 ESC 

To insert a section mark (§):

 ESC 

To insert a force justify character (↵):

 ESC RETURN

Use this sequence at the end of the final line in a justified component if you want the line to be distributed across the entire line length. If you use the sequence in an unjustified component, it has the same effect as a hard return.

Interrupting the Publishing Software

There is a keyboard command that makes it possible for you to interrupt the operation of the Interleaf software. There are times when this is very useful. 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:

- Hold down the CONTROL key and press **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 select:

- **f**(*ile*) and you have made changes in one or more documents, you will be asked if you want to save the changes in crash files. If you select **f** and you have not made changes, the editing session continues.
- **e**(*xit*), the Interleaf publishing software will close, and the screen saver will start up again. You will *not* be asked if you want to save any changes you have made to documents, so use this command carefully.
- **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. You cannot cancel a **Save** or a **Close** command.
- **c**(*ontinue*), your editing session continues.
- **i** (*screen image*), you will be able to take make an image of any part of the display on your screen. See *Screen Images* in Volume 2 of the *Reference Manual* for instructions on using this feature.

Cutting and Deleting Text

There is an important distinction between cutting and deleting text. When you *cut* text, it is put on the clipboard, and you can paste it somewhere else or paste it back where it was if you change your mind. When you *delete* text, it is gone forever.

See the chapter *The Clipboard* for a discussion of cutting and pasting in the publishing software.

To cut text using a combination of the mouse buttons and the keyboard:

✓ Select the block of text you wish to cut.

☐ Press the DELETE key or the L10 key.

The text is put on the clipboard as the contents of a from 'documentname' icon.

Even though this step involves using the DELETE key, it is considered a Cut operation because you highlighted text.

To delete the character to the right of the text caret:

☐ Hold down the CONTROL key and press d.

To delete the character to the left of the text caret:

☐ DELETE

Moving the Text Caret

You can use the arrow keys on the right keypad to move the text caret on the text page (Figure A-3).

| | | |
|--|--|--|
| | R8 ↑ begin of doc begin of comp prev line | |
| R10 ← begin of line prev word prev char | | R12 → end of line next word next char |
| | R14 ↓ end of doc end of comp next line | |

Figure A-3. Arrow keys

Unshifted movements that do not require you to press the BACK SPACE or ESC key can be repeated by holding down the appro-

appropriate key. For example, as long as you hold down the right arrow key (**R12**), the text caret will continue moving forward in text character by character.

To repeat a **BACK SPACE** or **ESC** sequence, you must press the **BACK SPACE** or **ESC** key every time. For example, in *stripes*, position the text caret somewhere in the first word *finally*. To move the caret to the end of the word *sublime*, press the **BACK SPACE** key and then the **R12** key five times.

If you continue to hold down a function key after using it with the **BACK SPACE** or **ESC** key, the function key executes its normal, unshifted command.

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