

GOLDEN TIGER REFERENCE MANUAL

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**Smalltalk-80™ of March 1, 1984 (CV4)
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INTRODUCTION

Golden Tiger is a development activity aimed at organizing and enhancing the capabilities of analysts through the use of a flexible, computer-based personal workstation. The features of the current **Golden Tiger** system have evolved significantly from earlier versions, and many new features have been added.

The **Golden Tiger** system permits you to view and easily manipulate many forms of data such as text, pictures, and graphics. These data can be created at the workstation itself or obtained electronically from separate databases. The system also permits the remote operation of applications programs on mainframe computers, with the results being presented in such a way that they can be readily manipulated and integrated into other activities on the display.

The **Golden Tiger** system is especially designed to be easily used by individuals who have no familiarity with computers. The system is dependable, and it is essentially impossible for you to work yourself into a corner. Thus, the easiest way to learn the **Golden Tiger** software is by actively using it! For a good beginning document that introduces you to its basic software features, read *The Tiger Tamer*.

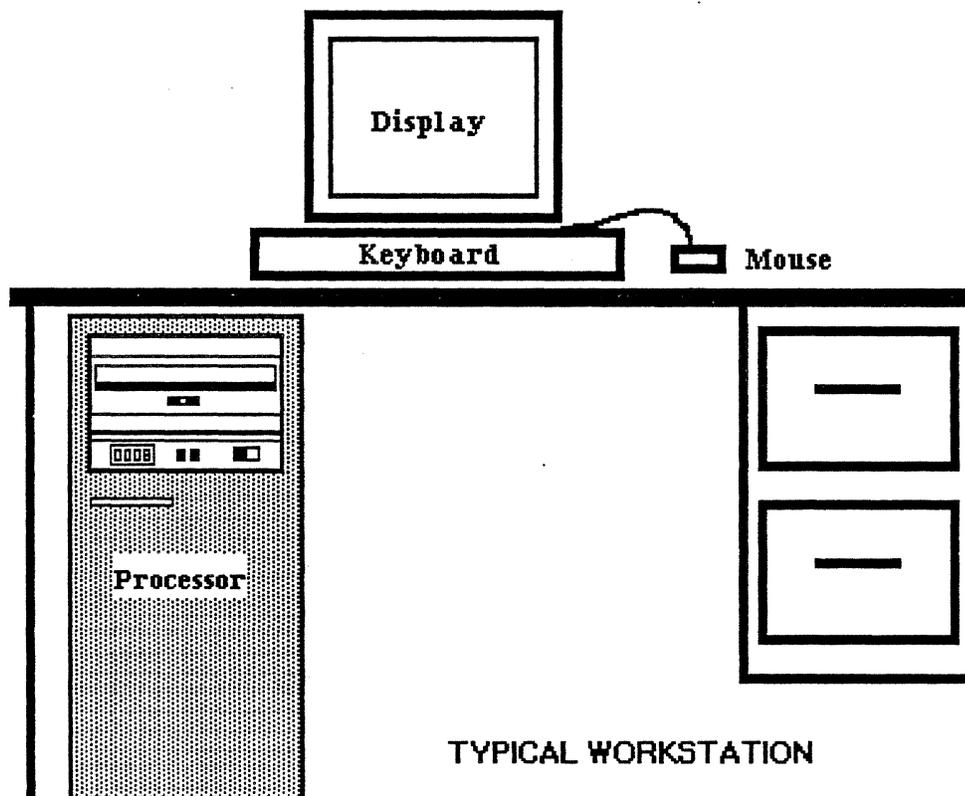
Sections I and II of this document repeat much of the basic material contained in *The Tiger Tamer*. However, Section III details all the functions and menus of all the analytical tools that are provided—and with this information you can explore every system capability. The document material has, in general, been arranged in order of the skill necessary to use each feature successfully. By the time you get to the point of using that feature, you will have developed these skills. An on-line Help aid, and this Guide, are also available in text form on the display.

Every effort has been made to make this document as accurate and informative as possible, but activities for the **Golden Tiger** system are dynamic and changing. Consequently, there is no way to be completely up-to-date. The information contained in this document is based on the best information at Vista Laboratory on the date of publication and may not correspond exactly to the **Golden Tiger** configuration which you use. However, it should make no difference in your learning how to use the system quickly and efficiently with this Guide.

SECTION I: HARDWARE

This section discusses the computer hardware, software (language), and how to turn the workstation processor on.

The Golden Tiger Workstation ~ ~ Xerox 1108-111



Several pieces of equipment make up your immediate workstation—the display screen, keyboard, and mouse (which is sitting on your desk or table). The workstation's processor contains its disk drive. A special laser xerographic printer (used by the other Golden Tiger workstations as well) is available at a nearby location to hardcopy your text and illustrations.

Specifically, the Tiger workstation consists of:

~ ~ ~ ~ ~

~ A two-page-sized *video display screen* that has a 17-inch diagonal; the display at this point will be dark and the Idle Image will be bouncing around on the screen to let you know the system is alive and well.

~ A standard typewriter-layout *keyboard* with several special function keys.

~ A *processor* that houses a fixed disk (which you will never see or need to change) and a maintenance panel; there is also a small floppy disk drive located above the maintenance panel, but you won't be using it.

~ A *mouse* which is the primary tool for manipulating display activities and the content of displayed information. It is housed in a small, white plastic box with three black elongated buttons on top. The mouse is connected by a wire to the back of the workstation keyboard, and it may be placed either to the right or to the left of the keyboard.

~ ~ ~ ~ ~

Most typical computer workstations have the processor sitting right next to the video display and keyboard. However, your processor may be located in another room nearby. Find the processor so you'll know where it is in case you have to turn it on or off, or reboot it.

Smalltalk-80: The Language

The Golden Tiger system is implemented in a computer language known as Smalltalk-80™ (Smalltalk-80 is a trademark of Xerox Corporation). Smalltalk-80 is an object-oriented, high level programming language with a special flexibility for development of user interactive functions. For more detailed information on any functions of Smalltalk-80, you may refer to the books titled *Smalltalk-80: The Interactive Programming Environment* by Adele Goldberg (Addison-Wesley, 1983), or *Smalltalk-80: The Language and its Implementation* by Adele Goldberg and David Robson (Addison-Wesley, 1983).

One of the most apparent characteristics of programs written in the Smalltalk-80 language—and a major source of its power to serve users—is that information of many different types can be displayed on the screen simultaneously. When nothing is on the display, it is a uniform shade of gray. As different types of data are called to the screen, they are displayed in white rectangular areas known as *windows*. Windows can lie on top of each other much as a scattering of pieces of paper can lie atop one another on a desk. These windows are easily changed in size, moved, uncovered, removed, copied, and so on, under the control of the user.

Smalltalk allows you to perform these manipulations easily and, with a minimum of practice, to perform them with little conscious thought, so that your attention can be concentrated on the meaning of the information contained in the windows and not on the operation of the machine.

Turning on the Processor

Normally, before you start to use your workstation it will be in Idle Image; that is, you will only see a form or icon displayed (and probably moving) against a dark screen. This means your workstation processor is turned on but the Golden Tiger software has not yet been called up for use. To begin using the software, all you need to do is click any mouse button or press and release the space bar. This will bring up the Login window (described later).

If your workstation processor has been completely turned off for some reason, this is how to get it "up and running" again:

- Pull down the cover of the processor maintenance panel, if the cover is closed.

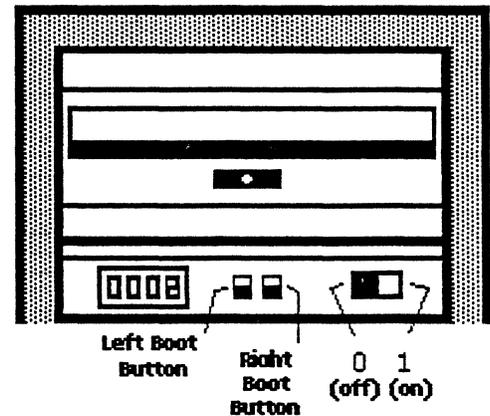
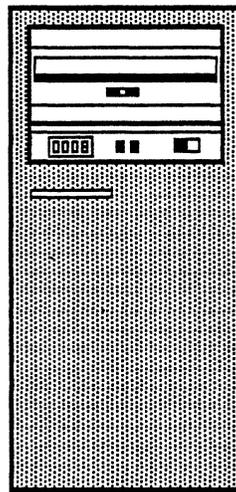
~ There are two buttons there that are labeled "Left Boot Button" and "Right Boot Button." We use these buttons to "boot" or start up the processor.

~ To the right of these is a rocker switch with "off" underneath one side and "on" underneath the other. The rocker switch will be in the "off" position.

- Push the rocker switch to the "on" position. Let the processor start up for a few seconds. Notice in the lower lefthand corner of the panel that a red 4 digit number (probably 0000) displays itself.

- Next *boot* the processor this way: simultaneously press both the Left Boot Button and Right Boot Button with two fingers of one hand.

- Release only the Left Boot Button, and watch the numbers count up from 8888 to 0000.
- Since you are going to boot at 0001, release the Right Boot Button as soon as 0001 appears.
- If you cycle past the number, don't worry. Press both buttons in again, release the Left Boot Button, watch the numbers appear as before, then release the Right Boot Button at 0001.
- It takes several minutes for the system to get itself ready. When it's finished, the first thing you should see is the Idle Image.



Expanded View

~ ~ ~ ~ ~

For a description of how to turn the processor completely off, see the popup menu item called Log Out that is described in the section titled "System Middle Mouse Button Menu."

SECTION II: SYSTEM INTERFACE

This section discusses the overall user interface. The following interface devices are described:

- ★ The Mouse
- ★ System Cursors
- ★ Windows
- ★ Input Forms (Confirmers, Notifiers, Prompters, and Q-Boxes)

The Mouse

Become familiar with your *mouse*. Basically, it is a small rectangular box with three black buttons that are located near the top: there should also be a pad underneath the mouse for smoother movement. A thin cord (the tail) connects the mouse to the keyboard. Southpaws may pick up the mouse and its pad and place it at the left side of the keyboard; it will work just as well.

The object is to press a mouse button with one finger (or two different fingers—usually the index and middle fingers) while holding the sides of the mouse with the thumb and remaining fingers. This makes the mouse easy to maneuver.

The mouse is a primary tool for manipulating windows and menus and the content of displayed information. Pressing the buttons on the top of the mouse invokes different reactions depending upon where the cursor is at the time. Many manipulations can be performed with one hand on the mouse without having to use any keyboard commands. Motion of the mouse on the desk top is replicated by motion of the cursor on the screen. If the mouse reaches the end of its plastic pad, pick up the mouse and move it to the center of the pad. The cursor on the screen will not move.

In general, the left mouse button is used to select items on the screen, the middle mouse button brings up menus associated with specific activities, and the right mouse button brings up menus which deal with the display as a whole.

Before we go any further, here are descriptions of mouse/button interactions that you will need to know as you follow the examples and use your text and graphics software.

~~~~~

★ **Left mouse button**

- The pointing and selecting button on the mouse.

★ **Middle mouse button**

- Brings up menus associated with pane specific activities.

★ **Right mouse button**

- Brings up the menu associated with window activities.

★ **To "click" means to**

- Press the left mouse button down then immediately release it. You will hear an audible "click" from the mouse.

★ To "double click" means to

– Click the left mouse button rapidly twice.

★ To "press and release" the mouse button means to

– Push the button down and release it at some future time by letting the button up. When you *press* a mouse button, press and hold the button down until you are sure of exactly what you want to do before you release it.

★ To "select" something can mean two different things and is done in two slightly different ways:

( 1 ) Place the cursor at your point of interest and click the left mouse button. This accomplishes things like placing the insertion mark at a desired location or highlighting (selecting) text that has to be edited.

( 2 ) Press the middle or right mouse button and hold it down; that will cause a *menu* to appear (menus will be discussed shortly). When you move the cursor down and up through the menu list, each item will highlight, or select. If you release the mouse button while the cursor is currently on a highlighted item, the menu item has then been selected and will start to perform its intended function.

~~~~~

To use the mouse, grasp the long sides lightly between your thumb and last two or last three fingers, with your index finger positioned so that it can easily reach all three of the buttons. Use your index finger, if possible, to perform all of the button pushing.

To cause the cursor to move, use your hand and wrist—some people prefer more of one and less of the other, but it makes little difference. For large movements about the screen, moving your hand is the proper technique. For smaller movements, wrist motion, with your wrist resting on the table, is more precise.

Don't look at the mouse: look at what the the cursor is doing on the display and think about putting the cursor where you want it to go. Like most eye-hand coordination skills of this type, you will soon not think of the mouse at all, but only about the activity you want to perform.

System Cursors

The *cursor* is the changeable graphical symbol that displays on the workstation screen. As you move the mouse over the mouse grid, the cursor (on the screen) will duplicate the mouse's movements at 2:1 linear magnification.

Only one cursor at a time is controlled by the mouse. The cursor takes on different shapes in order to provide you with visual feedback so you know what the system is currently doing. For example, if the machine is writing to the disk, the cursor changes to the form of a pencil. If the machine is reading data from the disk, the cursor takes on the shape of a pair of glasses. Cursor shapes unique to the Golden Tiger program are listed along with their names and typical use in Table 1, which follows.

Cursor Shapes Used in the Golden Tiger

★ **Normal** – The one usually displayed; an arrow that points northwest. The point of cursor selection is at the upper left corner, at the tip of the arrowhead.

★ **Origin (top left)** – This cursor, which indicates the upper left corner of a window frame, is used when a window is being moved on the screen or when a window is being framed.

★ **Bottom Left** – Indicates the bottom left corner of a window frame and is used when a window is being moved on the screen.

★ **Corner (bottom right)** – Indicates the bottom right corner of a window frame and is used when a window is being moved on the screen or when a window is being framed.

★ **Top Right** – Indicates the top right corner of a window frame and is used when a window is being moved on the screen.

★ **Mouse** – Looks like the mouse with the middle button darkened. It is used to indicate that pressing the middle mouse button is required to cause some action to take place.

★ **Crosshair** – Looks like a gun site crosshair. It is used whenever the system is requesting the user to identify a point at which information will be given (such as longitude or latitude).

★ **Execute** – A coffee cup that is used when the system is working on something and not paying any attention to the user.

★ **Wait** – An hourglass that is used when the system is working on something and not paying any attention to the user.

★ **Read** – Looks like a pair of glasses. It appears when information is being read from a disk file.

★ **Write** – Looks like a pencil writing on the screen, representing information being written onto an external disk file.

★ **Down Arrow** – A downward-pointing arrow. It is used in the scroll bar to indicate scrolling the text down.

★ **Up Arrow** – An upward-pointing arrow. It is used in the scroll bar to indicate scrolling the text up.

★ **Up Down Arrow** – An up-and-down arrow. It is the shape the arrow takes when it's "at rest" in the scroll bar.

★ **Marker** – A horizontal arrow pointing to the right. It is used in a scroll bar to indicate the proportional location, in the file, to which you want to jump.

★ **Center Justify** – Looks like two arrows pointing to the center. It is used in the Preview window to indicate that Preview will apply center justification to the selected text.

Some Golden Tiger Cursors



Normal



Wait



Origin (top left)



Read



Bottom Left



Write



Corner (bottom right)



Down Arrow



Top Right



Up Arrow



Mouse



Up Down



Crosshair



Marker



Execute

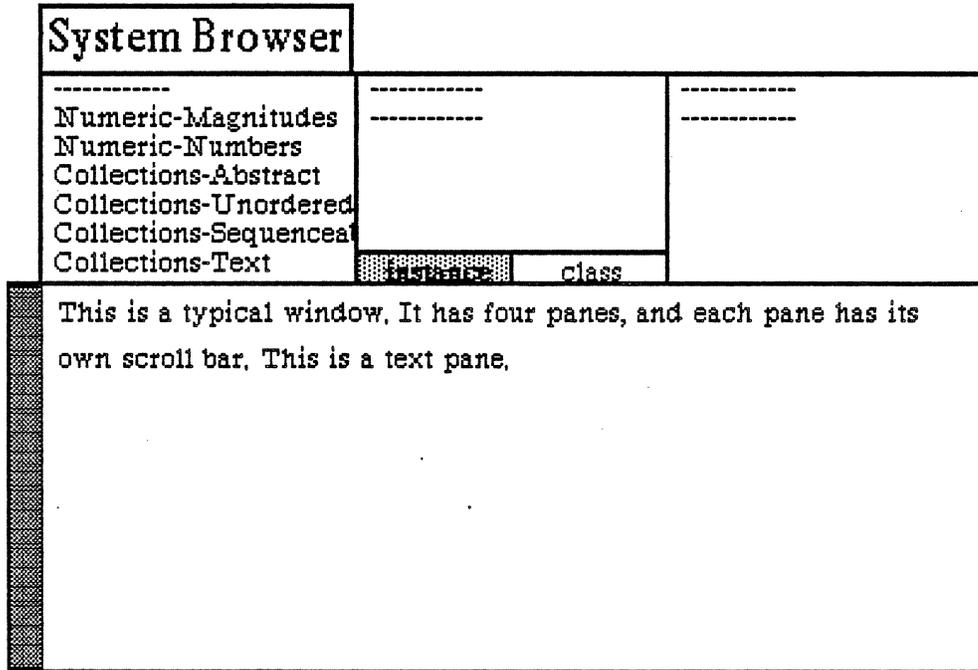


Center Justify

Golden Tiger Windows

OVERVIEW

All of the work in the Golden Tiger System is performed in different kinds of *windows*. A window is a rectangular area containing text and/or pictures. These can be examined, created, edited, stored, and retrieved through the use of mouse and menu interactions within the window. There are usually three main components of a Golden Tiger window:



~ The Window Pane

First, a typical window often consists of two or more *panes*. Windows may have one pane or many panes, depending upon the purpose of the particular window. Also, panes can come in several varieties. These varieties will be discussed as appropriate during the process of learning about the windows themselves.

~ The Title Tab

Second, a window has a *title tab*. A title tab is the small, rectangular area at the upper left of the main window. It contains a title, which is a very short description of what the window is about, or what you have decided to name it. The title tab appears in reverse video (white letters on a black background) when its window is the "active" window. If your display becomes crowded and confusing because of many opened windows you can, if you wish, "collapse" these windows to just their title tabs. Because the title tabs take up much less space, it is easy to keep track of all of the windows that are currently being used.

~ The Scroll Bar

Third, many windows have a *scroll bar* (although some types of windows never have them). If you have an open window containing a large body of text, you may be able to view only a portion of it at a time. Needed: a device whereby you can move through text from top to bottom and back again, or jump quickly to any part of the text. That device is the scroll bar, which is the narrow rectangular area that is displayed next to the left side of the window (or pane) that it controls. The scroll bar isn't always visible—it appears only when the cursor is inside the appropriate window or pane. As with menus that pop up and then disappear when no longer needed, this feature reduces screen clutter and space is used more effectively.

The length of the scroll bar represents the length of the entire document, and inside of it is a gray area. This gray area is located within the scroll bar at a point relative to the location of the text within the window. In other words, it represents that portion of text currently showing on the screen. If the gray area is at the top of the scroll bar, then the window is showing text at the beginning of the document. If the gray area fills the entire scroll bar, then you can be sure that all of the document is currently displayed.

For more information on how to use the scrolling feature, see "Scroll Bar" in the Word Processing section of this Guide.

ACTIVE/OPEN WINDOWS

A window is "open" if it has been called into being and has not been "closed" specifically. While theoretically a very large number of windows can be open at one time, as the number increases, they will be overlapped by other windows or even completely covered. Many of these windows will not be contributing to the work being done, and others will be completely forgotten. Furthermore, each window which is open requires machine resources—some a little and some a great deal—because the machine must remember each window and its contents in case you want to see it again. The window manipulations described in this section tell you, among other things, how to close unwanted windows.

While many windows can be open at one time, only one window can be "active." To make any window on the display the active window, place the cursor in any portion of that window which can be seen and click the left mouse button. This will "awaken" that window and bring it to the top of the stack, if there are several overlapping windows on a display.

The standard window popup menu, which appears in most windows (or panes), is brought up by pressing the *right* mouse button while the cursor is inside an active window. Each of these menu options is described below:

a Window's standard right mouse button popup

help
classification
close others
select and close
find
move
frame
collapse
close self

Help

To use the window Help tool, press the right mouse button and release with **help** selected from the pop-up menu. A window will appear on the screen with a brief explanation of the window's function and a reference to the User Guide, and to where more information about the window may be found.

Classification

The classification of any data window may be changed by you to reflect its new status. A "Change Window Classification" Q-Box appears, and you may select the new classification. Select **accept** at the top and

the window classification bars, top and bottom, will change to reflect the selection. If the data item has no classification there are no classification bars.

Close others

When a display becomes very crowded with windows after an extended period of work, chances are that most are not being used. To keep the window that you are currently working in, and close all of the others, select **close others** from the pop-up menu and release the button. If any of the windows selected for closure have contents that require saving, a Confirmer will appear and ask if you are sure you want to close that specific window (yes or no).

Select and close

Permits you to select any number of the windows currently on the screen and close them. After this selection has been made, another popup menu will appear that lists the title tabs of all the open windows. Move the cursor over this list and click the middle mouse button over your choice(s), which will select a window for closing, and also cause the actual title for the window to fade in-and-out on the screen at that window's location.

More than one window may be selected with this function. Execution of this command begins when you move the cursor outside of the displayed list and click a mouse button. If any of the windows selected for closure have contents that have not been saved, a Confirmer will appear and ask if you are sure you want to close that specific window.

Find

Permits you to transfer control from the window you are in to any other window currently on the screen. The tool works very similarly to **select and close** above. A popup menu will appear on the screen with the titles of all the open windows. Moving the cursor over this list while pressing the middle mouse button will cause the label of the window selected for finding to be highlighted, and also cause the actual title for the window to fade in-and-out on the screen at the location of that window.

Releasing the middle mouse button while any one of the items is selected (the title in the popup menu is highlighted) will cause the selected window to become the active window.

The **find** command can be aborted by moving the cursor anywhere outside of the displayed list and clicking the left mouse button.

Move

If you do not like where a window is on the screen, you can move it to another location. Place the cursor in the window to be moved and select **move** on the window popup menu. The action of selecting this tool will cause an outline of the window to be formed, with the cursor grabbing the nearest corner. You can then drag the window frame around by this corner to position it on the screen exactly where you want it.

To dismiss the **move** tool and open the window where the frame is, click the left mouse button.

Frame

Allows you to change the size of a window. When you select **frame** on the window popup menu, the cursor changes into the Origin cursor, which is used to mark the location of the upper left corner of the new window. You can move the Origin cursor around the screen until it is positioned where you want it. Pressing the left mouse button will cause the upper left corner of the window to become anchored, and the cursor changes to a small Corner cursor marking the lower right corner of the new window frame. Moving this cursor about will cause the frame of the window to "rubber band." Move it around, using the mouse, until the window is the rectangle of the size and proportion that you want, then release the left mouse button. The contents of the reframed window will re-format themselves, as appropriate, to fill the newly-indicated window space.

Some windows are fixed in size and cannot be framed. In this case, **frame** works just like **move**.

Collapse/expand

Collapse and **expand** appear in place of each other on the menu—**collapse** is available when a window is open and active; **expand** is available when a window is collapsed.

Selecting **collapse** allows you to compress any active window down to its title tab and place that tab anywhere on the screen. When the left mouse button is released, the selected window will be collapsed to its tab alone and you can move the tab about the screen and place it where you want it. To release the tab at the desired location, click the left mouse button.

Since the tabs make up only a small fraction of the space of the window itself, and because the title in the tab is generally descriptive of the window, a number of open windows can be kept and organized on the screen without the display looking cluttered and confusing.

Selecting **expand** on the right mouse button pop-up menu of a collapsed window will restore the window to its precollapsed size and location.

Close self

When you have finished with a window and want to remove it from the group of open windows on the screen, close it by selecting **close self**. The window to be closed must be the active window. Depending on the type of window and what you have been doing with its contents, a **Confirmer** may appear to ask if you want to close that particular window without saving the contents (**yes** or **no**).

Input Forms

Golden Tiger has a feature known as Input Forms. These forms appear quite often when you are using the software. They appear when additional information is required from you in order to complete a task. There are four basic types of input forms:

- (1) Confirmers
- (2) Notifiers
- (3) Prompters
- (4) Q-Boxes

CONFIRMERS

Scratch pad's contents have not been saved. Are you certain that you want to close?	
yes	 no

A Confirmer attempts to keep you from making a mistake, such as trying to close a window full of text without saving the text first. In other words, when you attempt to do an activity that will destroy work you have done, the system will present you with a Confirmer to give you a second chance to consider that choice.

The top pane of the typical Confirmer presents a brief message explaining

the consequences of what you are attempting to do. Below this pane are two additional panes, one labelled yes and the other no. Regardless of where the insertion mark was before the Confirmer appeared, it is now limiting cursor movement you cannot get the cursor out of the Confirmer area without answering either one or the other of the choices by clicking over it. When you try to move the cursor outside the Confirmer, it will flash to attract your attention. When the cursor is in the yes area, it changes into a "thumbs-up" hand. When the cursor is in the no area, it changes into a "thumbs-down" hand.

If you select yes, you will OK your activity and then quit from it. If you select no, the action will be stopped and you will return to where you were.

NOTIFIERS

There were no recoverable files of the specified types
click mouse here please

A Notifier lets you know the status of some action that you have tried to do (perhaps mistakenly). The top pane contains a message explaining current reality, or what's wrong with your intended action. The bottom pane needs the left mouse button

clicked there, which has the effect of stopping or sidestepping your action. It's a polite way of not letting you do something that could have unforeseen consequences.

PROMPTERS

Line width for rectangle:
*

A Prompter appears when the activity you have selected needs additional information typed in. The top pane of a Prompter asks a question which is pertinent to the activity being performed. The lower pane of the Prompter contains a space for your answer; the insertion mark is automatically located here and can't be moved until the question is answered (but if you change your mind, press the <return> key). When you type in the answer, you can backspace over any errors. Pressing <return> enters the answer.

Q-BOXES

A Q-box (the "Q" stands for "question") appears in several varieties:

Fill-in-the-Blank. Requires you to type in information and/or select from among choices (the default choices are already selected and can be changed).

Password. Requires a password in order to proceed to the next action. Passwords are not displayed on the screen but are represented by an asterisk (*) for each character typed in. Gaining access to other computers, databases, and some applications programs may require additional passwords other than your login password.

Single Select. You must select one item from a displayed list of choices.

Multiple Select. You can select one or several or all items from a displayed list of choices.

Typical "Multiple Select" Q-Box

<table border="1"> <tr> <td>accept</td> <td>cancel</td> <td>bailOut</td> </tr> </table>			accept	cancel	bailOut
accept	cancel	bailOut			
Send to Printer	<input checked="" type="radio"/> now	<input type="radio"/> later			
File in an info center	<input type="radio"/> yes	<input checked="" type="radio"/> no			
Number Copies	1				
Starting Page No.	1				
Printer Name	Printer name here				
Mode	<input checked="" type="radio"/> normal	<input type="radio"/> landscape			
Size	<input checked="" type="radio"/> full	<input type="radio"/> half			
Border	<input checked="" type="radio"/> yes	<input type="radio"/> no			
Title					

SECTION III: HOW TO USE GOLDEN TIGER

Login Window

The first window you will encounter after you've left the Idle Image is the Login window. This window is like a locked gate that you must unlock in order to get to the rest of the Tiger software, and all the files that you have created and stored.

The login procedure is designed to assure that only authorized individuals will have access to data stored on the workstation itself and on the other machines to which the workstation is connected. Furthermore, the procedure will personalize data stored on the machine; more than one individual can have data on the machine without gaining access to each other's data, unless specific permission is granted.

You must perform the login procedure correctly or the machine will not let you continue any further. The information requested is cross-checked by the machine and its supporting machines, if connected.

LOGGING IN

If the cursor is not there already, move it into the Login window. Then move it out of the window. When you do this, the window flashes rapidly; this is a reminder that you haven't yet completed the activity associated with the window. There are several other windows and menus that flash like this, too, as you will see when using the Golden Tiger software on a regular basis.

Three outlined choices are available in the Login window, and you will select:

accept when your user name and password have been typed in correctly.

cancel when you have logged in something incorrectly—all your text will be eliminated and you can start over again.

bailOut when you've changed your mind about logging in and want to quit completely from the work session or go back to Idle.

Golden Tiger Log In	
accept	cancel
accept	cancel
accept	bailOut
Name:	Smithsonian
Password:	*****

In a typical login procedure, type in your name (the first highlighted area), then press <return>. After the cursor jumps to the Password line, type your password. For protection, every character in the password will appear as an asterisk (*). Now you may either select **accept** at the top of the Login window or press <return> again, which will move the cursor up to **accept**.

You should next see an empty, light gray screen with a small white banner at the top that says "Welcome to the Golden Tiger system." However, if your name or password is incorrect, you will be unable to get to the Tiger software. A message to this effect will appear and you will have to log in again.

LOGGING OUT

It's not necessary to log out if you leave your workstation for only a few minutes. However, if you leave for an extended period of time (more than half an hour) during the workday, you should log out first and put the software back into Idle Image. This is how it's done:

- Select **Log out** from the system middle mouse button popup.
- A **Confirmer** will appear that says "Logging out will close all windows. Are you sure you want to log out?" Select **yes**.
- *Another* **Confirmer** then appears that says "Do you really want to quit Golden Tiger?" Select **no**.
- After doing this, the **Idle Image** will re-appear on the screen. When you're ready to resume your work, press the space bar or click a mouse button to bring the **Login window** back.

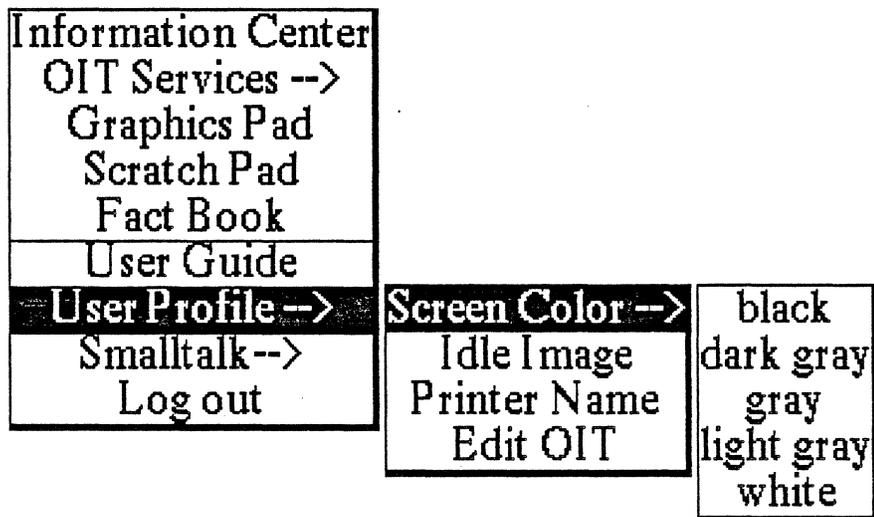
The Popup Menu

The Golden Tiger system makes extensive use of what is called a *popup menu* (or *popup tree menu* when it displays the --> feature). You make these various menus appear by pressing a mouse button: the specific menu obtained depends on where the cursor is the moment a mouse button is pressed, and which mouse button is pressed.

The *system tree* popups (there are two) are main system menus that will give you initial access to all the Golden Tiger features. They are brought up at any time by pressing the middle or right mouse button while the cursor is located in any non-window (gray) area of the screen.

System Middle Mouse Button Menu

This is the main system popup menu that is made to appear with the middle mouse button and the cursor in the gray screen (non-window) area. This menu is the access or gateway to major Golden Tiger software features. The menu items are discussed individually below, from first to last:



Information Center

Brings up a submenu that lists all the Information Center names currently stored on the disk. You must, in turn, select one of the names, then click the left mouse button outside the list area to open the desired Information Center. Note that:

- ★ The user who is currently logged into the system (via the Login window) will have the words "(logged in)" next to his/her Information Center name.

- ★ Some Information Centers may require a password in order to be opened up. If this is the case, a Password Q-Box will appear to receive the information. If an incorrect password is typed in, a Notifier appears that says "Improper password. Access denied." Clicking with the left mouse button in the bottom pane of the Notifier will return you to where you were before the selection.

★ One of the selections in the submenu is **Add new one**. Select this item when you want to create a brand new Information Center. A Q-Box will appear that will ask for its name, password (if any), and classification.

★ If you decide not to select any items in the submenu, you can dismiss it by moving the cursor out of the submenu area and clicking the left mouse button once.

For a detailed description of Information Center functions, see the section titled "Information Center."

OIT Services -->

Allows you to specify to which computer center a terminal emulation window is to be connected. Either a text or graphic terminal emulator may be selected. Moving the cursor to the right with the middle mouse button depressed will bring up the submenu selections for this category:

Default Delta Data Label

Default Tektronix Label

Graphics Pad

Generates all types of business graphics, such as pie, bar, and line charts, clustered and stacked bar charts, and x-y scatter or linear fit plots. Although many parameters are automatically managed by the software, they are still under full user control.

Selecting this item will open up a Q-Box that says "What sort of Graphics pad?" This Q-Box allows you to define, by various choices, the type of graphics pad (also known as an image editor) you want to create. These choices are explained below:

Pad Type: To begin, the graphical object can either be a **Chart** or a **Sketch**.

Size: **Standard** is the default size for the chart or sketch, which is 6" x 6".

FullPage will open the image editor to a working area the size of an 8-1/2 x 11 inch page, minus the borders.

Landscape will open the image editor to a working area the size of an 8-1/2 x 11 inch page, bottom working area has its long dimension horizontal instead of vertical (or portrait).

InputSize will allow you to define the size (square or rectangular) of your image editor. A Q-Box appears asking for both the height and width of the image-to-be, The number(s) typed in must be whole numbers and will automatically be in inches.

FrameSize will allow you to frame the size of your image with the Origin and Corner cursors, just as you would frame a window when you open it.

FromScreen will allow you to frame a section of the screen, complete with its contents. The section can be edited, saved, and stored into any available Information Center.

Scratch Pad

A Scratch Pad is a text item whose contents are treated in a casual manner—that is, a list of meetings for the week, messages in common, reminders, and so forth, can be typed into one. Since it's located on the system middle mouse button popup, it can be selected and opened by anyone currently logged in to the system. The same Scratch Pad window can be used over and over.

Usually, a Scratch Pad is not given a file name and is not stored into an Information Center, as other types of more permanent text are. It is more like a note or memo tacked on the wall for everyone to read.

In order to remove the contents of a Scratch Pad, the text must be selected and deleted, or the same text will appear every time a Scratch Pad is opened up.

Fact Book

This is an on-line text version of *The World Factbook*, complete with maps and text entry capability. Text information from other windows can be copied and pasted into the displayed Fact Book window.

User Guide

This is the on-line video display version of the *Golden Tiger User's Guide*. It contains all three Sections and supporting documentation found in the Guide, but no illustrations.

User Profile -->

Screen Color --> black dark gray gray light gray white

Changes the screen background color from black, through shades of gray to white.

Idle Image

Allows you to pick up any graphical object that is stored in the Information Center's transfer (or copy) buffer. It is retrieved from the transfer buffer by going to an Information Center and copying it, then placing it in the Idle Image form.

Printer Name

Allows you to change or set the default printer name.

Edit OIT

Allows you to edit the login sequences for the OIT and specify a user-defined set of function keys.

Smalltalk -->

This menu item contains features that are used by programmers only, and not the average Golden Tiger user.

Log Out

Selecting **Log out** is the correct way to end a session with the Golden Tiger system. This will shut down all open windows, save all altered Information Centers to the disk, and verify that all connections to OIT are closed before logging the user out of Golden Tiger.

When you are finished for the day, or during the day if you need to leave your workstation for an extended period of time (more than half an hour), you must log out and return the software to Idle Image in the following way:

- Select **Log out** from the popup.
- A confirmer appears that says "Logging out will close all windows. Are you sure you want to log out?"

Select **yes**.

- *Another* confirmer appears that says "Do you really want to quit Golden Tiger?" Select **no**.
- When you do this, the Idle Image will display itself. When you're ready to resume your work, press the space bar (or click a mouse button) which will bring up the Login window again.

~~~~~

It may occasionally be necessary to completely power down your workstation processor. Here is the procedure for shutting off the system:

- Select **Log out** from the popup.
- Select **yes** from both the first *and* second Confirmers that appear.
- Shortly, the software will take you into "Tajo" software (you don't need to know what that means).
- Press the middle mouse button in the screen area and bring up its menu; select **quit**.
- Allow a few seconds, then walk to your processor and flip the rocker switch from "on" back to "off."

## System Right Mouse Button Menu

This is the main syste popup menu that is made to appear with the right mouse button and the cursor in the gray screen (non-window) area. This popup menu is used for some on-screen window manipulations and display of system information.



### Select & close

Usually, when you select one window, the currently-selected window will deselect. This menu item permits you to multiple-select any number of windows currently on the screen and close them. When you use **select & close**, a submenu will appear that lists the title tabs of all the open windows that are on the screen (including collapsed windows). When you move the cursor over this list and click the left or middle mouse button over your choice(s), the window titles will appear in reverse video, which indicates they have been selected for closure.

If you change your mind and want to deselect a window title, click the right mouse button again over the title to remove the reverse video. Otherwise, moving the cursor out of the submenu and clicking any mouse button will cause the named window(s) to disappear. If any of the windows selected for closure have contents that have not been saved, a Conformer will appear and ask if you are sure you want to close that specific window.

### **Find**

Permits you to transfer control from the window you are in to any other window currently on the screen. The tool works very similarly to **select & close**. A submenu will appear on the screen with the titles of all the open windows. Moving the cursor over this list while pressing the middle mouse button will cause the label of the window selected for finding to be highlighted, and also cause the actual title for the window to fade in-and-out on the screen at the location of that window.

Releasing the middle mouse button while any one of the items is selected (the title in the submenu will be highlighted) will cause the selected window to become the active window.

The **find** command can be aborted by moving the cursor anywhere outside of the submenu list and clicking any mouse button.

### **Time of day**

Displays the current time in the upper right-hand area of the screen.

### **Resources**

Numerically displays the system's remaining Core (number of words of memory remaining), Oops (amount of remaining space for an object), and Disk Space (free pages) at the top of the screen. This feature is very useful when you are creating and storing a number of files, as it will inform you of how much in the way of resources you have to work with.

### **Garbage collect**

When you select this item, a Confirmer appears that asks "Are you sure you want to garbage collect?" After selecting yes, the system will get rid of "junk" files and clean up unwanted, hidden debris. Its purpose is to open up more disk space.

### **Idle start**

Gets you immediately to your display's current idle image without logging out first.

### **Collapse display**

Collapses all opened windows to their title tabs. Each one can be re-opened **expand**.

### **Restore display**

After working with and manipulating windows for a period of time, leftover images and pieces of windows tend to collect and clutter the screen. This is used to "clean up" the screen area and restore it to a more recognizable condition. However, it will also eliminate any "time of day" or "resources" information displayed at the top of the screen.

## The Information Center

The Information Center is the hub of the Golden Tiger system and is probably the tool that you will find the most serviceable to a wide variety of needs. It is an information management device that places innumerable resources within easy reach of even the most inexperienced user. You can do everything from putting out a one-line memo to creating a comprehensive document involving sophisticated spreadsheets, graphs, maps, and illustrations in practically the time it takes to think through the idea. All of these data-handling tools are available from any of the various Information Centers.

Imagine the Information Center as the ideal office:

- ★ In one corner stands the efficiently-organized file cabinet filled with stored raw materials, as well as intermediate and finished work. It is complete with cross-references, item references, keywords, annotations, and almost every other conceivable method of finding and retrieving just the right folder or individual item you might need.

- ★ Against the far wall is the library containing resources such as maps, charts, photographs, and any other relevant material that you have saved for future use.

- ★ A tall cabinet by the door holds tools to create charts, outlines, spreadsheets, databases, and maps at the tip of a finger.

- ★ At every turn you find yourself supplied with a list of alternate actions readily available to you with popup menus.

- ★ Even the trash can is special because it allows you to retrieve incomplete or mistakenly-discarded documents.

Access to this ideal office exists in the Golden Tiger Information Center, ready and waiting for occupancy. There are two additional Information Centers which will help you learn what tools are available and how to apply them. One is the Userguide Information Center that contains this User Guide on-line in text form. The other is the Demo Information Center that contains examples of windows and various tools.

Another special and personal feature of the Information Center is its flexibility. It is as individual as you are: you will manipulate the available tools according to your own work habits, and not have to adjust to a rigid system. You are provided with everything needed to organize and use information in whatever style that best suits you, by calling up, manipulating, and creating items in a manner very close to old-fashioned, hands-on, pen and paper directness, while at the same time utilizing the speed, accuracy, and power of the latest technology—the best of both worlds!

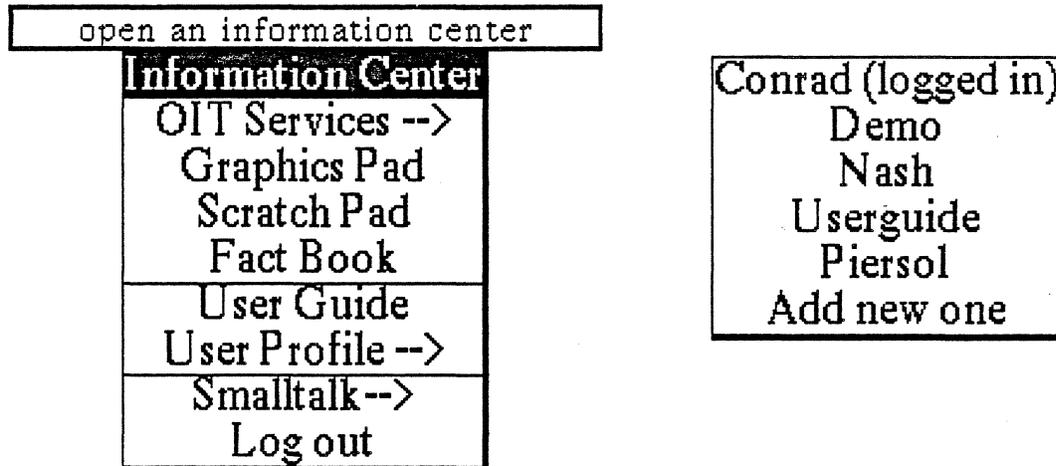
Starting in requires little more than that you be given your password—your "key" to the ideal office—and enter the system. Concise directions, along with clear menus and graphics, make functional use a simple matter of logical steps from there.

### BASIC CONCEPTS

This section provides an overview of the main components of the Information Center, their functions and manipulations.

## OPENING OR CREATING AN INFORMATION CENTER

- To open an Information Center, press the middle mouse button with the cursor in a non-window area to get the *system* middle mouse button menu. When the popup menu appears, select **Information Center** (it will go into reverse video) and release the mouse button.



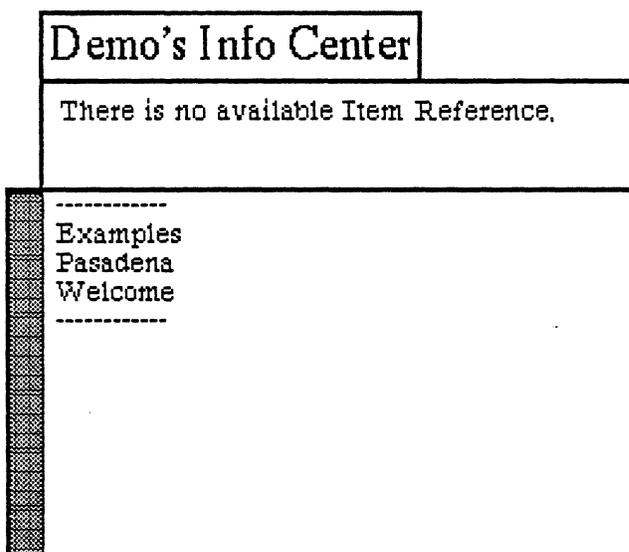
- Immediately, a submenu appears by itself. Because more than one Information Center is in your Golden Tiger software, you are given a choice of which name to select and open up. Note: if you decide not to open an Information Center, click the left mouse button anywhere outside the submenu and the list of names will disappear.

- Notice the first Information Center that is listed carries your logged-in name. That is, when you log in, an Information Center will automatically get your name; thus, someone who logs in with the name "Bill" will cause a "Bill (logged in)" to show on the submenu and a "Bill's Information Center" window when it is opened.

- When you've selected an Information Center name, the Golden Tiger system will respond by presenting you with a rectangular outline with the upper left corner highlighted. The outline shows the size the new window will be and the highlighted corner (called the Origin cursor) indicates that the window can be moved. To place the window where you want it to be on the screen, move the cursor to that location; the window outline will follow along. Then click the left mouse button. The outline will disappear and the window itself will appear in that space.

The Information Center window consists of two panes and a title tab. The upper pane is a display area which provides you with information about what the window is doing internally. You have no direct access to this pane. The lower pane contains a list of the Information Center's contents. Any of the items can be opened and the contents perused. This pane also contains a scroll bar.

The order in which these items are listed is alphabetical. If you were to add another item, the list modifies itself so that the new item appears in its proper alphabetical place.

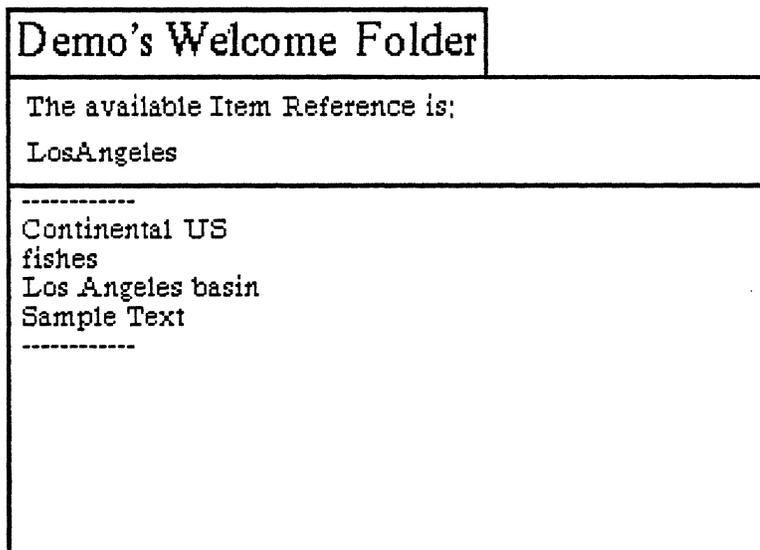


- If you select Add new one in order to create a brand new Information Center, a Q-Box will next appear that says "Add new info center for (name)." Here you can give the new Information Center a name and a password (which is optional). Selecting accept from the Q-Box will create the new Information Center.

### THE FOLDER

The folder makes up a large part of an Information Center's structure. It is the data organizer that helps you file and cross-reference your materials. An Information Center is really an aggregate of folders; it is the "top level" folder and as such has no special properties over any other folders.

A folder holds other folders and items. An "item" can be a text file, a map, a chart, a photo, and so on. Like the Information Center, the typical folder window consists of a title tab, two panes (the lower pane has a scroll bar), and filenames that are automatically listed in alphabetical order. A new folder can be created any time by selecting the create --> folder submenu option from the folder or Information Center window.



## MIDDLE MOUSE BUTTON POPUP MENU

The middle mouse button popup menu is identical for both the Information Center and a folder, and contains the following options:

### Open

Displays the selected filename in a window.

### Display -->

#### Structure tree

Displays, in graphic form in a window, all the file items and folders contained within a folder and how they interconnect. A folder is represented by a rectangle with a black title tab at the top left, while items are plain rectangles. To display a folder's Structure Tree, select the folder name with the left mouse button, then select **display --> structure tree**. The Structure Tree's middle mouse button popup menu contains the following options:

### Open

Displays the selected file item in a window.

### Add connection

Connects items to folders or folders to other folders; for instance, if "Los Angeles" (a map) is connected to "Fred" (a folder), "Los Angeles" is now located in "Fred," as well as its original location. If you try to connect a folder to an item, or an item to an item, you will get a Notifier that says "(name) is not a folder; you can't add a connection here."

### Remove connection

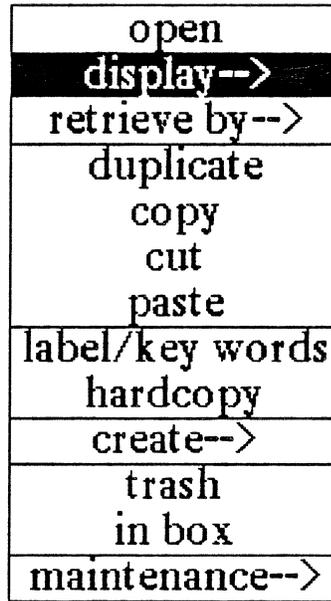
Removes the connection that currently exists between an item and a folder, or a folder and a folder.

### Redisplay

Refreshes the Structure Tree window by removing broken lines, left over lines, or gaps that were created when adding and removing connections.

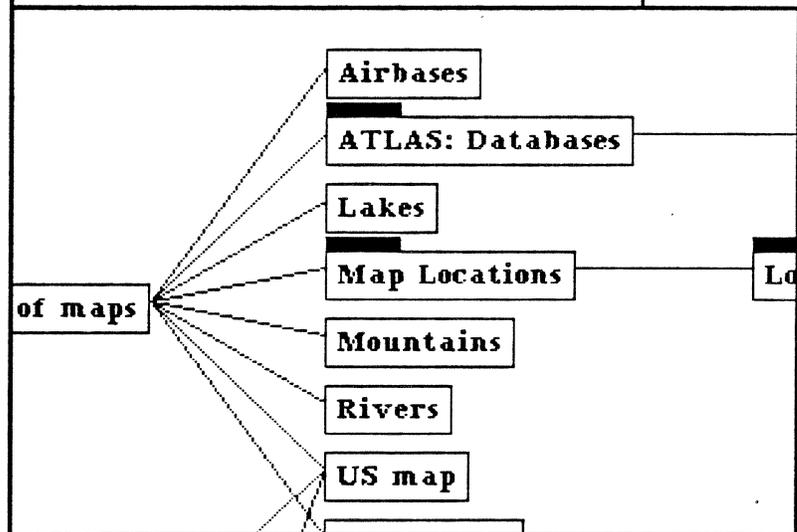
### Organize

Recomputes and displays the connections in a more efficient way.



structure tree  
structure list  
cross references

## Structure of Information Center



### Scroll

Allows you to display whatever area of the Structure Tree is currently not visible in the window. Selecting scroll causes a miniature representation of the entire Structure Tree to appear, as a subwindow, in the upper lefthand corner of the window. By placing the cursor into the subwindow and pressing and holding down the left mouse button, a movable, rectangular scroll bar will appear. Put the scroll bar over the part of the Structure Tree currently not visible that you want to see, and release the mouse button. The subwindow will disappear and the Structure Tree will scroll right to that area.

### Hardcopy

Makes a hardcopy of either the currently visible portion of the graphic Structure Tree (by just selecting hardcopy) or an item in the Structure Tree itself (a map, text item, etc.) by selecting the item name so that it goes into reverse video, then selecting hardcopy.

## Structure of Information Center

```
Information Center~Folder
  Examples,demo~Folder
    Atlas of maps,map~Folder
      Airbases~Item
      ATLAS: Databases~Folder
        cities~Item
        Lakes~Item
        Map Locations,map~Folder
          Los Angeles,map,los angeles~Folder
            Los Angeles basin,image,los angeles~Item
          Mountains~Item
          Rivers~Item
          US map,map~Item
          World map,map~Item
        Data Bases,database~Folder
          cities,database,map~Item
          junk~Item
          Sales office~Item
          US map,map~Item
        fred~Folder
        Outlines,outline~Folder
```

**display**  
**hardcopy**

### Structure list

A filing structure outline that lists all the folders and items in a folder and what type of item each listed filename is—text item, outline, folder, spreadsheet, etc.

To display a folder's Structure List, place the cursor inside the folder window and select display --> structure list from the popup. A Structure List's middle mouse button popup menu contains the following options:

**Display**

Displays the selected filename in a window.

**Hardcopy**

Makes a hardcopy of either the listing in the Structure List (by just selecting **hardcopy**) or an item in the Structure List itself (a map, text item, etc.) by selecting the item name, then selecting **hardcopy**.

**Cross references**

Finds the same data items existing in different folders and puts them in a "holder" (a temporary holding device that resembles a folder). If there are no cross references belonging to your selected item, a Notifier will appear that says "There are no other references to this selection."

**Retrieve by -->**

**Key words**

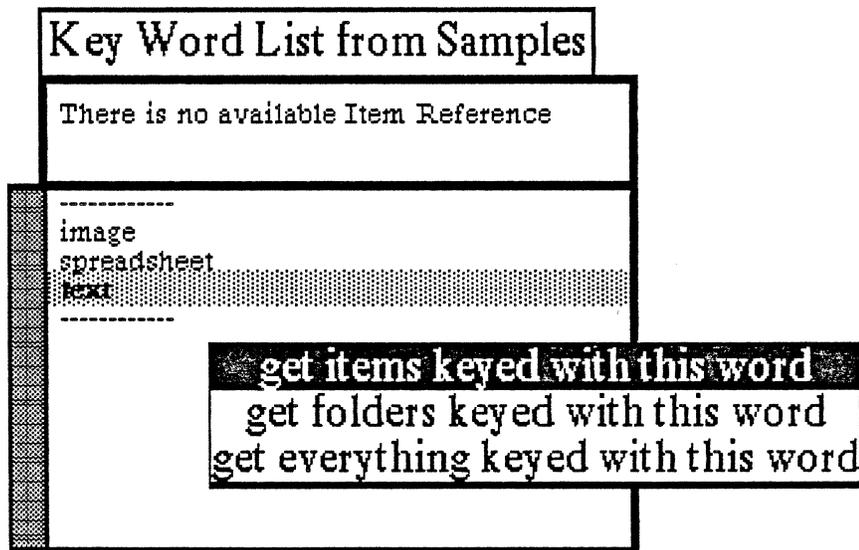
Identifies folders and different kinds of items that are in some way associated with a particular key word. The best illustration of how this can work is to go through a typical sequence of events. For instance, if you select a folder called "Samples" from "Bill's Info Center," open the folder, and then select **retrieve by --> key words**, the following will occur:

- A window called "Key Word List from Samples" will appear. Listed in the pane below are all the key words belonging in the "Samples" folder. One of them is "text."

- In this case, you are interested in locating files having to do with the key word of text, so select it. Then press the middle mouse button, which will display a popup menu with the options

- get items keyed with this word
- get folders keyed with this word
- get everything keyed with this word

on it. Select **get items keyed with this word** and release the mouse button.



- This will open a window called "Items Keyed by Text from Samples" which lists all items associated with the key word of text. You select one of the listed files called "The New Report ← from Text Files." The window's middle mouse button popup menu has the following options to manipulate the selected file:

**Open.** Displays the selected file in a window.

**Duplicate.** Creates a duplicate file with a new name. Selecting **duplicate** opens a "New item label" Q-Box, where you type in a new name, any key words, and its classification. The new file name will appear as an Item Reference in displayed folders. Using **paste** will place the duplicated file into the folder of your choice.

**Copy.** Puts a copy of the file into a copy buffer.

**Cut.** Removes the file from its current listing and puts it into a copy buffer.

**Items keyed to.** Filters or further refines the key word search. Selecting this will bring up a Prompter that says "key word?" Type in your word and press the <return> key. This will display a list of the items associated with the key word, and what folder each item comes from. If nothing can be identified, a message will say "There are no items keyed by (key word) from Text Files."

**Key words.** Selecting this will display a window called "Key Word List from The New Report ← from Text Files," with all the associated key words listed in the pane below.

**Make folder.** Creates a new folder that consists of the same files listed in the "Items Keyed by Text from Samples" window.

Selecting **make folder** opens a Q-Box called "New folder label." You type in the name of your new folder and any key words. The new folder can be pasted into an Information Center or another folder.

#### Folders

Displays a list of all the folders (and what folders they come from) that are contained in the folder you have just selected.

#### Items

Displays a list of all the items (and what folders they come from) that are contained in the folder you have just selected.

#### Items with key

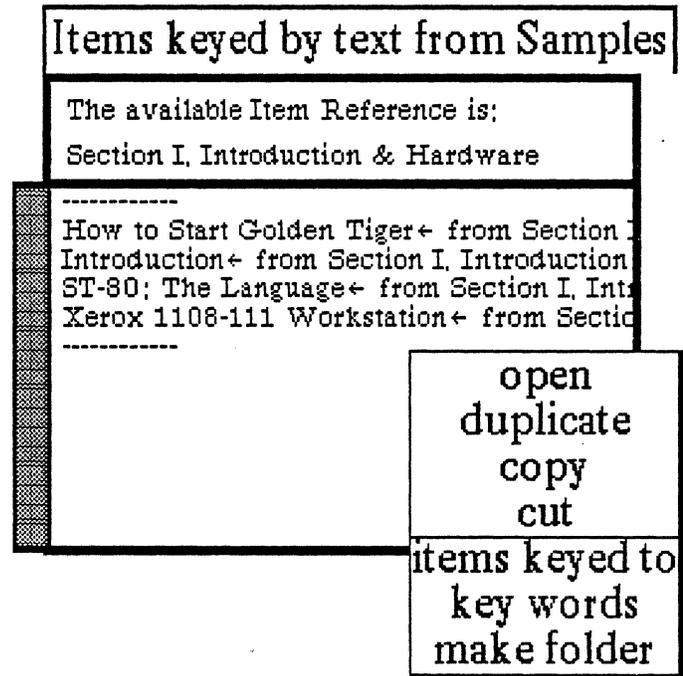
Filters or further refines the key word search. Selecting this will bring up a Prompter that says "key word?" Type in your word and press the <return> key. This will display a list of the items associated with the key word, and what folder each item comes from. If nothing can be identified, a message will say "There are no items keyed by (key word) from (folder name)."

#### Data type

Causes a window to appear that lists all the items of the same data type you've selected and what folder each originates from. When you select **data type**, it brings up the following data item list:

text, spreadsheet, map, image, report, database, chart, press, interpress, outline, and preview.

Select the desired data type first. When the selection goes into reverse video, place the cursor outside the list, click the left mouse button, and open to the temporary window (or holder) via the Origin cursor.



### Duplicate

Creates a duplicate file with a new name given by you. Selecting **duplicate** opens a "New item label" Q-Box, where you type in a new name (label), any key words, and its classification. The new file name will appear as an Item Reference in displayed folders. Using **paste** will place the duplicated file into the folder of your choice.

### Copy

First select the item name to be copied, then select **copy** from the popup. The item is temporarily stored in the copy buffer. Next move the cursor to any other Information Center or folder currently open. The item will be listed in the upper pane as an Item Reference. If you now select **paste** from the middle mouse button popup, the file will be copied to that window. If you **copy** two different files in a row, the copy buffer will lose the first file. You can **paste** only what is currently in the buffer.

### Cut

Eliminates a file completely or moves it to another folder or Information Center without keeping a copy in the current window (as opposed to using **copy**). To completely remove a file, select it, then select **cut** from the popup. To move the file to another window, move the cursor to that window and select **paste**.

If you immediately cut another file without pasting the first one, the first file will be lost from the copy buffer. If you accidentally cut a file or forget to paste it, it can be retrieved from the Trash (explained below).

### Paste

Picks up the item in the copy buffer and places it in another window. **Paste** will also remove this selection from the Trash. If no item is in the copy buffer the window will flash and the **paste** command is ignored.

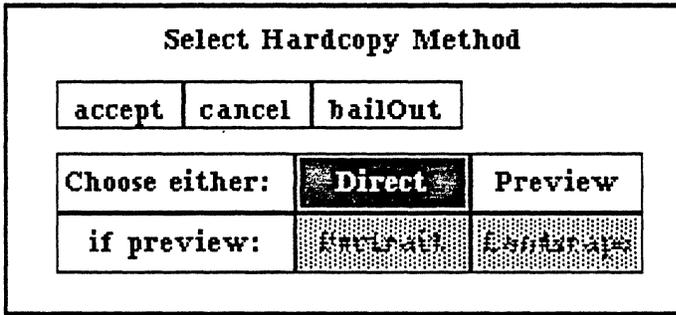
### Label/key words

Allows you to edit an item in certain ways. When you select **label/key words**, it brings up an "Edit item label" Q-Box in which you can change the item's name, keyword(s), and classification. If the item is currently open and displayed on the screen when you change its name, its window title tab name won't change until you close the item and re-open it later, even though the new name will instantly change in the folder.

| Edit item label |                          |         |       |       |      |
|-----------------|--------------------------|---------|-------|-------|------|
| accept          | cancel                   | bailOut |       |       |      |
| Name            | cities                   |         |       |       |      |
| Keywords        | database,map             |         |       |       |      |
| Classification  | <input type="checkbox"/> | Int     | XPers | XPriv | XReg |

**Hardcopy**

Sends your selected file be printed. Notice that this allows you to hardcopy a file without opening it first. You may, of course, display the file in a window and select the hardcopy command from there. The result is the same.



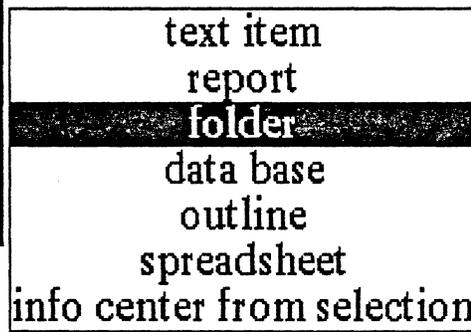
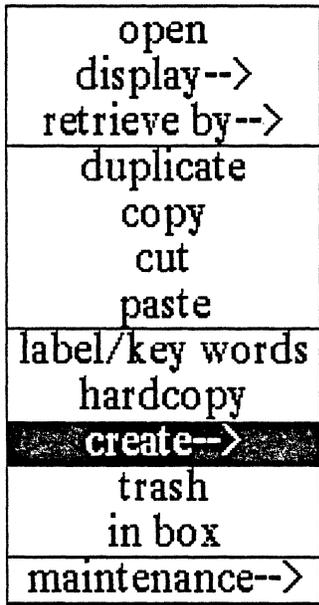
Two Q-Boxes appear in succession after you select hardcopy: the first Q-Box, called "Select hardcopy method," displays a choice between *Direct* (just send the file to be printed) or *Preview* (don't print the file but put it into a Preview window).

In this case, you would select Direct, which will bring up the second printing Q-Box. It needs a printer name (if none is there); you

may also designate here how many copies to print and what page to start printing on. After this information is typed in, click over accept. While the system is sending the file to be printed, a message to this effect will appear in the upper righthand corner of the screen. After the file has been printed, "Done" or "finished" will display there.

**Create -->**

Makes a new item from a folder and stores it into the folder. After the item is created and stored, you can display it by selecting it with the left mouse button, then selecting open from the popup menu. You have a choice of the following types of data items to create:



**Text item**

A single-paned window into which text is entered and edited.

**Report**

A Report window consists of three panes: an image pane, a contents pane, and a text entering and editing pane.

**Folder**

The main data organizer that holds all types of items and other folders.

**Data base**

A data management tool that allows you to rapidly display data, add to it or change it, create new data, and manipulate the various data according to your particular needs.

**Outline**

A method of structuring a document. Once an outline has been constructed, the outline window is capable of taking part or all of the material and producing an organized document from it.

**Spreadsheet**

A modeling device or tool that allows you to explore "what-if" scenarios.

**Info center from selection**

A way of creating a new Information Center from a folder. Selecting this option displays an "Add New Information Center" Q-Box, in which you name it and password it (if necessary). The new Information Center will contain the same item(s) as the folder (or item) that was selected when the Information Center was created.

**Trash**

This is a backup feature that stores "unwanted" items (until you deliberately delete them from here). When an item is cut from a folder, it will automatically go into the folder's "trash bin" and be listed in the bottom pane. It's invaluable as a storage window if you have accidentally deleted a file or find that you need a deleted file later on.

Selecting trash will cause the trash bin to appear. Its middle mouse button popup menu contains the following options for manipulating trashed files:

**Add Folder**

|                 |                |                |
|-----------------|----------------|----------------|
| <b>accept</b>   | <b>cancel</b>  | <b>bailOut</b> |
| <b>Name</b>     | The new folder |                |
| <b>Keywords</b> | mine           |                |

**Bill's TRASH**

The available Item Reference is:  
Table of Contents

---

Fact Book  
meanie  
My Characters  
Table of Contents

---

|                 |
|-----------------|
| <b>open</b>     |
| restore         |
| label/key words |
| dump selection  |
| dump all trash  |
| open in box     |

**Open**

Displays the contents of a selected filename in a window.

**Restore**

Takes the file from the trash bin and puts it back into an Information Center's In Box. When you select restore, it brings up a Q-Box where you may give the file a new name and any key words. Selecting accept then removes the file from the trash bin and restores it into an Information Center.

**Label/key words**

Allows you to edit an item in certain ways. When you select label/key words, it brings up an "Edit item label" Q-Box in which you can change the item's name, keyword(s), and classification. If the item is currently open and displayed on the

screen when you change its name, its window title tab name won't change until you close the item and re-open it later, even though the new name will instantly change in the folder.

**Dump selection**

Deletes the selected file from the trash bin.

**Dump all trash**

Deletes all the files at once from the trash bin. Before this occurs, a Confirmer appears that says "Do you really want to dump the whole trash bin?" (yes or no) to make sure that you really want to delete all the item(s).

**Open in box**

Allows you to get to the "in box" from the "trash bin."

**In box**

An in box is a folder to receive items that, at the time, have no place else to go. For instance, if you store an item that has no key words, or has key words that don't match those of any existing folder, the item will be placed into the in box for your convenience. You can select the item later and refile it when you are ready. The popup menu for this feature is as follows:

**Open**

Displays the contents of the selected filename in a window.

**Duplicate**

Creates a duplicate file with a new name given by you. Selecting duplicate opens a "New item label" Q-Box, where you type in a new name (label), any key words, and its classification. The new file name will appear as an Item Reference in displayed folders. Using paste will place the duplicated file into the folder of your choice.

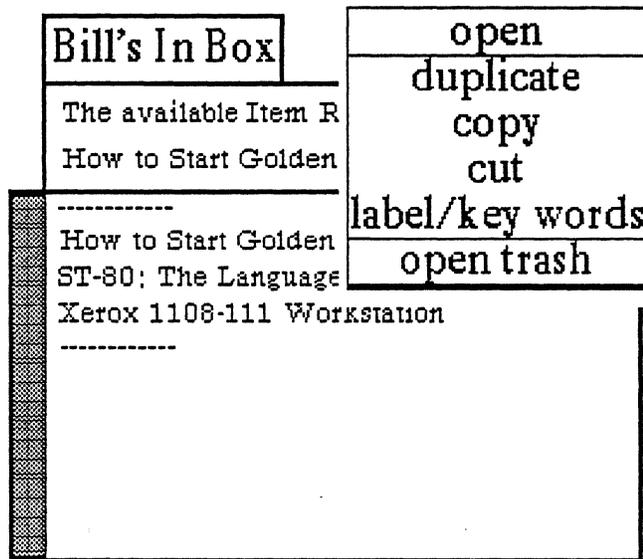
**Copy**

First select the item name to be copied, then select copy from the popup. The item is temporarily stored in the copy buffer. Next move the cursor to any other Information Center or folder currently open. The item will be listed in the upper pane as an Item Reference. If you now select paste from the middle mouse button popup, the file will be copied to that window. If you copy two different files in a row, the copy buffer will lose the first file. You can paste only what is currently in the buffer.

**Cut**

Eliminates a file completely or moves it to another folder or Information Center without keeping a copy in the current window (as opposed to using copy). To completely remove a file, select it, then select cut from the popup. To move the file to another window, move the cursor to that window and select paste.

If you immediately cut another file without pasting the first one, the first file will be lost from the copy buffer. If you accidentally cut a file or forget to paste it, the file can be retrieved from the Trash window.



### Label/key words

Allows you to edit an item in certain ways. When you select label/key words, it brings up an "Edit item label" Q-Box in which you can change the item's name, keyword(s), and classification. If the item is currently open and displayed on the screen when you change its name, its window title tab name won't change until you close the item and re-open it later, even though the new name will instantly change in the folder.

### Open trash

Allows you to get to the "trash bin" from the "in box."

### Maintenance -->

A maintenance tool for saving and restoring Information Centers, changing passwords, identifying files not listed in a window, and so on. The available choices on the submenu are:

#### Save info center

Saves away the Information Center, with all its structure, to the disk.

#### Restore info center

Brings back the previously stored Information Center. This comes in handy if you have, for instance, added items to your Information Center and decide you don't want them afterwards. By selecting restore info center, you'll get the Information Center as it existed before adding the items.

#### Close info center

Saves an Information Center, then removes its data structure from memory. This gets some resources (core and oops) back.

#### Destroy info center

Removes the Information Center from memory: it kills the Information Center file on the disk, scavenges for all types of data items that were listed in the Information Center, and then gets rid of them. Selecting destroy info center brings up a Confirmer that says "This will DESTROY the (name) Information Center. Are you sure?" with a yes or no decision.

#### Change password

Changes a password and/or an access level via a "Change Information Center parameters for (name)" Q-Box.

#### File name list

Lists all the files in an Information Center and what type of item each one is (text, image, database, etc.). If you named a typical text file "My Summary" it will appear in the file name list as "MySummary.text-+1." You may list all the files at once that are residing in the Information Center, or select and list one file at a time.

#### Lock

Prevents anyone, other than the owner of an Information Center, from viewing the locked file(s).

#### Unlock

Releases the file(s) in an Information Center by allowing others besides the owner to view them.

#### Scavenged items

Displays the scavenge folder, typically called "Data items living on borrowed time" (see access unreferenced below). These are items that have previously been deleted and no longer belong to any Information Center or folder. If there are no items currently in the scavenge folder, a Notifier will appear that states "The scavenge folder is empty."

**Access unreferenced**

A useful device which scavenges for data items that have become "detached," or deleted from folders or Information Centers, then subsequently dumped from the trash bin. This could be thought of as a "last resort" to get to files/items that have actually been deleted and to re-establish them. It is also a method by which you can gather together and permanently delete unwanted items off the disk, thereby freeing up needed disk space.

After selecting **access unreferenced**, a list of the *types* of previously-deleted (from the Trash window) data items that Golden Tiger will scavenge or look for displays itself:

|                          |                            |                                                                                                                 |
|--------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------|
| hardcopy                 | save info center           | text<br>spreadsheet<br>map<br>image<br>report<br>database<br>chart<br>press<br>interpress<br>outline<br>preview |
| create-->                | restore info center        |                                                                                                                 |
| trash                    | close info center          |                                                                                                                 |
| in box                   | destroy info center        |                                                                                                                 |
| <b>maintenance--&gt;</b> | change password            |                                                                                                                 |
|                          | file name list             |                                                                                                                 |
|                          | lock                       |                                                                                                                 |
|                          | unlock                     |                                                                                                                 |
|                          | scavenged items            |                                                                                                                 |
|                          | <b>access unreferenced</b> |                                                                                                                 |
|                          | backup selection           |                                                                                                                 |

You may select from one to all of the data items, then click the left mouse button outside the list. Immediately, a message will appear in the reference pane of the folder that states \*\*\* I am working \*\*\* and "Checking active data items." When it has finished, you will see the message "I have my lists now" and the Origin cursor, so that you may open up the resulting Scavenge Folder. All the relevant items are put into this folder, which is called "Data items living on borrowed time." It has its own middle mouse button popup menu with the following options:

**Open**

Displays the selected item contents in a window.

**Cut**

Removes the selected item from the list and displays it in the folder's Reference pane above. This means you can then, if you wish, move the cursor into a desired folder or Information Center and paste the item into it.

**Refile**

Brings up a Q-Box that allows you to give the selected item a (new) name, any key word(s), and a choice of existing Information Centers to file it into.

**Destroy**

Deletes the selected item completely off the disk. Selecting **destroy** will cause a Confirmer to appear that asks "Destroy will remove (item) from the disk. Are you sure?" If you then select yes, there will be no chance of ever accessing this item again.

**Destroy all**

Deletes all the listed items completely off the disk. Selecting **destroy all** will cause a Confirmer to appear that asks "Destroy all will remove all these items from the disk. Are you sure?" If you then select yes, there will be no chance of ever accessing these items again.

**Release**

Protects a selected item from a **destroy**; that is, all other listed items can be destroyed, but an item that's been selected and released first will disappear from the list and show up again when you next do an **access unreferenced**.

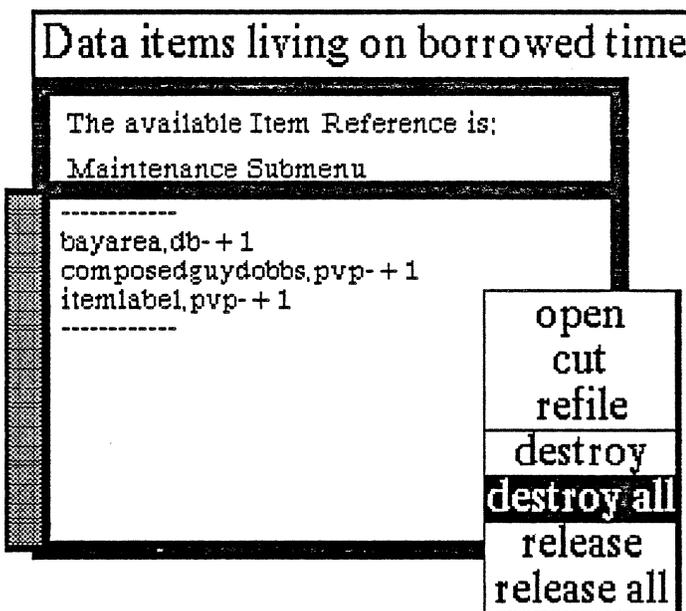
**Release all**

Protects all current items from a potential **destroy all**; that is, any other listed items can be destroyed, but items that have been released first will disappear from the list and show up again when you next do an **access unreferenced**.

**Backup selection**

Sends a copy of your file(s) directly to a designated remote file server while still in Golden Tiger:

- Move the cursor into the Information Center that contains the file(s) to be backed up.
  - ~ If you want to back up one item, select it first
  - ~ If you want to back up everything in a folder, select the folder name
  - ~ If you want to back up the entire Information Center, move the cursor to the top level of the window where the title tab is and don't select anything.
- A Q-Box appears called "Backup Selection to File Server." It's divided into three parts.



**Host:** Here is where you select your server or host. There is probably a default host name already shown, such as VaultFiles:Golden:Lion.

**Directory:** The directory name and/or file drawer on the remote file server where the files are to be stored. The default current user's name will probably be displayed there.

**Password:** The currently logged-in user must enter his/her correct password here.

- After selecting **accept**, an Origin cursor appears so you can open an "XDE Communication Center" window, which already has the initial command to back up the files. It will show you what it is doing so you can confirm what files are being stored.

## RIGHT MOUSE BUTTON POPUP MENU

The right mouse button in an Information Center or folder brings up the standard window manipulation popup menu with the following functions:

### Help

To use the window Help tool, press the right mouse button and release with **help** selected from the pop-up menu. A window will appear on the screen with a brief explanation of the window's function and a reference to the User Guide, and to where more information about the window may be found.

### Close others

When a display becomes very crowded with windows after an extended period of work, chances are that most are not being used. To keep the window that you are currently working in, and close all of the others, select **close others** from the pop-up menu and release the button. If any of the windows selected for closure have contents that require saving, a Confirmer will appear and ask if you are sure you want to close that specific window (yes or no).

### Select and close

Permits you to select any number of the windows currently on the screen and close them. After this selection has been made, another popup menu will appear that lists the title tabs of all the open windows. Move the cursor over this list and click the middle mouse button over your choice(s), which will select a window for closing, and also cause the actual title for the window to fade in-and-out on the screen at that window's location.

More than one window may be selected with this function. Execution of this command begins when you move the cursor outside of the displayed list and click a mouse button. If any of the windows selected for closure have contents that have not been saved, a Confirmer will appear and ask if you are sure you want to close that specific window.

### Find

Permits you to transfer control from the window you are in to any other window currently on the screen. The tool works very similarly to **select and close** above. A popup menu will appear on the screen with the titles of all the open windows. Moving the cursor over this list while pressing the middle mouse button will cause the label of the window selected for finding to be highlighted, and also cause the actual title for the window to fade in-and-out on the screen at the location of that window.

Releasing the middle mouse button while any one of the items is selected (the title in the popup menu is highlighted) will cause the selected window to become the active window.

The **find** command can be aborted by moving the cursor anywhere outside of the displayed list and clicking any mouse button.

### **Move**

If you do not like where a window is on the screen, you can move it elsewhere. Place the cursor in the window to be moved and select **move** on the window popup menu. The action of selecting this tool will cause an outline of the window to be formed, with the cursor grabbing the nearest corner. You can then drag the window frame around by this corner to position it on the screen exactly where you want it.

To dismiss the **move** tool and open the window where the frame is, click the left mouse button.

### **Frame**

Allows you to change the size of a window. When you select **frame** on the window popup menu, the cursor changes into the Origin cursor, which is used to mark the location of the upper left corner of the new window. You can move the Origin cursor around the screen until it is positioned where you want it. Pressing the left mouse button will cause the upper left corner of the window to become anchored, and the cursor changes to a small Corner cursor marking the lower right corner of the new window frame. Moving this cursor about will cause the frame of the window to "rubber band." Move it around, using the mouse, until the window is the rectangle of the size and proportion that you want, then release the left mouse button. The contents of the reframed window will re-format themselves, as appropriate, to fill the newly-indicated window space.

Some windows are fixed in size and cannot be framed. In this case, **frame** works just like **move**.

### **Collapse/expand**

The selections **collapse** and **expand** appear in place of each other. **Collapse** is available when a window is open and active. **Expand** is available when a window is collapsed.

Selecting **collapse** allows you to compress any active window down to its title tab and place that tab anywhere on the screen. When the left mouse button is released, the selected window will be collapsed to its tab alone and you can move the tab about the screen and place it where you want it. To release the tab at the desired location, click the left mouse button.

Since the tabs make up only a small fraction of the space of the window itself, and because the title in the tab is generally descriptive of the window, a number of open windows can be kept and organized on the screen without the display looking cluttered and confusing.

Selecting **expand** on the right mouse button pop-up menu of a collapsed window will restore the window to its precollapsed size and location.

### **Close self**

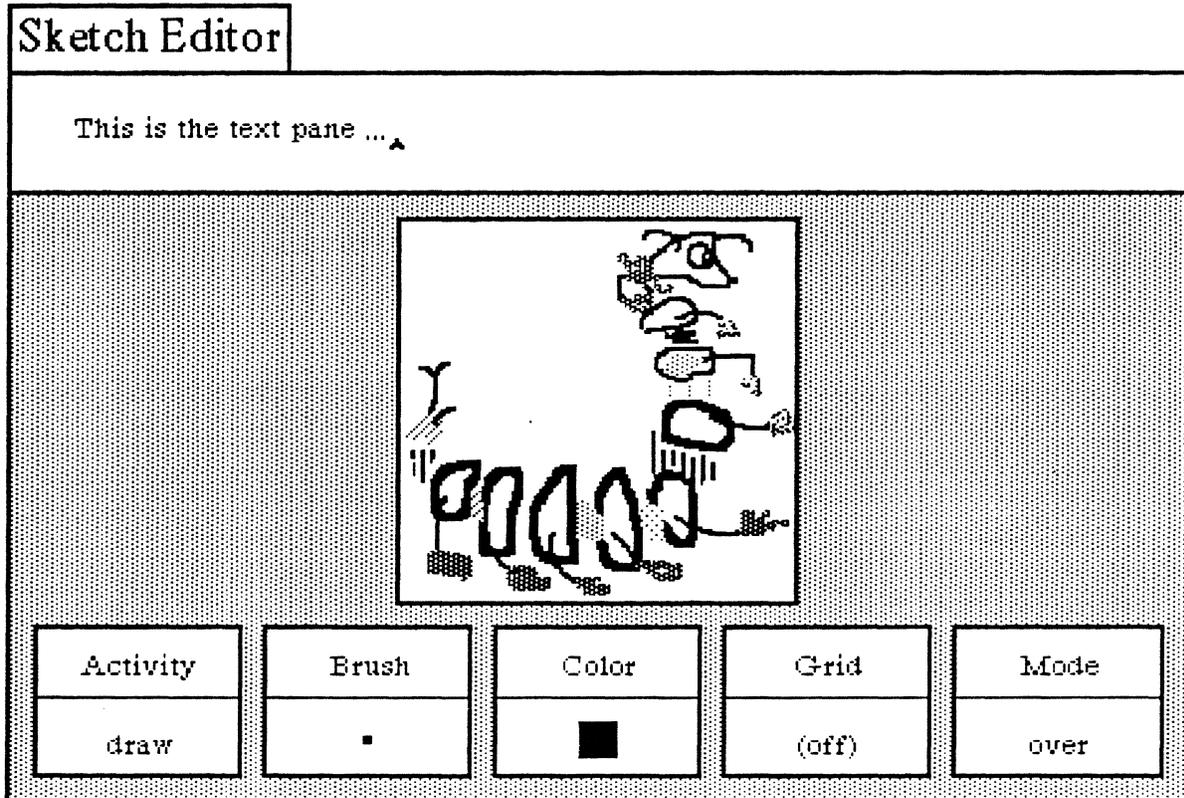
When you have finished with a window and want to remove it from the group of open windows on the screen, you can close it by selecting **close self**. The window to be closed must be the active window. When the mouse button is released, the window will be closed. Depending on the type of window and what you have been doing with its contents, a Confirmer may appear to ask if you want to close that particular window without saving the contents.

## The Sketch Editor

### OVERVIEW

The Sketch Editor is a basic graphics tool that is used to draw images, much as a painter creates a painting. The "canvas" is the sketch creating (middle) pane, and the "brush" is represented by the cursor as it moves around the pane.

The window of the Sketch Editor is similar in structure and function to that of the Chart Editor. Only the commands from the middle mouse button popup menu in the sketch creating (middle) pane are different.



### OPENING A SKETCH EDITOR

To open up a Sketch Editor, select **Graphics Pad** from the middle mouse button system popup. Immediately, a Q-Box request form will appear that states "What sort of Graphics pad?" Here you will have a choice of either a Sketch pad (the default) or a Chart pad. Leave the default selected before clicking over accept.

Other choices that you can select from the request form are all related to sketch size:

| What sort of Graphics pad? |           |           |            |
|----------------------------|-----------|-----------|------------|
| accept                     | cancel    | bailOut   |            |
| Pad Type:                  | Chart     |           | Sketch     |
| Size:                      | Standard  | FullPage  | Landscape  |
|                            | InputSize | FrameSize | FromScreen |

**Standard** (the default). A standard 6" x 6" sketch area.

**FullPage**. An 8-1/2" x 11" sketch area oriented in portrait mode (vertical).

**Landscape**. An 8-1/2" by 11" sketch area oriented in landscape mode (horizontal).

**InputSize**. Allows you to set a different height and width (other than standard) for the sketch. Sketch dimensions are always given in inches.

**Frame**. Allows you to define the size of the sketch with the Origin and Corner cursors, the same as you do when you open a window with the frame command.

**FromScreen**. Allows you to simultaneously frame an area of the screen as you are opening the sketch. Whatever was framed will appear in the sketch creating (middle) pane.

#### SKETCH EDITOR WINDOW DESCRIPTION

When you open a Sketch Editor you will see three main areas (or panes) in the window:

- The top or *text pane*, which acts like a regular text window (every command is the same) where you may enter text and perform other functions. Text entries are used for labels on the sketch below by placing the typed-in text into the copy buffer (using **copy** from the popup) and then either pasting it into the sketch creating pane or into the Brush (from the Brush button) for placement on the sketch.
- The middle or *sketch creating pane* where the sketch itself and other related graphics are represented.
- The bottom or *button pane* which has five "buttons" across the window. Each button is represented as a rectangle with an upper half that contains the button title (Activity, Brush, Color, Grid, Mode) and a lower half that displays the currently selected option.

## Sketch Editor Text Pane

The left, middle, and right mouse buttons function within the text (top) pane of the Sketch Editor in the following ways:

### LEFT MOUSE BUTTON

This button retains its normal operations in the text pane of moving the insertion mark (or caret) around to determine where text entry is to occur and to select blocks of text to be edited.

### MIDDLE MOUSE BUTTON MENU

The middle mouse button brings up a variation of the standard text manipulation popup menu with the following functions:

#### Again

Repeats the last replace, copy, or cut edits that you do.

#### Undo

Reverses the effects of the last command. For instance, if you have deleted text, **undo** will put it back in.

#### Copy

Puts a copy of the current selected text into the copy buffer.

#### Cut

Deletes the current selected text and puts it into the copy buffer.

#### Paste

Places, at the insertion mark, whatever information is currently in the copy buffer.

#### Compute it

Takes selected text, evaluates it, and displays the result. For example, if you type in "2 + 3" and select it, then select **compute it**, the number "5" will appear.

#### Time stamp

Displays the day-month-year and current time in the upper lefthand corner of the text pane.

#### Fonts--> regular or underlined

Allows you to change selected text to whatever typeface is chosen from the resulting scrollable tree popup menu, including bold, italic, underlined, and different text sizes.

### RIGHT MOUSE BUTTON MENU

The right mouse button menu is the standard window manipulation popup. It is exactly the same in the Sketch Editor's text pane, creating pane, and button pane.

#### Help

To use the window help tool, press the right mouse button and release with **help** selected from the pop-up menu. A window will appear on the screen with a brief explanation of the window's function and a reference to the User Guide, and to where more information about the window may be found.

#### Classification

The classification of any data window may be changed by the user to reflect its new status. A Change Window Classification input form appears and the new classification is selected by the user. Select **accept** on the input form and the data window classification bars, top and bottom, will change to reflect the selection. If the data item has no classification there are no classification bars.

### Close others

When a display becomes very crowded with windows after an extended period of work, chances are that most are not being used. To keep the window that you are currently working in, and close all of the others, select **close others**. If any of the windows selected for closure have contents that require saving, a Confirmer will appear and ask if you are sure you want to close that specific window (**yes** or **no**).

### Select and close

Permits you to select any number of the windows currently on the screen and close them. After this selection has been made, another popup menu will appear that lists the title tabs of all the open windows. Move the cursor over this list and click the middle mouse button over your choice(s), which will select a window for closing, and also cause the actual title for the window to fade in-and-out on the screen at that window's location.

More than one window may be selected with this function. Execution of this command begins when you move the cursor outside of the displayed list and click a mouse button. If any of the windows selected for closure have contents that have not been saved, a Confirmer will appear and ask if you are sure you want to close that specific window.

### Find

Permits you to transfer control from the window you are in to any other window currently on the screen. The tool works very similarly to **select and close** above. A popup menu will appear on the screen with the titles of all the open windows. Moving the cursor over this list while pressing the middle mouse button will cause the label of the window selected for finding to be highlighted, and also cause the actual title for the window to fade in-and-out on the screen at the location of that window.

Releasing the middle mouse button while any one of the items is selected (the title in the popup menu is highlighted) will cause the selected window to become the active window.

The **find** command can be aborted by moving the cursor anywhere outside of the displayed list and clicking any mouse button.

### Move

If you do not like where a window is on the screen, you can move it elsewhere. Place the cursor in the window to be moved and select **move** on the window popup menu. The action of selecting this tool will cause an outline of the window to be formed, with the cursor grabbing the nearest corner. You can then drag the window frame around by this corner to position it on the screen exactly where you want it.

To dismiss the **move** tool and open the window where the frame is, click the left mouse button.

### Frame

Allows you to change the size of a window. When you select **frame** on the window popup menu, the cursor changes into the Origin cursor, which is used to mark the location of the upper left corner of the new window. You can move the Origin cursor around the screen until it is positioned where you want it. Pressing the left mouse button will cause the upper left corner of the window to become anchored, and the cursor changes to a small Corner cursor marking the lower right corner of the new window frame. Moving this cursor about will cause the frame of the window to "rubber band." Move it around, using the mouse, until the window is the rectangle of the size and proportion that you want, then release the left mouse button. The contents of the reframed window will re-format themselves, as appropriate, to fill the newly-indicated window space.

Some windows are fixed in size and cannot be framed. In this case, **frame** works just like **move**.

### **Collapse/expand**

The selections **collapse** and **expand** appear in place of each other in the right mouse button popup menu. **Collapse** is available when a window is open and active. **Expand** is available when a window is collapsed.

Selecting **collapse** allows you to compress any active window down to its title tab and place that tab anywhere on the screen. When the left mouse button is released, the selected window will be collapsed to its tab alone and you can move the tab about the screen and place it where you want it. To release the tab at the desired location, click the left mouse button.

Since the tabs make up only a small fraction of the space of the window itself, and because the title in the tab is generally descriptive of the window, a number of open windows can be kept and organized on the screen without the display looking cluttered and confusing.

Selecting **expand** on the right mouse button pop-up menu of a collapsed window will restore the window to its precollapsed size and location.

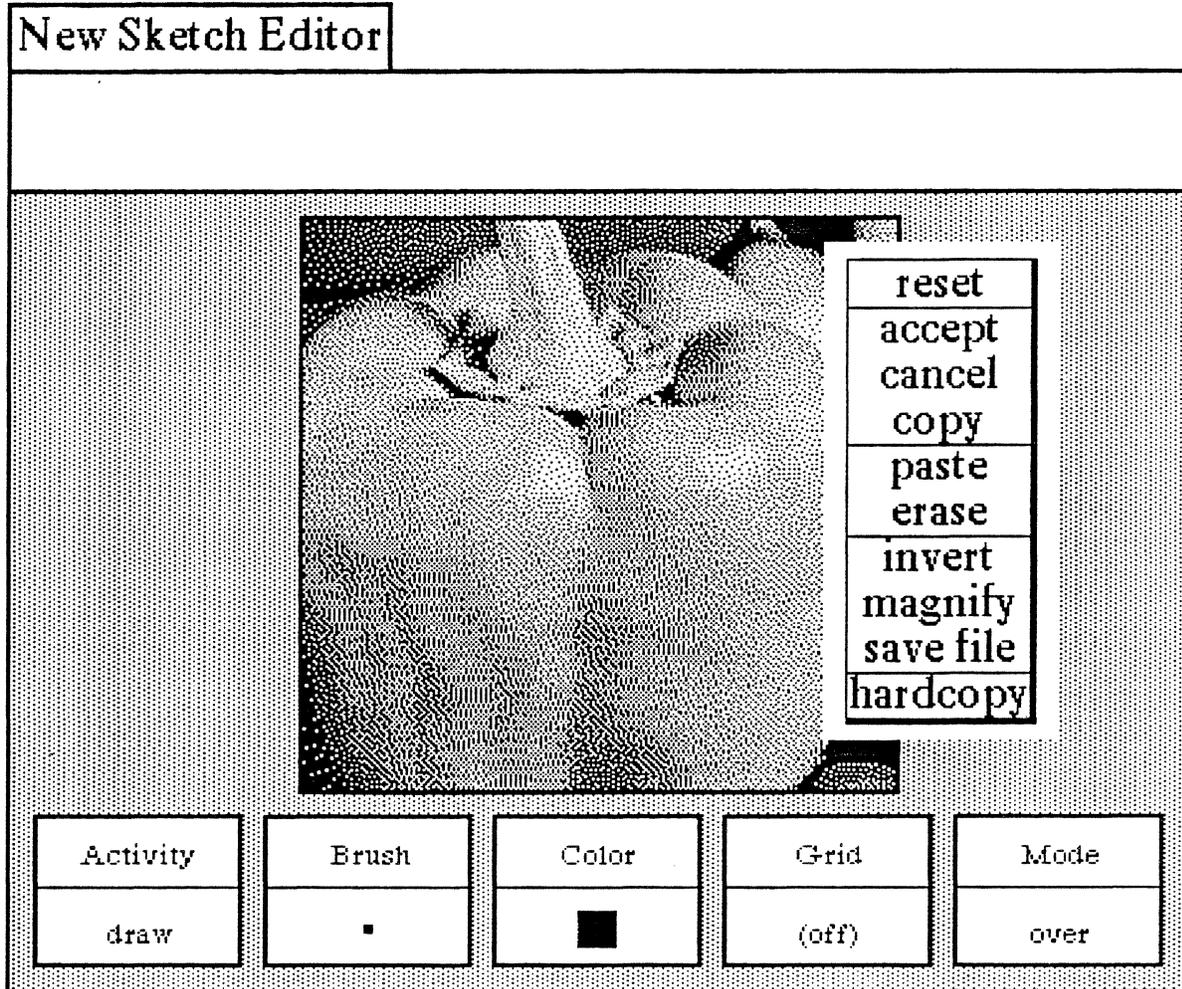
### **Close self**

When you have finished with a window and want to remove it from the group of open windows on the screen, you can close it by selecting **close self**. The window to be closed must be the active window. When the mouse button is released, the window will be closed. Depending on the type of window and what you have been doing with its contents, a Confirmer may appear to ask if you want to close that particular window without saving the contents.

### Sketch Editor Creating Pane

This pane acts as a canvas upon which you create and edit your freeform drawings or more formalized graphics and images. After you are finished you may save your sketch into a file for later retrieval or make a hardcopy of it.

The left and middle mouse buttons function within this pane as described below. The right mouse button brings up the standard window popup menu, as detailed in the Sketch Editor Text Pane section.



#### LEFT MOUSE BUTTON

If you press and hold down this mouse button and move the cursor around with the mouse, the cursor becomes a pencil or paintbrush that will draw within the pane whatever movements you make with the cursor; this is a "frechand drawing" feature. The cursor can also become whatever shape the current Brush is. The Brush shape is added to the sketch by clicking (or pressing) the left mouse button. The exact manner in which the Brush shape is added to the sketch will be determined by the state of the five graphic control "buttons" in the bottom Button pane.

## MIDDLE MOUSE BUTTON MENU

The middle mouse button controls a popup menu with the following functions:

### Reset

Sets all five buttons in the Button pane to their default settings. **Reset** does not reset anything in the Text or Sketch Creating panes. The defaults are:

- ★ draw (Activity button)
- ★ a 4-pixel by 4-pixel black square (Brush button)
- ★ black (Color button)
- ★ off (Grid button)
- ★ over (Mode button)

### Accept

Takes a "snapshot" of the sketch you are currently working on. That is, the sketch will be saved, so that if you do a **cancel** afterwards, you will get this image back. If you are annotating a complex sketch, it's a good idea to do an **accept** as you complete each stage of your work.

### Cancel

Returns you to the sketch that existed after the last **accept**. It will undo everything you have done since then. If you started with a blank sketch, a **cancel** without any previous **accept** will put you back to a blank sketch creating pane.

### Copy

Stores the current sketch in the creating pane into a buffer, so that you may transfer the sketch to another compatible window or to a Brush. For example, you may **copy** the sketch and then **paste** it into another graphics editor or image-type window. You cannot transfer a sketch into a text window.

### Paste

Places the contents of the buffer into the sketch creating pane. For example, when you use the upper text pane to create text, select it, and copy it, you can then (with **paste**) place the text into the middle pane below. **Paste** will always locate the object beginning at the Origin cursor, which is at the upper left corner of the sketch pane.

If you want to specify where the text is to go, use **paste** in the Brush button menu. The brush shape will change to whatever is in the buffer. You then go to the desired location for the text in the sketch creating pane and click the left mouse button to add the text to the sketch.

### Erase

Gets rid of all pane contents and the pane is wiped clean. If you accidentally select this option, then selecting **cancel** will recover the last chart saved with an **accept**.

### Invert

Reverses the bits in the sketch image; that is, all the white bits will be set to black, and all the black bits will be set to white.

### Magnify

After selecting this function, you specify the area to be magnified by framing a rectangular area in the sketch creating pane (the system will ignore any areas outside of the sketch pane). The amount of magnification that occurs is determined by the size of the area that is framed. When displaying the magnified area on the screen, the rule is: the larger the framed area, the smaller the magnification used.

After framing the desired area, a magnified form of it appears. You will then find a suitable screen location and place the magnified form by clicking the left mouse button at that point. Do *not* place the magnified form over the site of the original selected area, as the system has trouble handling this type of overlay.

As you edit the magnified form, the changes you are making there are also occurring on the normal-sized sketch form. When you have finished editing, move the cursor out of the magnified form and click the left mouse button to close the form and return to normal.

**Save file**

Stores the sketch into an Information Center for later retrieval. Selecting **save file** will cause a Confirmer to appear that asks if you want to overwrite the existing file or create a new file. In either case, an Info Center Q-Box next appears and here you will specify the label, keywords, and target Information Center to store the file in.

**Hardcopy**

Causes a Hardcopy Q-Box to appear requesting necessary information for printing. Select **accept** at the top of the form when you're finished and the hardcopy request will be placed in the background printing queue.

## Sketch Editor Button Pane

The Button pane at the bottom of the Sketch Editor window contains the tools to manipulate material in the text pane, and especially the sketch creating pane.

There are five rectangular-shaped buttons and each has two parts: its title at the top and the current selection at the bottom. The selection is changed and updated accordingly when a new selection from the button's popup menu is made. These buttons can basically be thought of as graphics or image editors.

Since each Sketch Editor button has its own unique popup, we will go through every one individually, starting with the graphics button at the far left and working from there towards the right. The middle mouse button menu is the only one described for this pane.

### MIDDLE MOUSE BUTTON MENU



#### 1. Activity Button

This button sets the mode of operation for the brush:

##### Draw

This default setting assures that the cursor will perform like a standard paintbrush. The cursor becomes the brush form currently displayed in the Brush button, and puts copies (one-at-a-time or continuous) of the form on the creating pane above when the left mouse button is pressed or clicked. If the mouse button is pressed and held down and the brush/cursor moved about inside the creating pane, the brush form will be copied along the path of the brush/cursor.

##### Stamp

This option is similar to **draw**, except **stamp** will simply produce one copy at a time of the current brush form, even if the left mouse button is held down and moved inside the creating pane. Use **stamp** to get the cleanest copy of a brush form.

##### Line

Allows you to draw a line with the brush form between two specified points. To specify the start point, go to the location in the creating pane where you want the line to begin and press the left mouse button. Do not release the mouse button, as this will only produce the current form in the brush menu. Instead, hold the mouse button down and move the brush to the desired end point. The start and end points will be connected by a "rubberband" line that acts as a visual aid. Move the brush up and down slightly until the line is smooth, with no "stairsteps" showing, then release the button. The line will now connect between the two points.

##### Curve

Similar to drawing a line; however, it takes an extra point to determine the curved line. To draw a curve, go to your start point then press and hold the left mouse button. Move the brush to the next point and release the mouse button. There should be a "rubberband" line joining the two points. To specify the curvature of your line, move the brush around to define the apex of the curve. At this time, you should see a repeated drawing of a curve line trying to follow the current brush point.

When the desired curve line is reached, click the left mouse button. The final curve line will appear and link up the three points.

#### **Splines-->**

The following four commands will enable you to draw connected, straight, or curved lines of your choice.

**Open Curve.** Here, a set of points are put in to define the curved line to be drawn. The brush becomes a crosshair, and points are entered by locating the desired pane point and clicking the left mouse button. As each point is clicked down, it is numbered, starting with "1."

When all the desired points have been entered, a click of the middle mouse button will draw the curve. The numbers will disappear and the points will be connected in the order of their entry sequence.

**Closed Curve.** This is like the Open Curve, except that it will draw a closed, connected curve so that the result is a continuously connected line, with the last point connected back to the first point.

A set of points are put in to define the curved line to be drawn. The brush becomes a crosshair, and points are entered by locating the desired pane point and clicking the left mouse button. As each point is clicked down, it is numbered, starting with "1."

When all the desired points have been entered, a click of the middle mouse button will draw the curve. The numbers will disappear and the points will be connected in the order of their entry sequence.

**Open Linear.** A set of points are put in to define the lines to be drawn. The brush becomes a crosshair, and points are entered by locating the desired pane point and clicking the left mouse button. As each point is clicked down, it is numbered, starting with "1."

When all the desired points have been entered, a click of the middle mouse button will terminate the action. The numbers will disappear and the points will be connected by straight lines in the order of their entry sequence.

**Closed Linear.** This is like Open Linear, except that it will connect the last point to the first point. A set of points are put in to define the lines to be drawn. The brush becomes a crosshair, and points are entered by locating the desired pane point and clicking the left mouse button. As each point is clicked down, it is numbered, starting with "1."

When all the desired points have been entered, a click of the middle mouse button will terminate the action. The numbers will disappear and the points will be connected by straight lines in the order of their entry sequence, including the connection from the last point to the first point.

#### **Rectangle**

When this function is selected, the cursor assumes the shape of the upper left (Origin) cursor as soon as it is moved into the editing pane. You can then frame the size of your rectangle by pressing the left mouse button, just as you can frame certain types of windows when you open them.

#### **Circle**

Select this, and when the cursor assumes a crosshair shape in the editing pane, press the left mouse button at the point where you want the center of the circle to be. Move the crosshair away from the center of the circle in any direction and note the "rubberband" line that will indicate the radius of the circle. After you have chosen the appropriate radius, release the mouse button. A circle will draw itself about the center point at the specified radius.

#### **Block**

Fills a rectangular area (that you have just defined) with any color or pattern currently in the Color button. The rectangular area is not outlined.

### Fill

Fills a rectangular area (that you have defined) with the current color or pattern in the Color button. There are two steps to filling an area. First, the Origin cursor appears and you define the rectangle (so the fill command will have an outer boundary). After this, the crosshair cursor appears; you now click with the left mouse button to indicate which area within the rectangle is to be filled.

## 2. Brush Button

This button provides all the graphics tools for manipulating the shape of the drawing brush. The Brush button popup menu contains the following functions:

### Default

This resets the current brush form to be a 4-pixel by 4-pixel black square.

### Icons -->

Moving the cursor to the right from this menu selection will produce a scrollable submenu of all of the available annotation forms or icons. Select the desired icon and the Brush button will be updated to reflect this. When you move the cursor into the creating pane above, copies of the selected icon may be placed onto the image by clicking the left mouse button.

### Symbols -->

Moving the cursor to the right from this menu selection will produce a scrollable submenu of all of the available chart symbol forms. Furthermore, to the right of each of these forms is another submenu (although no --> indicates this). If required, you may go two levels for your selection: once you have selected the desired symbol from the first submenu, move to the right of the selection to the next submenu to further modify the symbol.

The resulting form is displayed in the Brush button. When you move the cursor into the creating pane above, copies of the selected form may be placed onto the image by clicking the left mouse button.

### Alter -->

This tree popup branches off to five other subfunctions, all of which allow you to manipulate the current brush form:

**Invert.** After selecting this, the brush form will be color-reversed: the black bits will become white bits and vice versa. This is sometimes referred to as "reverse video."

**Rotate -->.** The submenu selections to the right give you the choice of rotating your brush form 90, 180, or 270 degrees. The "brush form," in this case, should be a symbol, an icon, or some sort of framed image; the default brush (a 4 by 4 pixel square) will reflect no alterations. The rotation is always clockwise, so that two 90-degree rotations will be equivalent to a 180-degree rotation.

Note that this function, along with the mirror function, allows you to generate many combinations of the existing icon or symbol forms.

**Mirror.** This "mirror-images" the x-axis of the brush form. For example, if you have a brush form that looks like ">" in the beginning, the brush will look like "<" after **mirror** is used. In order to mirror the y-axis, mirror the x-axis first and then do a **rotate -->180** from the popup menu.

**Magnify.** Enlarges the current brush form, after you have typed the width and height magnification factors (whole numbers only) into the Prompter that appears. The form represented on the Brush button will immediately reflect the change.

**Shrink.** Reduces the current brush form, after you have typed the width and height reduction factors (whole numbers only) into the Prompter that appears. The form represented on the Brush button will immediately reflect the change.

### **Square**

After selecting this, a Prompter requests you to specify the new size for the square brush. The square brush form of the new specified size will be produced, using the current color or pattern in the Color button.

### **Round**

Produces a round paint brush (the default is square) with the current color or pattern in the Color button. A Prompter will request the radius for the round paint brush.

### **Rectangle**

A Prompter will request that you specify the linewidth for the rectangular brush. You will then frame the rectangle to the desired size and it will become the brush form. This allows the rapid generation of many boxes of the same size.

### **Circle**

A Prompter will request you to specify the linewidth for the circular brush. You will specify the size of the desired circle by placing its center on the pane (by pressing the left mouse button) and "rubberbanding" out to the desired radius. It will promptly become the brush form.

### **Frame**

After selecting this, the Origin cursor appears and you will define a rectangle that encompasses your desired screen material; that is, the particular area of the image on the screen that you wish to become the brush form.

### **Surround**

This resembles **frame**, but allows you to pick up irregular images that might be difficult to outline with that function. The normal cursor image is displayed; you will press the left mouse button and use it like a pencil to surround or "rope" the screen image. After releasing the mouse button, the crosshair cursor appears. Next, click with the left mouse button as close as possible to the roped-off image (or even inside the image). The brush form will assume the shape of the surrounded object.

### **Copy**

Takes the image currently in the Brush button and puts it into the image copy buffer for later use. For example, you may copy the brush image and paste it into the creating or editing pane and/or the Brush button in any other graphics editor. This gives the ability to move an image from one image-type editor to another.

### **Paste**

Takes the image in the Brush button and replaces it with the image in the copy buffer. For example, you may copy or cut a piece of text and paste it into the Brush button, or you may copy another image somewhere else and paste it into the Brush button.

### **Retrieve**

Allows you to get a brush image from the Information Center's transfer buffer. The item in the transfer buffer must be an image in order for the operation to work correctly.

### **Save**

Allows you to store the current brush form into the Information Center of your choice.

### **Hardcopy**

After selection, a printing or hardcopy Q-Box will appear requesting information such as printer name, number of copies, and so on. After you have typed in this information (or you may wish to leave the default settings), select **accept** at the upper left of the Q-Box. "Done" or "printing successful," which will appear at the top right of the screen later on, means the file has been printed.

### 3. Color Button

The Color button allows you to change the color or pattern used by the brush form to any of those shown on the popup. Besides the colors and patterns that you see on the menu, you may also create your own patterns. One way is to **paste** a standard pattern into the brush image, then use your imagination and the brush manipulation tools to create a new pattern. Once this pattern is pasted into the Color button, you will be able to start drawing with it.

### 4. Grid Button

When you use the Grid button, an invisible grid for the creating pane can be made to appear for accurate cursor positioning. You may set the spacing of the grid in both x and y axes; moreover, you can turn the grid on or off in either the x or y axis to allow maximum flexibility.

#### On/Off -->

You may select **on** or **off** from here in the x or y axis; this feature works like a switch that will "toggle" the gridding on and off accordingly. For example, if your current x axis gridding is **on**, the command **on/off** and x will turn the x axis gridding **off**. If you repeat this procedure, you will find that the x axis gridding will return to **off**. This is also true, of course, for y axis gridding. The current status will always be displayed in the Grid button.

#### Spacing

Sets the spacing in the horizontal and vertical direction separately. After selection, a Prompter appears requesting the spacing for each direction; enter whole numbers only. If either of the gridding axes is **on**, its corresponding spacing value will also be shown next to it to help you determine the gridding distance.

### 5. Mode Button

The setting of the Mode button will determine the method in which the brush form is to be added to the creating pane.

#### Over

The brush form you draw with will be drawn over the image in the creating pane. The white bits in the brush form are not transparent and will overlay (cover) the image.

#### Under

The brush form you draw with will be drawn under the image in the creating pane. Only the black bits in the brush form will be set on the screen, because the white parts of the brush image are now transparent.

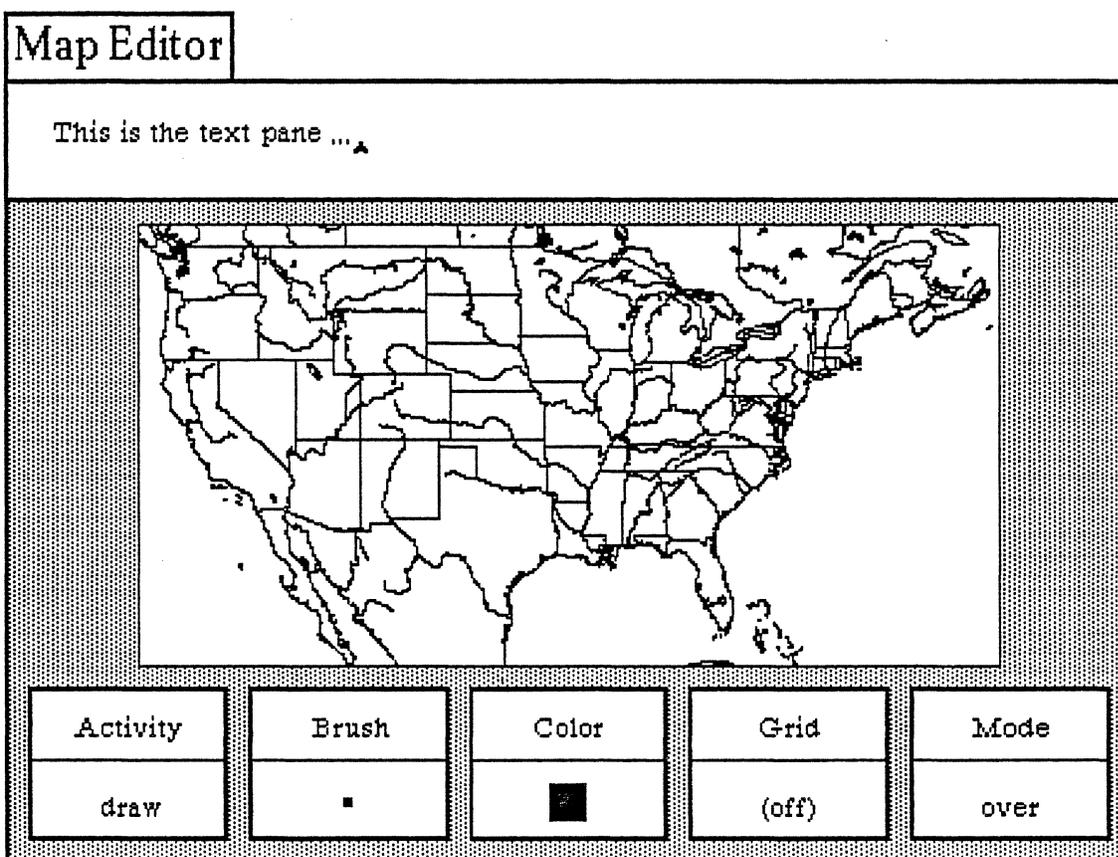
#### Reverse

The white bits in your brush will have no effect on the image, which is under the brush. But the black bits in your brush will turn the black bits in the image under the brush white. Similarly, the black bits in your brush will turn the white bits in the image under the brush black.

#### Erase

The black bits in the brush form will set any black bits on the screen to white, thus making the image invisible. The white bits in the brush form will again have no effect on the screen image.

## The Map Editor



### OVERVIEW

The Map Editor provides the capability of displaying or creating bitmap images generated from a digital geographic database, which then can be edited and annotated. In other words, maps are generated on demand from a map database that has been stored on the local disk or in a remote mass storage device, such as a file server. The Map Editor allows you to expand (zoom) areas within the displayed area and to annotate the map with data from other databases. These databases can be files of cities, harbors, depots, or anything else you find useful as a map annotation.

The Map Editor window is similar in structure and function to that of a Sketch editor. Only the commands in the tree popup menu in the map editing (middle) pane are different.

### OPENING A MAP EDITOR

From your Demo Information Center, select the item titled "World Map" and open it. The map that subsequently appears can be used as a template for other maps, since you can add information to it, modify it, and zoom in on it to draw submaps.

## MAP EDITOR WINDOW DESCRIPTION

When you open a Map Editor you will see three main areas (or panes) in the window:

- The top or *text pane*, which acts exactly like a regular workspace window (every command is the same) where you may enter text and perform other functions. Text entries are used for labels on the map below by placing the typed-in text into the copy buffer (using **copy** from the popup) and then either pasting it into the map editing pane below or into the Brush (from the Brush button) for placement on the map.

Information returned from certain map queries is also displayed in this pane. For instance, when **Lat/Lon** is selected from the map editing popup menu, the latitude/longitude of the cursor point is displayed and updated as the cursor is moved about the map. When distance/bearing queries are made on the map, the result is also displayed here.

- The middle or *map editing pane* where the map itself and other related graphics are represented.
- The bottom or *button pane* which has five "buttons" across the window. Each button is represented as a rectangle with an upper half that contains the button title (Activity, Brush, Color, Grid, Mode) and a lower half that displays the currently selected option.

## Map Editor Text Pane

The left, middle, and right mouse buttons function within the text (top) pane of the Map Editor in the following ways:

### LEFT MOUSE BUTTON

This button retains its normal operations in the text pane of moving the insertion mark (or caret) around to determine where text entry is to occur and to select blocks of text to be edited.

### MIDDLE MOUSE BUTTON MENU

The middle mouse button brings up a variation of the standard text manipulation popup menu with the following functions:

#### Again

Repeats the last replace, copy, or cut edits that you do.

#### Undo

Reverses the effects of the last command. For instance, if you have deleted text, **undo** will put it back in.

#### Copy

Puts a copy of the current selected text into the copy buffer.

#### Cut

Deletes the current selected text and puts it into the copy buffer.

#### Paste

Places, at the insertion mark, whatever information is currently in the copy buffer.

#### Compute it

Takes selected text, evaluates it, and displays the result. For example, if you type in "2 + 3" and select it, then select **compute it**, the number "5" will appear.

#### Time stamp

Displays the day-month-year and current time in the upper lefthand corner of the text pane.

#### Fonts--> regular or underlined

Allows you to change selected text to whatever typeface is chosen from the resulting scrollable tree popup menu, including bold, italic, underlined, and different text sizes.

### RIGHT MOUSE BUTTON MENU

The right mouse button menu is the standard window manipulation popup. It is exactly the same for the Map Editor's text pane, editing pane, and button pane.

#### Help

To use the window Help tool, press the right mouse button and release with **help** selected from the pop-up menu. A window will appear on the screen with a brief explanation of the window's function and a reference to the User Guide, and to where more information about the window may be found.

#### Classification

The classification of any data window may be changed by the user to reflect its new status. A Change Window Classification input form appears and the new classification is selected by the user. Select **accept** on the input form and the data window classification bars, top and bottom, will change to reflect the selection. If the data item has no classification there are no classification bars.

### Close others

When a display becomes very crowded with windows after an extended period of work, chances are that most are not being used. To keep the window that you are currently working in, and close all of the others, select **close others**. If any of the windows selected for closure have contents that require saving, a **Confirmer** will appear and ask if you are sure you want to close that specific window (**yes** or **no**).

### Select and close

Permits you to select any number of the windows currently on the screen and close them. After this selection has been made, another popup menu will appear that lists the title tabs of all the open windows. Move the cursor over this list and click the middle mouse button over your choice(s), which will select a window for closing, and also cause the actual title for the window to fade in-and-out on the screen at that window's location.

More than one window may be selected with this function. Execution of this command begins when you move the cursor outside of the displayed list and click a mouse button. If any of the windows selected for closure have contents that have not been saved, a **Confirmer** will appear and ask if you are sure you want to close that specific window.

### Find

Permits you to transfer control from the window you are in to any other window currently on the screen. The tool works very similarly to **select and close** above. A popup menu will appear on the screen with the titles of all the open windows. Moving the cursor over this list while pressing the middle mouse button will cause the label of the window selected for finding to be highlighted, and also cause the actual title for the window to fade in-and-out on the screen at the location of that window.

Releasing the middle mouse button while any one of the items is selected (the title in the popup menu is highlighted) will cause the selected window to become the active window.

The **find** command can be aborted by moving the cursor anywhere outside of the displayed list and clicking any mouse button.

### Move

If you do not like where a window is on the screen, you can move it elsewhere. Place the cursor in the window to be moved and select **move** on the window popup menu. The action of selecting this tool will cause an outline of the window to be formed, with the cursor grabbing the nearest corner. You can then drag the window frame around by this corner to position it on the screen exactly where you want it.

To dismiss the **move** tool and open the window where the frame is, click the left mouse button.

### Frame

Allows you to change the size of a window. When you select **frame** on the window popup menu, the cursor changes into the **Origin** cursor, which is used to mark the location of the upper left corner of the new window. You can move the **Origin** cursor around the screen until it is positioned where you want it. Pressing the left mouse button will cause the upper left corner of the window to become anchored, and the cursor changes to a small **Corner** cursor marking the lower right corner of the new window frame. Moving this cursor about will cause the frame of the window to "rubber band." Move it around, using the mouse, until the window is the rectangle of the size and proportion that you want, then release the left mouse button. The contents of the reframed window will re-format themselves, as appropriate, to fill the newly-indicated window space.

Some windows are fixed in size and cannot be framed. In this case, **frame** works just like **move**.

### **Collapse/expand**

The selections **collapse** and **expand** appear in place of each other in the right mouse button popup menu. **Collapse** is available when a window is open and active. **Expand** is available when a window is collapsed.

Selecting **collapse** allows you to compress any active window down to its title tab and place that tab anywhere on the screen. When the left mouse button is released, the selected window will be collapsed to its tab alone and you can move the tab about the screen and place it where you want it. To release the tab at the desired location, click the left mouse button.

Since the tabs make up only a small fraction of the space of the window itself, and because the title in the tab is generally descriptive of the window, a number of open windows can be kept and organized on the screen without the display looking cluttered and confusing.

Selecting **expand** on the right mouse button pop-up menu of a collapsed window will restore the window to its precollapsed size and location.

### **Close self**

When you have finished with a window and want to remove it from the group of open windows on the screen, you can close it by selecting **close self**. The window to be closed must be the active window. When the mouse button is released, the window will be closed. Depending on the type of window and what you have been doing with its contents, a **Confirmer** may appear to ask if you want to close that particular window without saving the contents.

## Map Editor Editing Pane

This pane is like a canvas upon which you can draw objects, display and edit maps, and annotate them. After you are finished you may save your map image into a file for later retrieval or make a hardcopy of it.

The left and middle mouse buttons function within this pane as described below. The right mouse button brings up the standard window popup menu, as detailed in the Text Pane section.

### LEFT MOUSE BUTTON

If you press and hold down this mouse button and move the cursor around, the cursor becomes a pencil or paintbrush that will draw within the pane whatever movements you make with the cursor. The cursor can also become whatever shape the current Brush is. The Brush shape is added to the map by clicking (or pressing) the left mouse button. The exact manner in which the Brush shape is added to the map will be determined by the state of the five graphic control buttons.

### MIDDLE MOUSE BUTTON MENU

The middle mouse button controls a popup menu with the following map editing functions:

#### Reset

Sets all five buttons in the button pane to their default settings. Reset does not reset anything in the text or map editing panes. The defaults are:

- ★ draw (Activity button)
- ★ a 4-pixel by 4-pixel black square (Brush button)
- ★ black (Color button)
- ★ off (Grid button)
- ★ over (Mode button)

#### Accept

Takes a "snapshot" of the map you are currently working on. That is, the map will be saved, so that if you do a cancel afterwards, you will get the image back. If you are annotating a complex map, it's a good idea to do an accept as you complete each stage of your work.

#### Cancel

Returns you to the map that existed after the last accept. It will undo everything you have done since then. If you started with a blank map, a cancel without any previous accept will put you back to a blank map editing pane.

#### Copy

Stores the current map in the editing pane into a buffer, so that you may transfer the map to another compatible window or to a Brush. For example, you may copy the map and then paste it into another graphics editor or image-type window. You cannot transfer a map into a text window.

|              |                   |
|--------------|-------------------|
| reset        |                   |
| accept       |                   |
| cancel       |                   |
| copy         |                   |
| paste        |                   |
| erase        |                   |
| invert       |                   |
| magnify      | display databases |
| save file    | query & display   |
| hardcopy     | select & search   |
| databases--> | make new database |
| location-->  | add to database   |
| redraw map   | remove place      |
| zoom         | redisplay all     |

### **Paste**

Places the contents of the buffer into the map pane. For example, when you use the upper text pane to create text, select it, and copy it, you can then (with paste) replace the contents of the map pane with the copied text. Paste will always locate the object beginning at the Origin cursor which is at the upper left corner of the map pane.

If you want to specify where the text is to go, use paste in the Brush button menu. The brush shape will change to whatever is in the buffer. You then go to the desired location for the text in the map editing pane and click the left mouse button to add the text to the map.

### **Erase**

Gets rid of all pane contents and the pane is wiped clean. If you accidentally use this function, then selecting cancel will recover the last map saved with an accept.

### **Invert**

Reverses the bits in the map image; that is, all the white bits will be set to black, and all the black bits will be set to white.

### **Magnify**

After selecting this function, you specify the area to be magnified by framing a rectangular area in the map editing pane (the system will ignore any areas outside of the map pane). The amount of magnification that occurs is determined by the size of the area that is framed. When displaying the magnified area on the screen, the rule is: the larger the framed area, the smaller the magnification used.

After framing the desired area, a magnified form of it appears. You will then find a suitable screen location and place the magnified form by clicking the left mouse button at that point. Do not place the magnified form over the site of the original selected area, as the system has trouble handling this type of overlay.

As you edit the magnified form, the changes you are making there are also occurring on the normal-sized map form. When you have finished editing, move the cursor out of the magnified form and click the left mouse button to close the form and return to normal.

### **Save File**

Stores the map into an Information Center for later retrieval. Selecting save file will cause a Confirmer to appear that asks if you want to overwrite the existing map or create a new map. In either case, an Info Center Q-Box next appears and here you will specify the label, keywords, and target Information Center to store the map in.

### **Hardcopy**

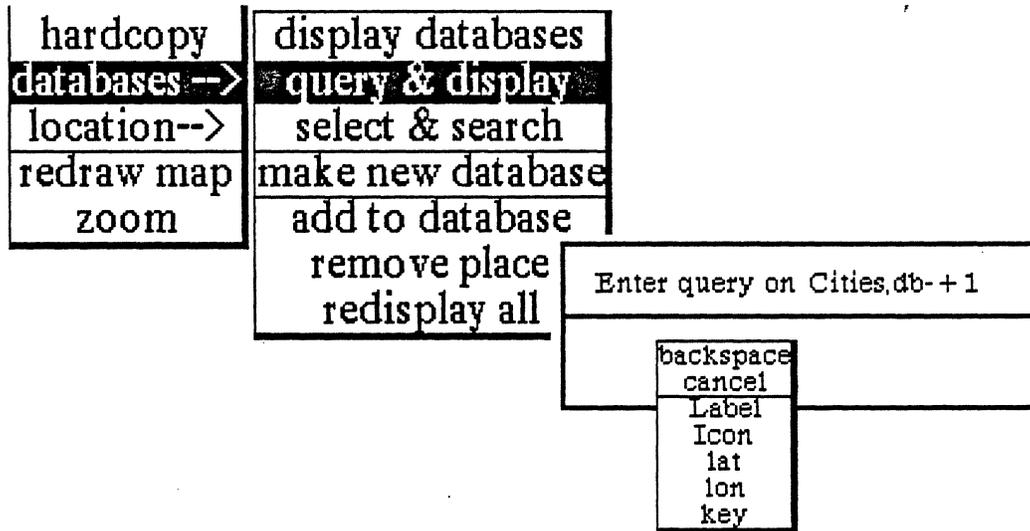
Causes a Hardcopy Q-Box to appear requesting necessary information for printing. Select accept at the top of the form when you're finished so the hardcopy request will be started and placed in the background printing queue.

### **Databases -->**

**Display databases.** Opens to a list of the current databases. After you select one of the items, the information appears on the map.

**Query & display.** Allows you to use a query as a filter for information by utilizing a series of query "templates." When you construct a query, a different approach is used to enter most of the information. Instead of typing in text and numbers or selecting from various boxes, you will utilize a series of small popup menus. These menus are designed to keep track of your query syntax (field name – operator – value) and to guide you in forming the query correctly.

In order to illustrate how this works, here is the procedure to make a typical latitude query, such as to display on the map all cities at "latitudes greater than 30":



- Select **query & display** from the popup, then select the desired database from the list that appears (in this case, it would be cities). Next, a Prompter says "Enter query on cities.db."

- Unlike other Prompters, you will not key in text or numbers and terminate it with a <return>. Notice that a mouse cursor appears in the bottom part of the Prompter, with the middle mouse button highlighted. This means that you are to press the middle mouse button to start entering your query.

- After pressing the middle mouse button, a tiny popup appears that contains:  
**backspace.** Eliminates (or backspaces over) the current displayed value.  
**cancel.** Closes the popup and cancels the query.

The remaining choices in the popup vary, as they represent the current applicable list in the Fields pane of your Database window. In this example, one of the variable selections is lat(itude).

- Select **lat** and observe that **lat** now appears at the bottom of the query Prompter. Press the middle mouse button again.

- The second popup to appear contains a *fixed* list of operators: **backspace cancel < > = <= >= ~**  
contains ~ contains

- You want to query latitudes "greater than," so select **>** and observe that **lat >** appears in the Prompter. Press the middle mouse button again.

- The third popup contains another fixed list: **backspace cancel enter value**

- Since you're ready to enter the number value of the query, select **enter value**. A Prompter appears that says "Enter a number." This time, key in "30" then press <return>.

- The original Prompter reappears and displays the query `lat > 30` at the bottom. Press the middle mouse button again to bring up the last menu. Its fixed choices are: `backspace cancel ACCEPT and or xor`

- If you now select **ACCEPT** from the menu, the names of all cities at "latitudes greater than 30" will quickly be displayed in their appropriate places on the map.

**Select & search.** Searches for database references to your selected item. Selecting this option changes the cursor into a crosshair. Move the crosshair into the map and superimpose it over the crosshair symbol located next to the item name you wish to select, then click the left mouse button. If database references exist, an Origin cursor will appear in order that you may frame and display the folder that contains the references. If no reference exists, a Confirmer will appear that says "There is no reference to this place. Shall I make a new folder?" If you select yes, this gives you the opportunity to start a database reference folder for the item.

**Make new database.** Brings up a Prompter that says "New database name." Type in the new name below and press `<return>`. Now if you select **display databases**, the new database name will be listed. There will be no usable database information in it until you do an **add to database**.

**Add to database.** Allows you to fill in information for a new database. Selecting this option changes the cursor into a crosshair. Since the database item is new, it will not yet appear on the map, so you must click over the point on the map where you want it to appear. After this, an "Identify this point" Q-Box will appear. In it you must type in the point name and the key. Select **accept**, and the list of databases appears in order for you to select the desired one. When this is done, the new information will appear in the correct database.

**Remove place.** Gets rid of a database item on the map. Selecting this option changes the cursor into a crosshair. Move the crosshair into the map and superimpose it over the crosshair symbol located next to the name you wish to delete, then click the left mouse button.

**Redisplay all.** Refreshes the map; cleans up any leftover bits and pieces and partially obscured names.

#### Location -->

**Lat/lon.** Lists, in the text pane, the latitude and longitude of a map point selected with the crosshair cursor.

**Lat/lon grid.** Draws a latitude/longitude grid upon the map. Selecting this option brings up a Prompter that says "Type spacing for grid (deg)." Type in the number and `<return>`. To get rid of a grid, you must select **cancel** from the middle mouse button popup.

**dist/bearing.** Lists, in the text pane, the distance and bearing of a map point selected with the crosshair cursor.

#### Redraw map

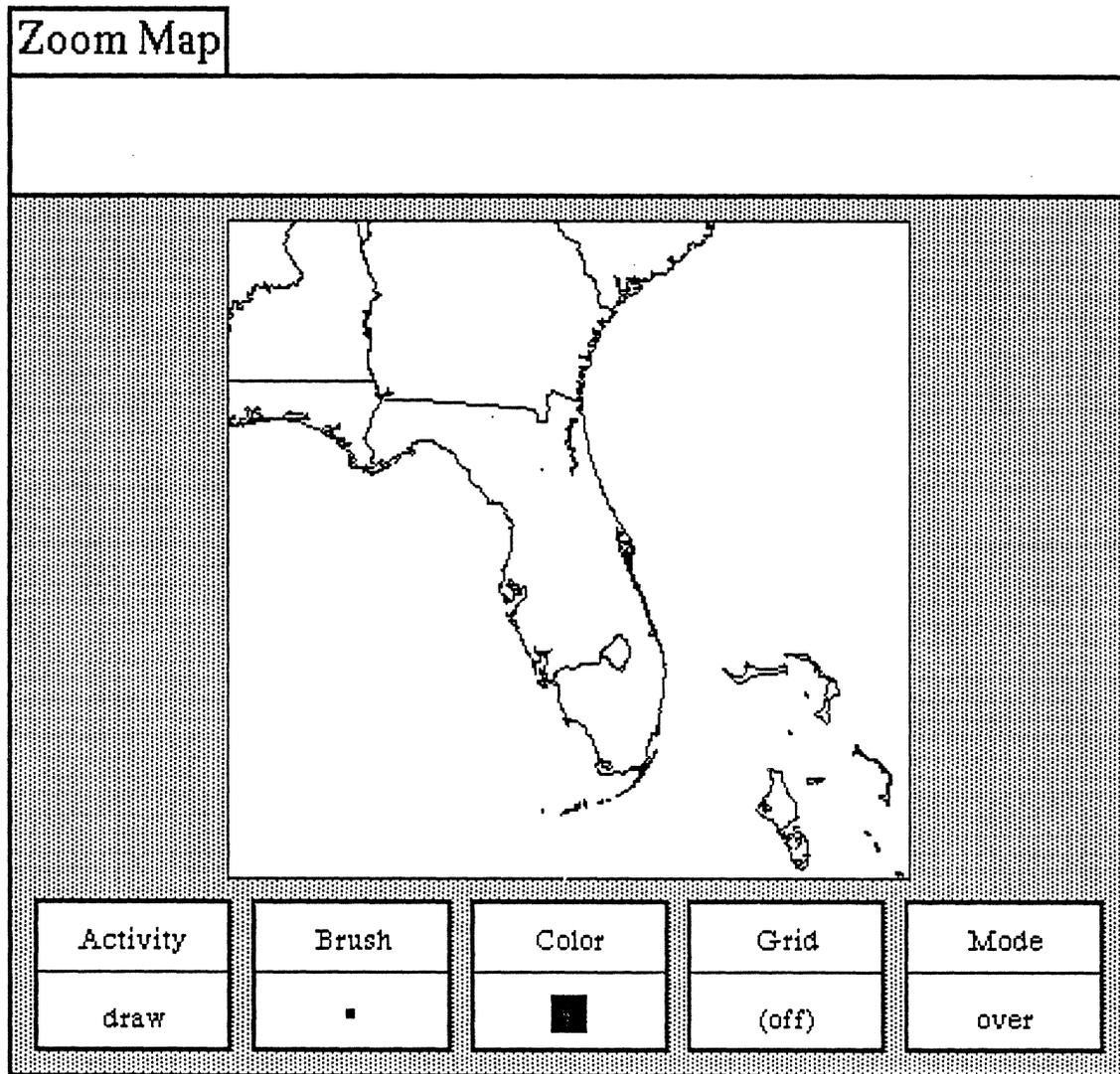
Redraws a complete duplicate map:

- Select **redraw map**, which causes the Origin cursor to appear.
- Press and hold down the left mouse button as you frame to the size that you want the redrawn map to be.
- When you release the mouse button, the frame of the map appears on the display. Click the left mouse button and the software will begin to redraw the map to the new size.

### Zoom

Displays an enlarged and sized map area. This is done in several stages:

- Select **zoom** and the Origin cursor appears. Press and hold down the left mouse button as you frame the map area to be zoomed.
- When you release the mouse button, the Origin cursor appears again. This time, press and hold down the left mouse button as you frame the area size to display into (this will be represented by a gray rectangle).
- When you release the mouse button, the frame of the zoomed area appears on the display. Click the left mouse button and the software will begin to draw the zoomed map window.



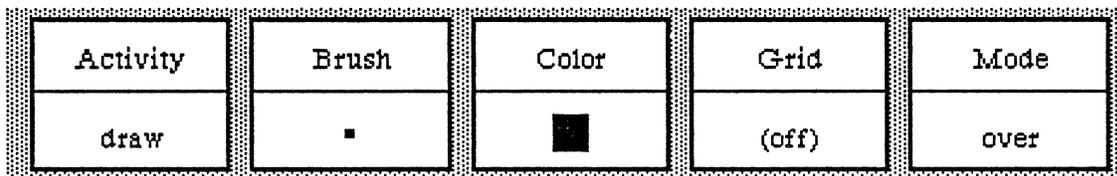
## Map Editor Button Pane

The Button pane at the bottom of the Map Editor window contains the tools to manipulate material in the text pane, and especially the map editing pane.

There are five rectangular-shaped buttons and each has two parts: its title at the top and the current selection at the bottom. The selection is changed and updated accordingly when a new selection from the button's popup menu is made. These buttons can basically be thought of as graphics or image editors.

Since each Map Editor button has its own unique popup, we will go through every one individually, starting with the Activity button at the far left and working from there towards the right. The middle mouse button is the only one described for this pane.

### MIDDLE MOUSE BUTTON MENU



#### 1. Activity Button

This button sets the mode of operation for the brush:

##### Draw

This default setting assures that the cursor will perform like a standard paintbrush. The cursor becomes the brush form currently displayed in the Brush button, and puts copies (one-at-a-time or continuous) of the form on the editing pane above when the left mouse button is pressed or clicked. If the mouse button is pressed and held down and the brush/cursor moved about inside the editing pane, the brush form will be copied along the path of the brush/cursor.

##### Stamp

This option is similar to **draw**, except **stamp** will simply produce one copy at a time of the current brush form, even if the left mouse button is held down and moved inside the editing pane. Use **stamp** to get the cleanest copy of a brush form.

##### Line

Allows you to draw a line with the brush form between two specified points. To specify the start point, go to the location in the editing pane where you want the line to begin and press the left mouse button. Do not release the mouse button, as this will only produce the current form in the brush menu. Instead, hold the mouse button down and move the brush to the desired end point. The start and end points will be connected by a "rubberband" line that acts as a visual aid. Move the brush up and down slightly until the line is smooth, with no "stairsteps" showing, then release the button. The line will now connect between the two points.

##### Curve

Similar to drawing a line; however, it takes an extra point to determine the curved line. To draw a curve, go to your start point then press and hold the left mouse button. Move the brush to the next point and release the mouse button. There should be a "rubberband" line joining the two points. To specify the curvature of your line, move the brush around to define the apex of the curve. At this time, you should see a repeated drawing of a curve line trying to follow the current brush point.

When the desired curve line is reached, click the left mouse button. The final curve line will appear and link up the three points.

#### **Splines-->**

The following four commands will enable you to draw connected, straight, or curved lines of your choice.

**Open Curve.** Here, a set of points are put in to define the curved line to be drawn. The brush becomes a crosshair, and points are entered by locating the desired pane point and clicking the left mouse button. As each point is clicked down, it is numbered, starting with "1."

When all the desired points have been entered, a click of the middle mouse button will draw the curve. The numbers will disappear and the points will be connected in the order of their entry sequence.

**Closed Curve.** This is like the Open Curve, except that it will draw a closed, connected curve so that the result is a continuously connected line, with the last point connected back to the first point.

A set of points are put in to define the curved line to be drawn. The brush becomes a crosshair, and points are entered by locating the desired pane point and clicking the left mouse button. As each point is clicked down, it is numbered, starting with "1."

When all the desired points have been entered, a click of the middle mouse button will draw the curve. The numbers will disappear and the points will be connected in the order of their entry sequence.

**Open Linear.** A set of points are put in to define the lines to be drawn. The brush becomes a crosshair, and points are entered by locating the desired pane point and clicking the left mouse button. As each point is clicked down, it is numbered, starting with "1."

When all the desired points have been entered, a click of the middle mouse button will terminate the action. The numbers will disappear and the points will be connected by straight lines in the order of their entry sequence.

**Closed Linear.** This is like Open Linear, except that it will connect the last point to the first point. A set of points are put in to define the lines to be drawn. The brush becomes a crosshair, and points are entered by locating the desired pane point and clicking the left mouse button. As each point is clicked down, it is numbered, starting with "1."

When all the desired points have been entered, a click of the middle mouse button will terminate the action. The numbers will disappear and the points will be connected by straight lines in the order of their entry sequence, including the connection from the last point to the first point.

#### **Rectangle**

When this function is selected, the cursor assumes the shape of the upper left (Origin) cursor as soon as it is moved into the editing pane. You can then frame the size of your rectangle by pressing the left mouse button, just as you can frame certain types of windows when you open them.

#### **Circle**

Select this, and when the cursor assumes a crosshair shape in the editing pane, press the left mouse button at the point where you want the center of the circle to be. Move the crosshair away from the center of the circle in any direction and note the "rubberband" line that will indicate the radius of the circle. After you have chosen the appropriate radius, release the mouse button. A circle will draw itself about the center point at the specified radius.

#### **Block**

Fills a rectangular area (that you have just defined) with any color or pattern currently in the Color button. The rectangular area is not outlined.

## Fill

Fills a rectangular area (that you have defined) with the current color or pattern in the Color button. There are two steps to filling an area. First, the Origin cursor appears and you define the rectangle (so the fill command will have an outer boundary). After this, the crosshair cursor appears; you now click with the left mouse button to indicate which area within the rectangle is to be filled.

## 2. Brush Button

Provides all the graphics tools for manipulating the shape of the drawing brush. The Brush button popup menu contains the following functions:

### Default

This resets the current brush form to be a 4-pixel by 4-pixel black square.

### Icons -->

Moving the cursor to the right from this menu selection will produce a scrollable submenu of all of the available annotation forms or icons. Select the desired icon and the Brush button will be updated to reflect this. When you move the cursor into the editing pane above, copies of the selected icon may be placed onto the image by clicking the left mouse button.

### Symbols -->

Moving the cursor to the right from this menu selection will produce a scrollable submenu of all of the available chart symbol forms. Furthermore, to the right of each of these forms is another submenu (although no --> indicates this). If required, you may go two levels for your selection: once you have selected the desired symbol from the first submenu, move to the right of the selection to the next submenu to further modify the symbol.

The resulting form is displayed in the Brush button. When you move the cursor into the editing pane above, copies of the selected form may be placed onto the image by clicking the left mouse button.

### Alter -->

This tree popup branches off to five other subfunctions, all of which allow you to manipulate the current brush form:

**Invert.** After selecting this, the brush form will be color-reversed: the black bits will become white bits and vice versa. This is sometimes referred to as "reverse video."

**Rotate -->.** The submenu selections to the right give you the choice of rotating your brush form 90, 180, or 270 degrees. The "brush form," in this case, should be a symbol, an icon, or some sort of framed image; the default brush (a 4 by 4 pixel square) will reflect no alterations. The rotation is always clockwise, so that two 90-degree rotations will be equivalent to a 180-degree rotation.

Note that this function, along with the mirror function, allows you to generate many combinations of the existing icon or symbol forms.

**Mirror.** This "mirror-images" the x-axis of the brush form. For example, if you have a brush form that looks like ">" in the beginning, the brush will look like "<" after mirror is used. In order to mirror the y-axis, mirror the x-axis first and then do a rotate -->180 from the popup menu.

**Magnify.** Enlarges the current brush form, after you have typed the width and height magnification factors (whole numbers only) into the Prompter that appears. The form represented on the Brush button will immediately reflect the change.

**Shrink.** Reduces the current brush form, after you have typed the width and height reduction factors (whole numbers only) into the Prompter that appears. The form represented on the Brush button will immediately reflect the change.

### **Square**

After selecting this, a Prompter requests you to specify the new size for the square brush. The square brush form of the new specified size will be produced, using the current color or pattern in the Color button.

### **Round**

This produces a round paint brush (the default is square) with the current color or pattern in the Color button. A Prompter will request the radius for the round paint brush.

### **Rectangle**

A Prompter will request that you specify the linewidth for the rectangular brush. You will then frame the rectangle to the desired size and it will become the brush form. This allows the rapid generation of many boxes of the same size.

### **Circle**

A Prompter will request you to specify the linewidth for the circular brush. You will specify the size of the desired circle by placing its center on the pane (by pressing the left mouse button) and "rubberbanding" out to the desired radius. It will promptly become the brush form.

### **Frame**

After selecting this, the Origin cursor appears and you will define a rectangle that encompasses your desired screen material; that is, the particular area of the image on the screen that you wish to become the brush form.

### **Surround**

This resembles **frame**, but allows you to pick up irregular images that might be difficult to outline with that function. The normal cursor image is displayed; you will press the left mouse button and use it like a pencil to surround or "rope" the screen image. After releasing the mouse button, the crosshair cursor appears. Next, click with the left mouse button as close as possible to the roped-off image (or even inside the image). The brush form will assume the shape of the surrounded object.

### **Copy**

Takes the image currently in the Brush button and puts it into the image copy buffer for later use. For example, you may copy the brush image and paste it into the graphic or editing pane and/or the Brush button in any other graphics editor. This gives the ability to move an image from one image-type editor to another.

### **Paste**

Takes the image in the Brush button and replaces it with the image in the copy buffer. For example, you may copy or cut a piece of text and paste it into the Brush button, or you may copy another image somewhere else and paste it into the Brush button.

### **Retrieve**

Allows you to get a brush image from the Information Center transfer buffer. The item in the transfer buffer must be an image in order for the operation to work correctly.

### **Save**

Allows you to store the current brush form into the Information Center of your choice.

### **Hardcopy**

After selection, a printing or hardcopy Q-Box will appear requesting information such as printer name, number of copies, and so on. After you have typed in this information (or you may wish to leave the default settings), select **accept** at the upper left of the Q-Box. "Done" or "printing successful," which will appear at the top right of the screen later on, means the file has been printed.

### 3. Color Button

The Color button allows you to change the color or pattern used by the brush form to any of those shown on the popup. Besides the colors and patterns that you see on the menu, you may also create your own patterns. One way is to paste a standard pattern into the brush image, then use your imagination and the brush manipulation tools to create a new pattern. Once this pattern is pasted into the Color button, you will be able to start drawing with it.

### 4. Grid Button

When you use the Grid button, an invisible grid for the editor pane can be made to appear for accurate cursor positioning. You can set the spacing of the grid in both x and y axes; moreover, you may turn the grid on or off in either the x or y axis to allow maximum flexibility.

#### On/Off -->

You may select **on** or **off** from here in the x or y axis; this feature works like a switch that will "toggle" the gridding on and off accordingly. For example, if your current x axis gridding is **on**, the command **on/off** and x will turn the x axis gridding **off**. If you repeat this procedure, you will find that the x axis gridding will return to **off**. This is also true, of course, for y axis gridding. The current status will always be displayed in the Grid button.

#### Spacing

Set the spacing in the horizontal and vertical direction separately. After selection, a Prompter appears requesting the spacing for each direction; enter whole numbers only. If either of the gridding axes is **on**, its corresponding spacing value will also be shown next to it to help you determine the gridding distance.

### 5. Mode Button

The setting of the Mode button will determine the method in which the brush form is to be added to the editing pane.

#### Over

The brush form you draw with will be drawn over the image in the graphics pane. The white bits in the brush form are not transparent and will overlay (cover) the image.

#### Under

The brush form you draw with will be drawn under the image in the graphics pane. Only the black bits in the brush form will be set on the screen, because the white parts of the brush image are now transparent.

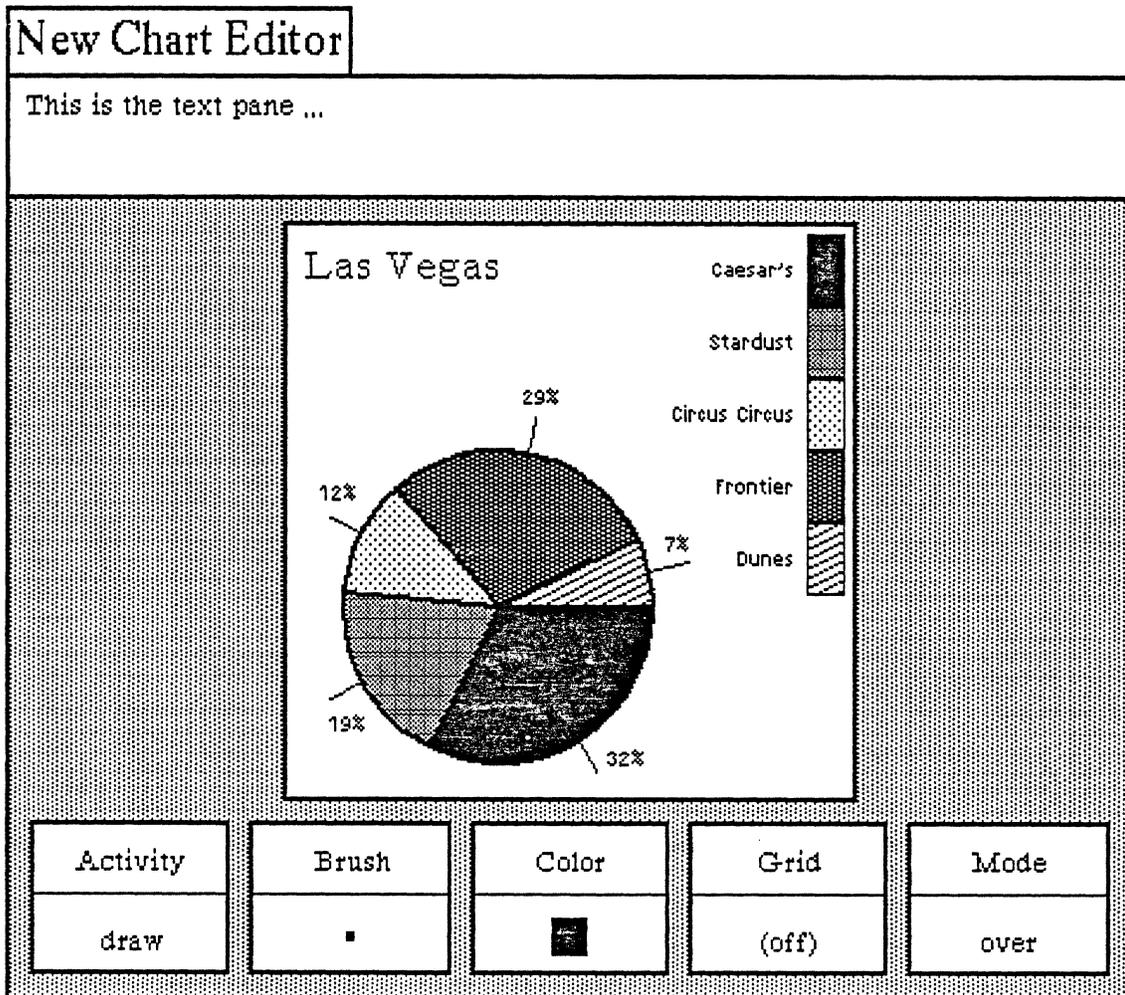
#### Reverse

The white bits in your brush will have no effect on the image which is under the brush, but the black bits in your brush will turn the black bits in the image under the brush white. Similarly, the black bits in your brush will turn the white bits in the image under the brush black.

#### Erase

The black bits in the brush form will set any black bits on the screen to white, thus making the image invisible. The white bits in the brush form will again have no effect on the screen image.

## The Chart Editor



### OVERVIEW

The Chart Editor is a graphics tool that uses your data to produce different types of charts. You have a choice of producing pie, bar, or line charts, clustered and stacked bar charts, x-y scatter, or linear fit plots. You may use data which are already available from a database or create your own data as you go along.

The window of the Chart Editor is similar in structure and function to that of the Sketch Editor. Only the commands from the middle mouse button popup menu in the chart creating (middle) pane are different.

### OPENING A CHART EDITOR

To open up a Chart Editor, select **Graphics Pad** from the middle mouse button system popup. Immediately, a Q-Box request form will appear that states "What sort of Graphics pad?" Here you will have a choice of either a Sketch pad (the default) or a Chart pad. Select **Chart** here, then select **accept**.

Other choices that you can select from the request form are all related to chart size:

**Standard** (the default). A standard 6" x 6" chart area.

**FullPage**. An 8-1/2" x 11" chart area oriented in portrait mode (vertical).

**Landscape**. An 8-1/2" by 11" chart area oriented in landscape mode (horizontal).

**InputSize**. Allows you to set a different height and width (other than standard) for the chart. Chart dimensions are always given in inches.

**Frame**. Allows you to define the size of the chart with the Origin and Corner cursors, the same as you do when you open a window with the frame command.

**FromScreen**. Allows you to simultaneously frame an area of the screen as you are opening the chart. Whatever was framed will appear in the chart creating (middle) pane.

## CHART EDITOR WINDOW DESCRIPTION

When you've opened a Chart Editor you will see three main areas (or panes) of the window:

- The top or *text pane*, which acts exactly like a regular text window (every command is the same) where you may enter text and perform other functions. Text entries are used for labels on the chart below by placing the typed-in text into the copy buffer (using copy from the popup) and then either pasting it into the chart creating pane below it or into the Brush (from the Brush button) for placement on the chart.
- The middle or *chart creating pane* where the chart itself and other related graphics are represented.
- The bottom or *button pane* which has five "buttons" across the window. Each button is represented as a rectangle with an upper half that contains the button title (Activity, Brush, Color, Grid, Mode) and a lower half that displays the currently selected option.

## Chart Editor Text Pane

The left, middle, and right mouse buttons function within the text (top) pane of the Chart Editor in the following ways:

### LEFT MOUSE BUTTON

This button retains its normal operations in the text pane of moving the insertion mark (or caret) around to determine where text entry is to occur and to select blocks of text to be edited.

### MIDDLE MOUSE BUTTON MENU

The middle mouse button brings up a variation of the standard text manipulation popup menu with the following functions:

#### Again

Repeats the last replace, copy, or cut edits that you do.

#### Undo

Reverses the effects of the last command. For instance, if you have deleted text, **undo** will put it back in.

#### Copy

Puts a copy of the current selected text into the copy buffer.

#### Cut

Deletes the current selected text and puts it into the copy buffer.

#### Paste

Places, at the insertion mark, whatever information is currently in the copy buffer.

#### Compute it

Takes selected text, evaluates it, and displays the result. For example, if you type in "2 + 3" and select it, then select **compute it**, the number "5" will appear.

#### Time stamp

Displays the day-month-year and current time in the upper lefthand corner of the text pane.

#### Fonts--> regular or underlined

Allows you to change selected text to whatever typeface is chosen from the resulting scrollable tree popup menu, including bold, italic, underlined, and different text sizes.

### RIGHT MOUSE BUTTON MENU

The right mouse button menu is the standard window manipulation popup. It is exactly the same for the Chart Editor's text pane, creating pane, and button pane.

#### Help

To use the window Help tool, press the right mouse button and release with **help** selected from the pop-up menu. A window will appear on the screen with a brief explanation of the window's function and a reference to the User Guide, and to where more information about the window may be found.

#### Classification

The classification of any data window may be changed by the user to reflect its new status. A Change Window Classification input form appears and the new classification is selected by the user. Select **accept** on the input form and the data window classification bars, top and bottom, will change to reflect the selection. If the data item has no classification there are no classification bars.

### Close others

When a display becomes very crowded with windows after an extended period of work, chances are that most are not being used. To keep the window that you are currently working in, and close all of the others, select **close others**. If any of the windows selected for closure have contents that require saving, a Confirmer will appear and ask if you are sure you want to close that specific window (**yes** or **no**).

### Select and close

Permits you to select any number of the windows currently on the screen and close them. After this selection has been made, another popup menu will appear that lists the title tabs of all the open windows. Move the cursor over this list and click the middle mouse button over your choice(s), which will select a window for closing, and also cause the actual title for the window to fade in-and-out on the screen at that window's location.

More than one window may be selected with this function. Execution of this command begins when you move the cursor outside of the displayed list and click a mouse button. If any of the windows selected for closure have contents that have not been saved, a Confirmer will appear and ask if you are sure you want to close that specific window.

### Find

Permits you to transfer control from the window you are in to any other window currently on the screen. The tool works very similarly to **select and close** above. A popup menu will appear on the screen with the titles of all the open windows. Moving the cursor over this list while pressing the middle mouse button will cause the label of the window selected for finding to be highlighted, and also cause the actual title for the window to fade in-and-out on the screen at the location of that window.

Releasing the middle mouse button while any one of the items is selected (the title in the popup menu is highlighted) will cause the selected window to become the active window.

The **find** command can be aborted by moving the cursor anywhere outside of the displayed list and clicking any mouse button.

### Move

If you do not like where a window is on the screen, you can move it elsewhere. Place the cursor in the window to be moved and select **move** on the window popup menu. The action of selecting this tool will cause an outline of the window to be formed, with the cursor grabbing the nearest corner. You can then drag the window frame around by this corner to position it on the screen exactly where you want it.

To dismiss the **move** tool and open the window where the frame is, click the left mouse button.

### Frame

Allows you to change the size of a window. When you select **frame** on the window popup menu, the cursor changes into the Origin cursor, which is used to mark the location of the upper left corner of the new window. You can move the Origin cursor around the screen until it is positioned where you want it. Pressing the left mouse button will cause the upper left corner of the window to become anchored, and the cursor changes to a small Corner cursor marking the lower right corner of the new window frame. Moving this cursor about will cause the frame of the window to "rubber band." Move it around, using the mouse, until the window is the rectangle of the size and proportion that you want, then release the left mouse button. The contents of the reframed window will re-format themselves, as appropriate, to fill the newly-indicated window space.

Some windows are fixed in size and cannot be framed. In this case, **frame** works just like **move**.

### **Collapse/expand**

The selections **collapse** and **expand** appear in place of each other in the right mouse button popup menu. **Collapse** is available when a window is open and active. **Expand** is available when a window is collapsed.

Selecting **collapse** allows you to compress any active window down to its title tab and place that tab anywhere on the screen. When the left mouse button is released, the selected window will be collapsed to its tab alone and you can move the tab about the screen and place it where you want it. To release the tab at the desired location, click the left mouse button.

Since the tabs make up only a small fraction of the space of the window itself, and because the title in the tab is generally descriptive of the window, a number of open windows can be kept and organized on the screen without the display looking cluttered and confusing.

Selecting **expand** on the right mouse button pop-up menu of a collapsed window will restore the window to its precollapsed size and location.

### **Close self**

When you have finished with a window and want to remove it from the group of open windows on the screen, you can close it by selecting **close self**. The window to be closed must be the active window. When the mouse button is released, the window will be closed. Depending on the type of window and what you have been doing with its contents, a **Confirmer** may appear to ask if you want to close that particular window without saving the contents.

## Chart Editor Creating Pane

This pane acts as a canvas upon which you can do freehand drawing, produce all types of business graphics, and, of course, do formal charting. After you are finished you can save your chart or image into a file for later retrieval or make a hardcopy of it.

The left and middle mouse buttons function within this pane as described below. The right mouse button brings up the standard window popup menu, as detailed in the Chart Editor Text Pane section.

### LEFT MOUSE BUTTON

If you press and hold down this mouse button and move the cursor around via the mouse, the cursor becomes a pencil or paintbrush that will draw within the pane whatever movements you make with the cursor; this is a "freehand drawing" feature. The cursor can also become whatever shape the current Brush is. The Brush shape is added to the chart by clicking (or pressing) the left mouse button. The exact manner in which the Brush shape is added to the chart will be determined by the state of the five graphic control "buttons" in the bottom Button pane.

### MIDDLE MOUSE BUTTON MENU

The middle mouse button controls a popup menu with the following functions:

#### Reset

Sets all five buttons in the button pane to their default settings. Reset does not reset anything in the text or chart creating panes. The defaults are:

- ★ draw (Activity button)
- ★ a 4-pixel by 4-pixel black square (Brush button)
- ★ black (Color button)
- ★ off (Grid button)
- ★ over (Mode button)

#### Accept

Takes a "snapshot" of the chart you are currently working on. That is, the chart will be saved, so that if you do a cancel afterwards, you will get this image back. If you are annotating a complex chart, it's a good idea to do an accept as you complete each stage of your work.

#### Cancel

Returns you to the chart that existed after the last accept. It will undo everything you have done since then. If you started with a blank chart, a cancel without any previous accept will put you back to a blank chart editing pane.

#### Copy

Stores the current chart in the editing pane into a buffer, so that you may transfer the chart to another compatible window or to a Brush. For example, you may copy the chart and then paste it into another graphics editor or image-type window. You cannot transfer a chart into a text window.

#### Paste

Places the contents of the buffer into the chart pane. For example, when you use the upper text pane to create text, select it, and copy it, you can then (with paste) place the text into the middle pane below. Paste will always locate the object beginning at the Origin cursor which is at the upper left corner of the chart pane.

If you want to specify where the text is to go, use **paste** in the Brush button menu. The brush shape will change to whatever is in the buffer. You then go to the desired location for the text in the chart creating pane and click the left mouse button to add the text to the chart.

**Erase**

Gets rid of all pane contents and the pane is wiped clean. If you accidentally select this option, then selecting **cancel** will recover the last chart saved with an **accept**.

**Magnify**

After selecting this function, you specify the area to be magnified by framing a rectangular area in the chart creating pane (the system will ignore any areas outside of the chart pane). The amount of magnification that occurs is determined by the size of the area that is framed. When displaying the magnified area on the screen, the rule is: the larger the framed area, the smaller the magnification used.

After framing the desired area, a magnified form of it appears. You will then find a suitable screen location and place the magnified form by clicking the left mouse button at that point. Do *not* place the magnified form over the site of the original selected area, as the system has trouble handling this type of overlay.

As you edit the magnified form, the changes you are making there are also occurring on the normal-sized chart form. When you have finished editing, move the cursor out of the magnified form and click the left mouse button to close the form and return to normal.

**Chart data**

Returns the displayed chart to the version currently stored in memory.

**Change chart -->**

Allows you to change the physical characteristics of the chart by using the following options:

**Parameters.** Selecting this will cause a "Change set up" Q-Box to appear, which will allow you to change the chart type (pie, bar); chart title; whether to include/not include a label, legend, fill, label by percent, or automatic scaling; and label text size (four available).

**Size.** Allows you to frame your chart to a larger or smaller size. The original chart also remains on the screen. You can keep it or close it.

**Add labels.** Adds relevant labels at the bottom of the chart (if they are not already there). This is also an option in the "Change set up" Q-Box.

**Add legend.** Adds a relevant legend at the top right of the chart. This is also an option in the "Change set up" Q-Box.

**Change data -->**

Allows you to modify existing chart data or create new chart data by using the following options:

**New data.** Selecting this will bring up a "Make new chart" Q-Box. Here you can put in completely new information for the chart by changing its title, data type, and/or type of chart. After selecting **accept** in the Q-Box, a "Making new chart data" window next appears, waiting for you to key in appropriate material. This window's middle mouse button popup has several text editing options:

|                          |                 |
|--------------------------|-----------------|
| reset                    |                 |
| accept                   |                 |
| cancel                   |                 |
| undo                     |                 |
| copy                     |                 |
| paste                    |                 |
| erase                    |                 |
| magnify                  |                 |
| chart data               |                 |
| change chart-->          |                 |
| <b>change data--&gt;</b> | <b>new data</b> |
| save chart               | modify data     |
| hardcopy                 | compress data   |

| Make new chart |        |         |      |        |    |
|----------------|--------|---------|------|--------|----|
| accept         |        | cancel  |      | done   |    |
| Title:         | Title  |         |      |        |    |
| Data type :    | single | stacked |      | xyPlot |    |
| Type of chart  | Bar    | Cluster | Line | Pie    | XY |

**copy.** Places a selected item into the copy buffer.

**cut.** Removes a selected item and places it into the copy buffer.

**paste.** Places the item currently in the copy buffer at the insertion mark (caret).

**enter data.** Brings up an "Enter data" Q-Box. This allows you to fill in your data name or label and the numerical value attached to the label; values must be entered as integers, not fractions or decimals. After you select **accept**, the new data material will be placed into the "Making new chart data" window. Immediately after that, another "Enter data" Q-Box appears. You can either enter additional data now, or select **done** if you have finished entering data. The Q-Box will re-appear every time you select **accept**. **Cancel** will cancel to the last accepted value.

**edit data.** With the left mouse button, select the data label to be edited, then **edit data** from the popup, which brings up an "Edit data" Q-Box. This allows you to change the Label or Value for that particular data (you must select **accept** to complete the edit). **Cancel** will cancel typed changes to the last accepted values; **bailOut** causes the Q-Box to disappear, with no changes having been made.

**chart data.** Causes the information that has been entered into the "Enter data" or "Edit data" Q-Box to be displayed (in chart form) in the New Chart Editor window, according to the chart's previously-determined parameters.

**Modify data.** Selecting this brings up an "Editing chart data" window. The current data labels and values are listed in the window. You will be able to alter the information by using the options from the window's middle mouse button popup:

**copy.** Places a selected item into the copy buffer.

**cut.** Removes a selected item and places it into the copy buffer.

**paste.** Places the item currently in the copy buffer at the insertion mark (caret).

**enter data.** Brings up an "Enter data" Q-Box. This allows you to fill in your data name or label and the numerical value attached to the label; values must be entered as integers, not fractions or decimals. After you select **accept**, the new data material will be placed into the "Making new chart data" window. Immediately after that, another "Enter data" Q-Box appears. You can either enter additional data now, or select **done** if you have finished entering data. The Q-Box will re-appear every time you select **accept**. **Cancel** will cancel to the last accepted value.

**edit data.** With the left mouse button, select the data label to be edited, then **edit data** from the popup, which brings up an "Edit data" Q-Box. This allows you to change the Label or Value for that particular data (you must select **accept** to complete the edit). **Cancel** will cancel typed changes to the last accepted values; **bailOut** causes the Q-Box to disappear, with no changes having been made.

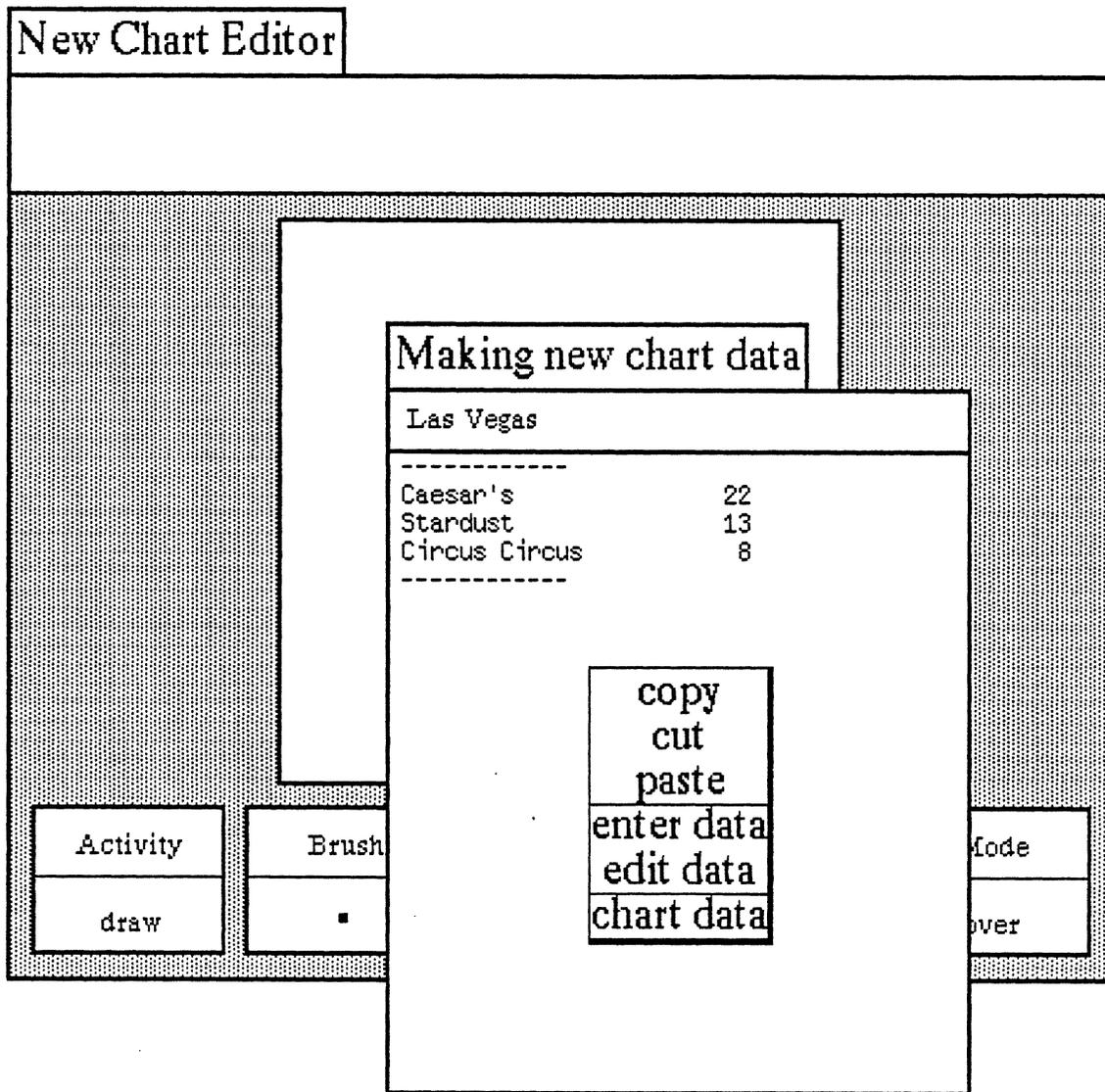


chart data. Causes the information that has been entered into the "Enter data" or "Edit data" Q-Box to be displayed (in chart form) in the New Chart Editor window, according to the chart's previously-determined parameters.

**Compress data**

This is a computational device that groups or puts together like items. For instance, if you have a label entry for "Jones" with a value of "20", and later on there is another label entry of "Jones" with a value of "10," **compress data** will combine the two entries into a single label "Jones" with a value of "30."

#### Save chart

This stores the chart into an Information Center for later retrieval. Selecting **save chart** will cause a Confirmer to appear that asks if you want to overwrite the existing chart or create a new chart. In either case, an Info Center Q-Box next appears and here you will specify the label, keywords, and target Information Center to store the chart in.

#### Hardcopy

Selecting this will cause a Hardcopy Q-Box to appear requesting necessary information for printing. Select **accept** at the top of the form when you're finished and the hardcopy request will be placed in the background printing queue.

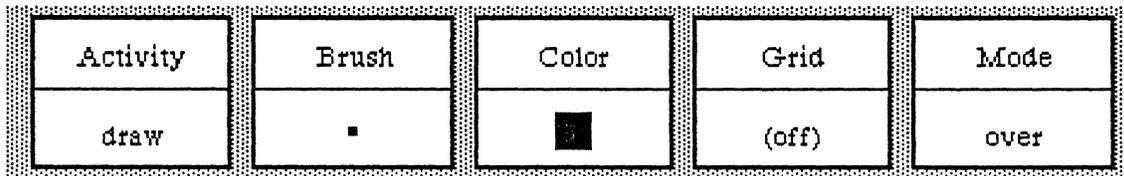
## Chart Editor Button Pane

The Button pane at the bottom of the Chart Editor window contains the tools to manipulate material in the text pane, and especially the chart creating pane.

There are five rectangular-shaped buttons and each has two parts: its title at the top and the current selection at the bottom. The selection is changed and updated accordingly when a new selection from the button's popup menu is made. These buttons can basically be thought of as graphics or image editors.

Since each Chart Editor button has its own unique popup, we will go through every one individually, starting with the Activity button at the far left and working from there towards the right. The middle mouse button is the only one described for this pane.

### MIDDLE MOUSE BUTTON MENU



#### 1. Activity Button

Sets the mode of operation for the brush:

##### Draw

This default setting assures that the cursor will perform like a standard paintbrush. The cursor becomes the brush form currently displayed in the Brush button, and puts copies (one-at-a-time or continuous) of the form on the creating pane above when the left mouse button is pressed or clicked. If the mouse button is pressed and held down and the brush/cursor moved about inside the creating pane, the brush form will be copied along the path of the brush/cursor.

##### Stamp

This option is similar to draw, except stamp will simply produce one copy at a time of the current brush form, even if the left mouse button is held down and moved inside the creating pane. Use stamp to get the cleanest copy of a brush form.

##### Line

Allows you to draw a line with the brush form between two specified points. To specify the start point, go to the location in the creating pane where you want the line to begin and press the left mouse button. Do not release the mouse button, as this will only produce the current form in the brush menu. Instead, hold the mouse button down and move the brush to the desired end point. The start and end points will be connected by a "rubberband" line that acts as a visual aid. Move the brush up and down slightly until the line is smooth, with no "stairsteps" showing, then release the button. The line will now connect between the two points.

##### Curve

Similar to drawing a line; however, it takes an extra point to determine the curved line. To draw a curve, go to your start point then press and hold the left mouse button. Move the brush to the next point and release the mouse button. There should be a "rubberband" line joining the two points. To specify the curvature of your line, move the brush around to define the apex of the curve. At this time, you should see a repeated drawing of a curve line trying to follow the current brush point.

When the desired curve line is reached, click the left mouse button. The final curve line will appear and link up the three points.

#### **Splines-->**

The following four commands will enable you to draw connected, straight, or curved lines of your choice.

**Open Curve.** Here, a set of points are put in to define the curved line to be drawn. The brush becomes a crosshair, and points are entered by locating the desired pane point and clicking the left mouse button. As each point is clicked down, it is numbered, starting with "1."

When all the desired points have been entered, a click of the middle mouse button will draw the curve. The numbers will disappear and the points will be connected in the order of their entry sequence.

**Closed Curve.** This is like the Open Curve, except that it will draw a closed, connected curve so that the result is a continuously connected line, with the last point connected back to the first point.

A set of points are put in to define the curved line to be drawn. The brush becomes a crosshair, and points are entered by locating the desired pane point and clicking the left mouse button. As each point is clicked down, it is numbered, starting with "1."

When all the desired points have been entered, a click of the middle mouse button will draw the curve. The numbers will disappear and the points will be connected in the order of their entry sequence.

**Open Linear.** A set of points are put in to define the lines to be drawn. The brush becomes a crosshair, and points are entered by locating the desired pane point and clicking the left mouse button. As each point is clicked down, it is numbered, starting with "1."

When all the desired points have been entered, a click of the middle mouse button will terminate the action. The numbers will disappear and the points will be connected by straight lines in the order of their entry sequence.

**Closed Linear.** This is like Open Linear, except that it will connect the last point to the first point. A set of points are put in to define the lines to be drawn. The brush becomes a crosshair, and points are entered by locating the desired pane point and clicking the left mouse button. As each point is clicked down, it is numbered, starting with "1."

When all the desired points have been entered, a click of the middle mouse button will terminate the action. The numbers will disappear and the points will be connected by straight lines in the order of their entry sequence, including the connection from the last point to the first point.

#### **Rectangle**

When this function is selected, the cursor assumes the shape of the upper left (Origin) cursor as soon as it is moved into the editing pane. You can then frame the size of your rectangle by pressing the left mouse button, just as you can frame certain types of windows when you open them.

#### **Circle**

Select this, and when the cursor assumes a crosshair shape in the editing pane, press the left mouse button at the point where you want the center of the circle to be. Move the crosshair away from the center of the circle in any direction and note the "rubberband" line that will indicate the radius of the circle. After you have chosen the appropriate radius, release the mouse button. A circle will draw itself about the center point at the specified radius.

#### **Block**

Fills a rectangular area (that you have just defined) with any color or pattern currently in the Color button. The rectangular area is not outlined.

### Fill

Fills a rectangular area (that you have defined) with the current color or pattern in the Color button. There are two steps to filling an area. First, the Origin cursor appears and you define the rectangle (so the fill command will have an outer boundary). After this, the crosshair cursor appears; you now click with the left mouse button to indicate which area within the rectangle is to be filled.

## 2. Brush Button

Provides all the graphics tools for manipulating the shape of the drawing brush. The Brush button popup menu contains the following functions:

### Default

This resets the current brush form to be a 4-pixel by 4-pixel black square.

### Icons -->

Moving the cursor to the right from this menu selection will produce a scrollable submenu of all of the available annotation forms or icons. Select the desired icon and the Brush button will be updated to reflect this. When you move the cursor into the creating pane above, copies of the selected icon may be placed onto the image by clicking the left mouse button.

### Symbols -->

Moving the cursor to the right from this menu selection will produce a scrollable submenu of all of the available chart symbol forms. Furthermore, to the right of each of these forms is another submenu (although no --> indicates this). If required, you may go two levels for your selection: once you have selected the desired symbol from the first submenu, move to the right of the selection to the next submenu to further modify the symbol.

The resulting form is displayed in the Brush button. When you move the cursor into the creating pane above, copies of the selected form may be placed onto the image by clicking the left mouse button.

### Alter -->

This tree popup branches off to five other subfunctions, all of which allow you to manipulate the current brush form:

**Invert.** After selecting this, the brush form will be color-reversed: the black bits will become white bits and vice versa. This is sometimes referred to as "reverse video."

**Rotate -->.** The submenu selections to the right give you the choice of rotating your brush form 90, 180, or 270 degrees. The "brush form," in this case, should be a symbol, an icon, or some sort of framed image; the default brush (a 4 by 4 pixel square) will reflect no alterations. The rotation is always clockwise, so that two 90-degree rotations will be equivalent to a 180-degree rotation.

Note that this function, along with the mirror function, allows you to generate many combinations of the existing icon or symbol forms.

**Mirror.** This "mirror-images" the x-axis of the brush form. For example, if you have a brush form that looks like ">" in the beginning, the brush will look like "<" after mirror is used. In order to mirror the y-axis, mirror the x-axis first and then do a rotate -->180 from the popup menu.

**Magnify.** Enlarges the current brush form, after you have typed the width and height magnification factors (whole numbers only) into the Prompter that appears. The form represented on the Brush button will immediately reflect the change.

**Shrink.** Reduces the current brush form, after you have typed the width and height reduction factors (whole numbers only) into the Prompter that appears. The form represented on the Brush button will immediately reflect the change.

### **Square**

After selecting this, a Prompter requests you to specify the new size for the square brush. The square brush form of the new specified size will be produced, using the current color or pattern in the Color button.

### **Round**

Produces a round paint brush (the default is square) with the current color or pattern in the Color button. A Prompter will request the radius for the round paint brush.

### **Rectangle**

A Prompter will request that you specify the linewidth for the rectangular brush. You will then frame the rectangle to the desired size and it will become the brush form. This allows the rapid generation of many boxes of the same size.

### **Circle**

A Prompter will request you to specify the linewidth for the circular brush. You will specify the size of the desired circle by placing its center on the pane (by pressing the left mouse button) and "rubberbanding" out to the desired radius. It will promptly become the brush form.

### **Frame**

After selecting this, the Origin cursor appears and you will define a rectangle that encompasses your desired screen material; that is, the particular area of the image on the screen that you wish to become the brush form.

### **Surround**

This resembles frame, but allows you to pick up irregular images that might be difficult to outline with that function. The normal cursor image is displayed; you will press the left mouse button and use it like a pencil to surround or "rope" the screen image. After releasing the mouse button, the crosshair cursor appears. Next click with the left mouse button as close as possible to the roped-off image (or even inside the image). The brush form will assume the shape of the surrounded object.

### **Copy**

Takes the image currently in the Brush button and puts it into the image copy buffer for later use. For example, you may copy the brush image and paste it into the creating or editing pane and/or the Brush button in any other graphics editor. This gives the ability to move an image from one image editor to another.

### **Paste**

Takes the image in the Brush button and replaces it with the image in the copy buffer. For example, you may copy or cut a piece of text and paste it into the Brush button, or you may copy another image somewhere else and paste it into the Brush button.

### **Retrieve**

Allows you to get a brush image from the Information Center transfer buffer. The item in the transfer buffer must be an image in order for the operation to work correctly.

### **Save**

Allows you to store the current brush form into the Information Center of your choice.

### **Hardcopy**

After selection, a printing or hardcopy Q-Box will appear requesting information such as printer name, number of copies, and so on. After you have typed in this information (or you may wish to leave the default settings), select **accept** at the upper left of the Q-Box. "Done" or "printing successful," which will appear at the top right of the screen later on, means the file has been printed.

### 3. Color Button

The Color button allows you to change the color or pattern used by the brush form to any of those shown on the popup. Besides the colors and patterns that you see on the menu, you may also create your own patterns. One way is to paste a standard pattern into the brush image, then use your imagination and the brush manipulation tools to create a new pattern. Once this pattern is pasted into the Color button, you will be able to start drawing with it.

### 4. Grid Button

When you use the Grid button, an invisible grid for the creating pane can be made to appear for accurate cursor positioning. You can set the spacing of the grid in both x and y axes; moreover, you may turn the grid on or off in either the x or y axis to allow maximum flexibility.

#### On/Off -->

You may select on or off from here in the x or y axis; this feature works like a switch that will "toggle" the gridding on and off accordingly. For example, if your current x axis gridding is on, the command on/off and x will turn the x axis gridding off. If you repeat this procedure, you will find that the x axis gridding will return to off. This is also true, of course, for y axis gridding. The current status will always be displayed in the Grid button.

#### Spacing

Sets the spacing in the horizontal and vertical direction separately. After selection, a Prompter appears requesting the spacing for each direction; enter whole numbers only. If either of the gridding axes is on, its corresponding spacing value will also be shown next to it to help you determine the gridding distance.

### 5. Mode Button

The setting of the Mode button will determine the method in which the brush form is to be added to the creating pane.

#### Over

The brush form you draw with will be drawn over the image in the graphics pane. The white bits in the brush form are not transparent and will overlay (cover) the image in the graphic editing pane.

#### Under

The brush form you draw with will be drawn under the image in the creating pane. Only the black bits in the brush form will be set on the screen, because the white parts of the brush image are now transparent.

#### Reverse

The white bits in your brush will have no effect on the image which is under the brush. But the black bits in your brush will turn the black bits in the image under the brush white. Similarly, the black bits in your brush will turn the white bits in the image under the brush black.

#### Erase

The black bits in the brush form will set any black bits on the screen to white, thus making the image invisible. The white bits in the brush form will again have no effect on the screen image.

## The Hardcopy Tool

### OVERVIEW

A hardcopy of text or graphics is created and sent to a printer by a feature that will be called a *hardcopy tool*. This tool is sometimes referred to as "background printing" because once you have specified what to print and how, you can go ahead and do other things in the Tiger system while the hardcopy tool is creating a press file and sending it to the printer. (A press file is a file in a certain format that the printer can understand).

Whenever the hardcopy tool has something to work on, a *printing status window* appears on the screen (in the upper righthand corner) to give information about what the hardcopy is currently doing, and to allow you access to its list of popup menu options.

### USING THE HARDCOPY COMMAND

Making a hardcopy of your text or graphics is easy, since most of the other tools in the system (such as text windows, charts, maps) contain one or more popup menus with the command *hardcopy* in it.

Once the hardcopy command has been selected, you will be presented with one or more request forms (known as Q-Boxes) to specify what is to be done with the text, graphics, or various possible combinations. When you have finished filling in your request form, a package containing your instructions and a copy of what is to be printed is put on the end of the hardcopy tool's queue (or list). The printing status window then provides the only access to it.

### "SELECT HARDCOPY METHOD" Q-BOX

When you are going to hardcopy text-type files (text, outlines), a special Q-Box appears titled "Select hardcopy method." This Q-Box will *not* appear if you are attempting to print graphics files. After the label *Choose either:* you have two choices:

**Direct** (the default) means that you want to send the file directly to the printer. If you select this it will, in turn, cause the standard Hardcopy Q-Box to appear next, which is described below.

**Preview** means that you don't want to hardcopy this file, but instead intend to put it in another type of window into which you can merge graphics with text files. See the section titled "The Preview Window" for a complete description of this feature.

If you select **Preview**, the two words (**Portrait** and **Landscape**) next to *if preview:* "wake up" and become selectable, whereas they are normally obscured if the selected hardcopy method is **Direct**. **Portrait** and **Landscape** refer to the orientation of the image on a standard 8-1/2" x 11" page. **Portrait** means the text or illustration will orient 11" vertically and 8-1/2" horizontally. **Landscape** means the text or illustration will orient 8-1/2" vertically and 11" horizontally.

| Select Hardcopy Method |               |           |
|------------------------|---------------|-----------|
| accept                 | cancel        | bailOut   |
| Choose either:         | <b>Direct</b> | Preview   |
| if preview:            | Portrait      | Landscape |

| Select Hardcopy Method |                 |                |
|------------------------|-----------------|----------------|
| accept                 | cancel          | bailOut        |
| Choose either:         | Direct          | <b>Preview</b> |
| if preview:            | <b>Portrait</b> | Landscape      |

**STANDARD HARDCOPY Q-BOX ITEMS**

The items on the request form(s) vary with what kind of data is being hardcopied, but a standard set of items appears on all the request forms. These are:

|                               |                     |                  |
|-------------------------------|---------------------|------------------|
| <b>accept</b>                 | <b>cancel</b>       | <b>bailOut</b>   |
| <b>Send to Printer</b>        | <b>now</b>          | <b>later</b>     |
| <b>File in an info center</b> | <b>yes</b>          | <b>no</b>        |
| <b>Number Copies</b>          | 1                   |                  |
| <b>Starting Page No.</b>      | 1                   |                  |
| <b>Printer Name</b>           | Printer name here ▲ |                  |
| <b>Mode</b>                   | <b>normal</b>       | <b>landscape</b> |
| <b>Size</b>                   | <b>full</b>         | <b>half</b>      |
| <b>Border</b>                 | <b>yes</b>          | <b>no</b>        |
| <b>Title</b>                  |                     |                  |

**Send to Printer:**

**Now.** Send the press file to the printer as soon as it is created.

**Later.** Make a press file and file it into the Information Center, but don't try to send it.

**File in an Info Center:**

**Yes.** If this is selected (along with later in the line above), it causes another request form to appear that lets you specify how the item being hardcopied should be filed (by label, key words, Info Center).

**No.** Combined with now in the line above, this causes the file to be deleted once it has been sent to the printer.

**Number Copies**

Type an integer; the default is 1. This does not need to be filled in if later is specified in the top line.

**Starting Page No.**

Type an integer; the default is 1. The page numbering will start with this number.

**Printer Name**

Type in the name of printer here; the default is whatever the last specified printer name was. It is not necessary to fill this in if later is specified in the top line.

### HARDCOPY Q-BOX MIDDLE MOUSE BUTTON POPUP

In addition to the selectable items within the standard Q-Box, its middle mouse button popup menu displays the following choices:

**Again**

Repeats the last copy or cut edits that you do.

**Undo**

Reverses the effects of the last command. For instance, if you have deleted text, **undo** will put it back in.

**Copy**

Puts a copy of the current selected text into the copy buffer.

**Cut**

Deletes the current selected text and puts it into the copy buffer.

**Paste**

Places, at the insertion mark, whatever information is currently in the copy buffer.

**Cancel**

Deletes the material you've filled in and returns the Q-Box to its original (default) state.

### ADDITIONAL GRAPHICS Q-BOX ITEMS

For image and graphics data, the following items are added to the standard hardcopy request form:

**Mode:**

**Normal** is the default, and refers to the orientation of the image on an 8-1/2" x 11" page. **Normal** means it will orient the image with the 8-1/2" across and the 11" vertically.

**Landscape** is a 90-degree rotation of the normal image. It will orient the image with the 8-1/2" vertically and the 11" across.

**Size:**

**Full** (the default) means print the image at the same size as it appears on the display.

**Half** means print the image scaled to half the displayed size.

**Border:**

**Yes** (the default) causes a 2-screen-unit wide border to be put around the image when it is printed out.

**No** means that no border will be placed around the image when it is printed out.

**Title:**

You may type in a title or caption for the image, or leave it blank. If a title is entered, it will be printed centered beneath the image.

### ANNOTATED TEXT Q-BOX

For text with annotations, this one item is added to the standard set:

**Print Annotations:**

**Yes** (the default) means the annotation reference numbers will be printed in the text, and a table of the annotations will be printed at the end of the text.

**No** means neither the annotation reference numbers nor their associated text will be printed.

## HARDCOPY EFFECTS ON THE SYSTEM

While a hardcopy is being made, you will notice some lessening in the speed at which the Golden Tiger system reacts to mouse clicks and typing. In order to keep this reaction time as quick as possible, hardcopying uses only small increments of time when needed. While this makes it easier for you to do other things, it slows down the printing considerably. If you want something printed faster and don't need to utilize other system features at the same time, there is an option called **foreground** in the printing status window popup that tells the printing process to take over the system. This is described in the subsection titled "Active State Menu Options."

## PRINTING STATUS WINDOW FEATURES

The Printing Status Window appears automatically during hardcopy creation in the upper righthand portion of your screen. This window gives you the ability to look at and change what the hardcopy process is doing, or is scheduled to do. It is a fixed-size window whose title tab tells you which of three possible states the hardcopy process is currently in: **active**, **access**, or **ESC for control**.

## PRINTING STATUS WINDOW MIDDLE MOUSE BUTTON MENU

The label above the printing status window shows the current printing state or mode, of which there are three. Its middle mouse button popup menu options are:

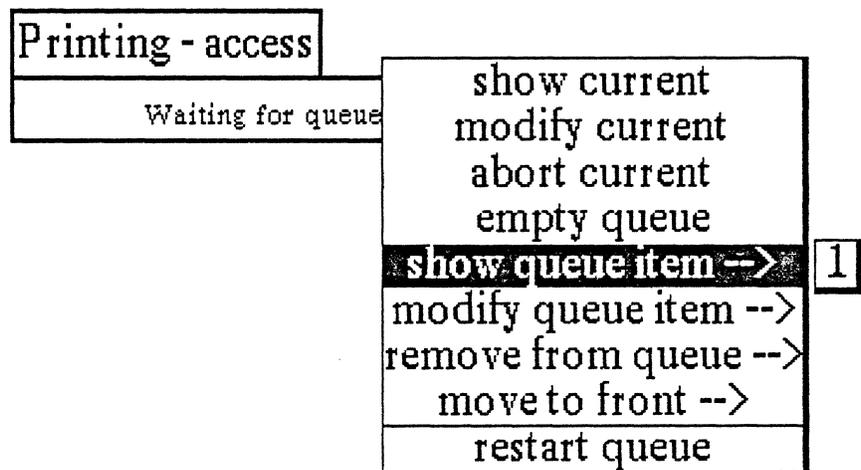
★ **Printing ~ active** means the hardcopy tool is alive and working. The active state is what you will first get when you hardcopy a document.

**Access queue** changes printing from the "active" to the "access" state, which contains a different middle mouse button popup that controls moving items around the queue, emptying the queue, and so on.

**Number waiting** brings up a Notifier giving the number of items currently waiting in the queue.

**Foreground** causes printing to take over control of the system so it can finish sooner. Once in this state, you cannot work in other areas of the window while the printing tool is working. The only thing you can do now is to press and release the ESC key to switch access back to the more active state (it may take as long as five seconds to switch). Otherwise, the faster printing will continue and the window will disappear as usual when all the printing is done.

★ **Printing ~ access** in the label means the hardcopy tool will not tell the queue to print the next document after the current one is finished. This allows you to inspect and modify items in the queue. The middle mouse button popup associated with this mode has the following items:



**Show current** brings up a Notifier telling what file it is currently working on; and if it is a complete press file, what printer it is being sent to.

**Modify current** brings up a request form to change whether the file currently being worked on is to be sent now or later, which printer to send it to, and the number of copies to send.

**Abort current** causes the printing request currently being worked on to be stopped at whatever stage it's in.

**Empty queue** causes the queue to be emptied of all entries.

**Show queue item** --> Press and move the cursor to the right and select the desired entry in the queue; this brings up a notifier that describes what file or label it is, and if it is a complete press file, what printer it will be sent to.

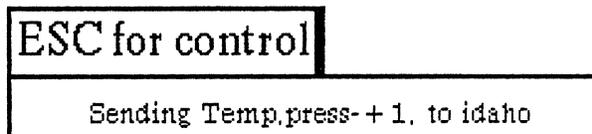
**Modify queue item** --> Press and move the cursor to the right and select the desired entry in the queue; this brings up a request form that will let you change whether the document is to be sent now or later, which printer to send it to, and the number of copies to send.

**Remove from queue** --> Press and move the cursor to the right and select the desired entry in the queue; this removes the entry from the queue and deletes the press file.

**Move to front** --> Press and move the cursor to the right and select the desired entry in the queue; this moves it to the front of the queue and ensures that it will be the next document printed.

**Restart queue** returns the hardcopy tool to the Active state.

★ **ESC for control** ~ appears in the label after you select foreground from the Active state popup. It means that the hardcopy status window has taken over the system to get its job done faster. You will not be able to work in other areas as you normally could while printing is going on, unless you now press and release the keyboard ESC key.



## PRINTING STATUS WINDOW RIGHT MOUSE BUTTON MENU

When in use, Active state and Access state each has its own unique middle mouse button popup. However, the right mouse button popup is the same for both states and contains the standard set of window manipulation options, except for close self:

### Help

To use the window Help tool, press the right mouse button and release with help selected from the pop-up menu. A window will appear on the screen with a brief explanation of the window's function and a reference to the User Guide, and to where more information about the window may be found.

### Close others

When a display becomes very crowded with windows after an extended period of work, chances are that most are not being used. To keep the window that you are currently working in, and close all of the others, select close others from the pop-up menu and release the button. If any of the windows selected for closure have contents that require saving, a Confirmer will appear and ask if you are sure you want to close that specific window (yes or no).

### Select and close

Permits you to select any number of the windows currently on the screen and close them. After this selection has been made, another popup menu will appear that lists the title tabs of all the open windows. Move the cursor over this list and click the middle mouse button over your choice(s), which will select a window for closing, and also cause the actual title for the window to fade in-and-out on the screen at that window's location.

More than one window may be selected with this function. Execution of this command begins when you move the cursor outside of the displayed list and click a mouse button. If any of the windows selected for closure have contents that have not been saved, a Confirmer will appear and ask if you are sure you want to close that specific window.

### Find

Permits you to transfer control from the window you are in to any other window currently on the screen. The tool works very similarly to **select and close** above. A popup menu will appear on the screen with the titles of all the open windows. Moving the cursor over this list while pressing the middle mouse button will cause the label of the window selected for finding to be highlighted, and also cause the actual title for the window to fade in-and-out on the screen at the location of that window.

Releasing the middle mouse button while any one of the items is selected (the title in the popup menu is highlighted) will cause the selected window to become the active window.

The **find** command can be aborted by moving the cursor anywhere outside of the displayed list and clicking any mouse button.

### Move

If you do not like where a window is on the screen, you can move it elsewhere. Place the cursor in the window to be moved and select **move** on the window popup menu. The action of selecting this tool will cause an outline of the window to be formed, with the cursor grabbing the nearest corner. You can then drag the window frame around by this corner to position it on the screen exactly where you want it.

To dismiss the **move** tool and open the window where the frame is, click the left mouse button.

### Frame

Allows you to change the size of a window. When you select **frame** on the window popup menu, the cursor changes into the Origin cursor, which is used to mark the location of the upper left corner of the new window. You can move the Origin cursor around the screen until it is positioned where you want it. Pressing the left mouse button will cause the upper left corner of the window to become anchored, and the cursor changes to a small Corner cursor marking the lower right corner of the new window frame. Moving this cursor about will cause the frame of the window to "rubber band." Move it around, using the mouse, until the window is the rectangle of the size and proportion that you want, then release the left mouse button. The contents of the reframed window will re-format themselves, as appropriate, to fill the newly-indicated window space.

Some windows are fixed in size and cannot be framed. In this case, **frame** works just like **move**.

### Collapse/expand

The selections **collapse** and **expand** appear in place of each other in the right mouse button popup menu. **Collapse** is available when a window is open and active. **Expand** is available when a window is collapsed.

Selecting **collapse** allows you to compress any active window down to its title tab and place that tab anywhere on the screen. When the left mouse button is released, the selected window will be collapsed to its tab alone and you can move the tab about the screen and place it where you want it. To release the tab at the desired location, click the left mouse button.

Since the tabs make up only a small fraction of the space of the window itself, and because the title in the tab is generally descriptive of the window, a number of open windows can be kept and organized on the screen without the display looking cluttered and confusing.

Selecting **expand** on the right mouse button pop-up menu of a collapsed window will restore the window to its precollapsed size and location.

**Close self**

Stops everything being printed or waiting to be printed. The printing status window will disappear automatically at a convenient time after all the printing requests have been filled.

## Word Processing

### OVERVIEW

The ability to quickly and easily create a document—such as a memo, report, summary, procedure—is an integral part of the Golden Tiger software. In fact, this entire *User Guide* was created with the same software that you are now using, which includes all the word processing features. Tiger's word processing capabilities go far beyond merely keying in and editing text. You may choose a variety of fonts and styles, add various kinds of images (sketches, maps, charts), annotate words, and even compute numbers, all with the numerous popup menu selections that are available at the touch of a finger.

All word processing is done in the *text* pane of a window. Some types of windows are a combination of text and graphics panes, while others aren't. For instance, a Text Item window has just one pane that is for text creation and editing only, while a Report window contains both a text editing and graphics image pane. The text editing pane middle mouse button popup menu is the same for both types of windows. It is this menu, with its listed options, that will be described later in detail.

|                                                                                                                                                                                                  |                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                           |        |        |         |      |       |  |          |      |  |                |                          |                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|---------|------|-------|--|----------|------|--|----------------|--------------------------|----------------------|
| <p>open<br/>display--&gt;<br/>retrieve by--&gt;<br/>duplicate<br/>copy<br/>cut<br/>paste<br/>label/key words<br/>hardcopy<br/><b>create--&gt;</b><br/>trash<br/>in box<br/>maintenance--&gt;</p> | <p><b>text item</b><br/>report<br/>folder<br/>data base<br/>outline<br/>spreadsheet<br/>info center from selection</p> | <p style="text-align: center;"><b>Add Item</b></p> <table border="1" style="width: 100%;"> <tr> <td style="width: 33%;">accept</td> <td style="width: 33%;">cancel</td> <td style="width: 33%;">bailOut</td> </tr> <tr> <td>Name</td> <td colspan="2">Label</td> </tr> <tr> <td>Keywords</td> <td colspan="2">text</td> </tr> <tr> <td>Classification</td> <td><input type="checkbox"/></td> <td>Int XPers XPriv XReg</td> </tr> </table> | accept | cancel | bailOut | Name | Label |  | Keywords | text |  | Classification | <input type="checkbox"/> | Int XPers XPriv XReg |
| accept                                                                                                                                                                                           | cancel                                                                                                                 | bailOut                                                                                                                                                                                                                                                                                                                                                                                                                                   |        |        |         |      |       |  |          |      |  |                |                          |                      |
| Name                                                                                                                                                                                             | Label                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                           |        |        |         |      |       |  |          |      |  |                |                          |                      |
| Keywords                                                                                                                                                                                         | text                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                           |        |        |         |      |       |  |          |      |  |                |                          |                      |
| Classification                                                                                                                                                                                   | <input type="checkbox"/>                                                                                               | Int XPers XPriv XReg                                                                                                                                                                                                                                                                                                                                                                                                                      |        |        |         |      |       |  |          |      |  |                |                          |                      |

### OPENING A TEXT ITEM WINDOW

A text item window is ideal for word processing. It is opened by pressing the middle mouse button in an Information Center or a Folder, then selecting create --> text item from the resulting popup. Immediately after that, an "Add Item" Q-Box will appear, and you must type in the label (title) of your text item after Name, plus any keywords (the default is text) and the appropriate classification for the document.

## Workspace

The first window you will encounter after you've left the Idle Image is the Login window. This window is like a locked gate that you must unlock in order to get to the rest of the Tiger software, and all the files that you have created and stored. **This is selected text...**

The login procedure is designed to assure that only authorized individuals will have access to data stored on the workstation itself and on the other machines to which the workstation is connected. Furthermore, the procedure will personalize data stored on the machine; more than one individual can have data on the machine without gaining access to each other's data, unless specific

After selecting *accept*, the new text item name is placed into whatever Information Center or Folder it was created from. Next, select the name with the left mouse button, then select *open* from the middle mouse button popup. When the Origin cursor appears, click the left mouse button to place the opened window on the screen. The window's name appears in the title tab at the top. An insertion mark, or caret, sits at the upper left corner of the window pane. When you start typing text, it will appear exactly at the insertion mark.

### SCROLL BAR

An important feature of a typical text-editing/word processing window is the *scroll bar*. A scroll bar allows you to move through text from top to bottom and back again, or jump quickly to any part of the text. It is represented by a narrow rectangular area that is displayed next to the left side of the pane that it controls. The scroll bar isn't always visible, and will disappear when no longer needed.

The length of the scroll bar represents the length of the entire document, and inside of it is a gray area. This gray area is located within the scroll bar at a point relative to the location of the text within the window. In other words, it represents that portion of text currently showing on the screen. If the gray area is at the top of the scroll bar, then the window is showing text at the beginning of the document. If the gray area fills the entire scroll bar, then you can be sure that all of the document is currently displayed.

In order to move, or scroll, through a document, the following points should be noted:

- Observe that the arrow "at rest" points both up and down when it resides in the scroll bar area. If you place the cursor toward the top of the scroll bar and click the *left* mouse button, the arrow briefly turns into an "up" arrow and the window text moves from the bottom up as the solid gray area moves downward.
- If you place the cursor at the top of the scroll bar and click the *right* mouse button, the arrow points "down" and text will move from the top down as the gray area moves upward.
- A more rapid way to scroll through text is to press and hold down the *middle* mouse button; you can then move the gray area up or down at will (the arrow will point to the right) and thereby "jump" to certain parts of the text when you release the button.
- You can also press and hold down either the left or right mouse button anywhere within the scroll bar area and make a fast scroll back and forth within the text, instead of one click at a time. Scrolling moves the text that is next to the cursor.

## SELECTING TEXT

Text must first be *selected* in order to perform editing operations on it. Selected text is usually displayed in reverse video; that is, the characters of selected text appear in white on a black background. You select text (characters, words, lines) with the left mouse button in three ways:

**Click ~** The mouse button is pressed and immediately released without moving the cursor. This places a caret (a small arrowhead at the bottom of a line of text, pointing upward between characters) at the location of the cursor.

**Double Click ~** The mouse button is clicked twice in succession with the cursor in the same location. This is the same as clicking at the location of the caret.

**Draw Through ~** Press the button and hold it down. Move the mouse to draw through (left to right or right to left) the letters, words or paragraphs to be selected. Release the mouse button.

## EMPTY SELECTIONS (the caret)

Empty selections are used for inserting text. A caret indicates the location of an empty selection. (The caret is a small arrowhead that points upward between characters at the bottom of a line of text.) The selection is made by pointing the cursor at the desired location and clicking the left mouse button.

## SELECTION FROM START TO END POINT

To select any arbitrary section of text, place the cursor immediately in front of the first character to be selected and press the left mouse button. While continuing to hold the button down, move the cursor to a point just beyond the last character to be selected. To terminate the selection, release the mouse button.

As the cursor is moved, the text being selected is displayed in reverse video. It doesn't matter what is selected while the mouse button is being held down as long as you end up with the desired text selected. Selections can be made in either direction from the start point—forward (moving to the right and down), or backward (moving to the left and up).

If the desired end of the selection is not visible in the window, select the start point and continue to hold down the mouse button while moving the cursor just below the window (or above, if selecting backwards). This makes the text scroll automatically while it is being selected. Once the end point becomes visible, moving the cursor back into the window will terminate the scrolling.

## ENTITY SELECTION

Whole "text entities" can be selected with one action. A textual entity is any text between delimiting characters. Delimiters are spaces (words), returns (paragraphs), start and end of text (entire document), parentheses, double quotes, square brackets, angle brackets.

~ To select delimited text, double click the left mouse button just after the first delimiter or just before the last delimiter. The entire delimited text (even text not currently displayed) will be selected.

~ To select a single word, double click anywhere between the spaces before and after it.

~ To select a single paragraph (defined here to be text between returns), double click before the first character or just after the last character.

~ To select the entire document, double click in front of the first character in it, or after the very last character in it. (The cursor must be at the very beginning of all the text, not some later portion which has been made visible by scrolling.)

## IMPLICIT SELECTION

When typing text, there is an implicit selection of all the text typed since the last explicit (with the mouse) selection. Implicit selections do not show in reverse video; however, hitting the ESC key will cause any existing implicit selection to be explicitly displayed in reverse video.

## TYPING TEXT

When typing, characters are inserted at the location of the caret. You don't need to type a <return> at the end of every line typed, since the software will take care of the word wrapping itself by automatically basing line endings on the size of the window. If you want to replace text, select it and then start typing in the new text; it is not necessary to delete the unwanted text first with the BS or DEL key.

## SPECIAL KEYS AND KEY COMBINATIONS

When typing text, there are a few useful keys and key combinations that will perform some simple functions without your resorting to the mouse or a popup menu:

- The BS or backspace key will erase the character preceding the caret. If text is explicitly selected (in reverse video), striking the BS key will delete the selection and one character in front of it.
- The DEL key will delete the current selection (either explicit or implicit). This means that if it is struck while typing, everything typed since the last mouse selection will be deleted.
- The ESC key will cause any implicit selection to be displayed in reverse video.
- Holding down the CTRL key in conjunction with typing a certain keyboard number will change the text font; CTRL and a keyboard character will change text style. See the popup item called Fonts --> for a complete description.
- Holding down the CTRL key and hitting a "d" will cause the current date to replace any displayed selection.

## MIDDLE MOUSE BUTTON POPUP BASIC EDITING FUNCTIONS

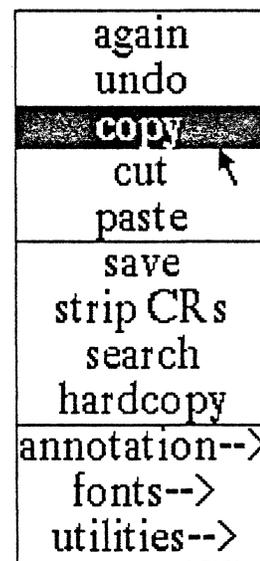
This section covers the basic editing functions of the middle mouse button tree popup. All of these functions operate in conjunction with the current selection. The "copy buffer" (which temporarily holds text) described below facilitates copying and moving text around (including moving between windows, because all windows use the same buffer), recovering from mistakes, and copying the same thing repeatedly.

The text editing functions are:

### Again

Used to search for a piece of text or to do a search and replace. It will look for the next occurrence starting from the current selection; if the left shift key is also held down, it will repeat until the end of the text.

To find the next occurrence of a piece of text, copy or cut the text to be looked for (this places it in the copy buffer). Select the place to start looking for it, and then select **again**. It will either find the text being searched for and select it, or it will flash the window to indicate it couldn't find it.



Use of **again** after replacing a piece of text will cause it to look for the next occurrence of the replaced text and replace it with the same thing. If it doesn't find anything to replace, the window will flash.

The **again** function can be repeated over and over by selecting it repeatedly, or it can be automatically repeated by holding down the left-shift key while selecting **again** until it is finished.

#### **Undo**

Attempts to undo or reverse the last action performed. This is particularly useful to get back text that has been mistakenly replaced or deleted. **Undo** will replace the current selection with whatever was the last text to be replaced, copied, or cut.

#### **Copy**

Puts a copy of the current selection into the text copy buffer. Once text is copied into the buffer it can be placed anywhere into any text window (see **paste**), or **again** can be used to find other occurrences of it.

#### **Cut**

Deletes the current selection, and places the deleted text into the text copy buffer. If the next operation is a **paste**, the cut text has essentially been moved. Using **cut** and then **again** will find the next occurrence of the cut text.

#### **Paste**

Replaces the current selection with the contents of the text copy buffer. Thus, if the current selection is empty, **paste** is equivalent to inserting the copy buffer text at the caret.

**Paste** does not affect the contents of the copy buffer, so the same text can be pasted repeatedly. **Again** can be used after **paste** to perform a search and replace operation (see **again**).

#### **Save**

Stores the file onto the disk.

#### **Strip CRs**

Removes unneeded <return>s from text that is received from another data source.

#### **Search**

Looks through an Information Center for any occurrences of your selected text in any of its labels or keywords.

#### **Hardcopy**

When you are going to hardcopy text files, a special Q-Box appears titled "Select Hardcopy Method." After the label **Choose either:** you have two choices:

**Direct** (the default) means that you want to send the file directly to the printer. If you select this it will, in turn, cause the standard Hardcopy Q-Box to appear next.

**Preview** means that you don't want to hardcopy this file, but instead intend to put it in another type of window into which you can merge graphics with text files. See the section titled "The Preview Window" for a complete description of this feature.

If you select **Preview**, the two words (**Portrait** and **Landscape**) next to **if preview:** "wake up" and become selectable, whereas they are normally obscured when the selected hardcopy method is **Direct**.

**Portrait** and **Landscape** refer to the orientation of the image on a standard 8-1/2" x 11" page. **Portrait** means the text or illustration will orient 11" vertically and 8-1/2" horizontally. **Landscape** means the text or illustration will orient 8-1/2" vertically and 11" horizontally.

### Annotation -->

Annotations can be thought of as working notes, editorial comments, or footnotes which are kept attached to the text but are not displayed in it. In paper and pencil days, the common practice for adding annotations was to scribble comments in the margins of the paper. Instead, in the Golden Tiger software, a tool called an "annotation marker" is used. The marker appears right in the text, and it can be selected for display, deletion, or expansion of the annotation.

Annotation markers are numbers, starting at 100, enclosed within double colons and displayed in a 7-point (very small) font. They look like this: ::100:: . Every marker number is unique within a document, so if an annotation is copied and pasted elsewhere in the text, it will get a new number.

The text of an annotation (and any annotations in it) is really attached to the annotation marker. This means that if text with the marker in it is copied, cut, or pasted, the annotation travels along with it. Therefore, annotations are deleted by cutting their marker from the text, copied by copying their marker, and can be pasted into text in the same or another window.

If your document has annotations and you want to make a hardcopy, the standard set of items in the "Select Hardcopy Method" Q-Box will contain an additional **Print Annotations: yes or no** choice. **Yes** (the default) means the annotation reference numbers will be printed in the text, and a table of the annotations will be printed at the end of the text. **No** means neither the annotation reference numbers nor their associated text will be printed.

Using **Annotation -->** is a much more elegant way of electronically scribbling notes in the margins; annotations can even be made on annotations *ad infinitum*. After moving the cursor to the right, the following submenu items appear:

#### Create

First, type the text that will comprise the contents of the annotation, select this text, then select **create**. The selected text is replaced by the annotation marker.

#### Display

An annotation is opened up by selecting its marker and then selecting **display**. If the marker has not been selected correctly, an error message will come up and you must re-try. If it was correctly selected, you will be presented with an Origin cursor to open up the annotation's window.

The annotation window popup menu has fewer items for text editing than the word processing text window popup, but those it does have are identical.

The label of the annotation window indicates exactly which annotation it is and where it came from by displaying the label of the original word processing window, followed by the sequence of annotation markers up to and including itself.

When the annotation window is closed, any annotation windows open on annotations within its text will also close.

#### Expand

A selected annotation marker is replaced by the text of the annotation by using **expand**. When an annotation marker is expanded, the annotation ceases to exist. Any annotations within the expanded annotation will not be expanded.

**Fonts -->**

Golden Tiger software comes with a variety of fonts that you can select from. The "default" font, and what you see in this particular paragraph, is called Serif 10 regular. The Table below is a summary of the available fonts.

The Table summary is shown in Gacha, which is a fixed-pitch font; that is, each character takes up the same amount of space along a line of text, like a typewriter font. It's best to use a fixed-pitch font if you need to use tabs in a table, such as the one above. All of the other fonts are variable-pitch; their width varies from character to character as appropriate.

*Serif* refers to the little added widenings in a character, such as those on the ends of the cross bar and foot of the capital T. Compare that with a sans-serif "t" shown here: T. Font designers long ago learned that serifs help a person's eyes scan text easily and also permit smaller white space between letters. However, sans-serif fonts are often better for emphasis, and tend to stand out more if you are labeling things like charts, tables, or viewgraphs.

|                    |                        |
|--------------------|------------------------|
| again              |                        |
| undo               |                        |
| copy               | serif 10               |
| cut                | <b>serif 10</b>        |
| paste              | <i>serif 10</i>        |
| save               | <u>serif 10</u>        |
| strip CR s         | <b><u>serif 10</u></b> |
| search             | <i>serif 10</i>        |
| hardcopy           | serif 12               |
| annotation-->      | <b>serif 12</b>        |
| <b>fonts--&gt;</b> | <i>serif 12</i>        |
| utilities-->       |                        |

**Font Families**

- 1) Serif regular, bold, italic, underlined
- 2) Sans-serif regular, bold, italic, underlined
- 3) Gacha regular, bold, italic, underlined
- 4) Cream regular, underlined

**Point Sizes**

- 10, 12, 14, 18  
 7, 10, 12, 14  
 10  
 12

Fonts will look different on the screen from the way they do in hardcopy output. This is because the system utilizes *screen* fonts and *printer* fonts. This is particularly true of bold and italic fonts, because their screen widths are larger than their printer widths. In general, the hardcopy output will look much better than the screen display.

Fonts can be selected by either of two ways: from the fonts --> submenu or from the keyboard.

**SELECTING FONTS FROM THE Fonts --> SUBMENU**

The submenu is a scrollable list of all the fonts that you have available in the software. To change the font of an existing piece of text, first select the text, then select fonts --> and slide to the right to the list. The list will scroll up or down if the cursor is placed at the bottom or top of the list while the middle mouse button is pressed down. Select the desired font from this list.

**SELECTING FONTS FROM THE KEYBOARD**

Text fonts may be changed by first selecting the desired text and then using certain keyboard commands, or by using the keyboard commands while keying in text. These various "quick commands" make text regular, bold, *italic*, regular-underlined, **bold-underlined**, or *italic-underlined* (but only if the font variant exists in the system).

The commands require that the control key (marked CTRL and located above or to the left of the left-SHIFT key) be held down while striking the relevant keyboard key. To remove a CTRL command from text, hold down both the CTRL and SHIFT keys while striking the relevant keyboard key.

These quick commands are:

| CTRL | Purpose            |
|------|--------------------|
| -    | underline text     |
| b    | make text boldface |
| i    | make text italic   |

#### CTRL-SHIFT

|   |                  |
|---|------------------|
| - | remove underline |
| b | remove bold      |
| i | remove italic    |

The quick commands for changing fonts during text entry or after selection are done by holding the CTRL key down while typing a numeral 0 through 9. There is no guarantee that the fonts illustrated below will stay in this exact order; some experimentation may be necessary to map your font set:

| CTRL | Result                 |
|------|------------------------|
| 1    | serif 10 point         |
| 2    | serif 10 bold          |
| 3    | <i>serif 10 italic</i> |
| 4    | serif 12 point         |
| 5    | serif 12 bold          |
| 6    | <i>serif 12 italic</i> |
| 7    | serif 18 point         |
| 8    | serif 18 bold          |
| 9    | <i>serif 18 italic</i> |
| 0    | sans-serif 12 point    |

#### Utilities -->

Basically, these are functions that are useful but are not used in the mainstream or day-to-day tasks:

##### Add as key word

Automatically adds a new selected key word to the label/keywords designation of your text item name.

##### Time stamp

Causes the current text selection to be replaced with the current date and time, such as (4 May 1985 5:53:06 pm).

**Restore**

Returns the text to the way it was before the last save was used.

**Erase file**

Causes a Confirmer to appear that states "This will erase all the text from the file. Are you sure?" with a yes or no selection. Selecting yes will delete *all* text from the file.

**Compute it**

Takes selected text, evaluates it, and displays the result. For example, if you type in "2 + 3" and select it, then select compute it, the number "5" will appear.

**File as new item**

Files the entire document or only selected text as a new text item. If you're filing only selected text, a Confirmer will appear that says "File only selected text?" to which you must select *yes* or *no*. Then a Q-Box will appear that needs the new item label, keywords, classification, etc. If you're filing the entire document, only the Q-Box will appear.

**RIGHT MOUSE BUTTON TEXT WINDOW POPUP**

The right mouse button brings up the standard window manipulation popup menu with the following functions:

**Help**

To use the window Help tool, press the right mouse button and release with **help** selected from the pop-up menu. A window will appear on the screen with a brief explanation of the window's function and a reference to the User Guide, and to where more information about the window may be found.

**Classification**

The classification of any data window may be changed by the user to reflect its new status. A Change Window Classification input form appears and the new classification is selected by the user. Select **accept** on the input form and the data window classification bars, top and bottom, will change to reflect the selection. If the data item has no classification there are no classification bars.

**Close others**

When a display becomes very crowded with windows after an extended period of work, chances are that most are not being used. To keep the window that you are currently working in, and close all of the others, select **close others** from the pop-up menu and release the button. If any of the windows selected for closure have contents that require saving, a Confirmer will appear and ask if you are sure you want to close that specific window (*yes* or *no*).

**Select and close**

Permits you to select any number of the windows currently on the screen and close them. After this selection has been made, another popup menu will appear that lists the title tabs of all the open windows. Move the cursor over this list and click the middle mouse button over your choice(s), which will select a window for closing, and also cause the actual title for the window to fade in-and-out on the screen at that window's location.

More than one window may be selected with this function. Execution of this command begins when you move the cursor outside of the displayed list and click a mouse button. If any of the windows selected for closure have contents that have not been saved, a Confirmer will appear and ask if you are sure you want to close that specific window.

### Find

Permits you to transfer control from the window you are in to any other window currently on the screen. The tool works very similarly to **select and close** above. A popup menu will appear on the screen with the titles of all the open windows. Moving the cursor over this list while pressing the middle mouse button will cause the label of the window selected for finding to be highlighted, and also cause the actual title for the window to fade in-and-out on the screen at the location of that window.

Releasing the middle mouse button while any one of the items is selected (the title in the popup menu is highlighted) will cause the selected window to become the active window.

The **find** command can be aborted by moving the cursor anywhere outside of the displayed list and clicking any mouse button.

### Move

If you do not like where a window is on the screen, you can move it elsewhere. Place the cursor in the window to be moved and select **move** on the window popup menu. The action of selecting this tool will cause an outline of the window to be formed, with the cursor grabbing the nearest corner. You can then drag the window frame around by this corner to position it on the screen exactly where you want it.

To dismiss the **move** tool and open the window where the frame is, click the left mouse button.

### Frame

Allows you to change the size of a window. When you select **frame** on the window popup menu, the cursor changes into the Origin cursor, which is used to mark the location of the upper left corner of the new window. You can move the Origin cursor around the screen until it is positioned where you want it. Pressing the left mouse button will cause the upper left corner of the window to become anchored, and the cursor changes to a small Corner cursor marking the lower-right corner of the new window frame. Moving this cursor about will cause the frame of the window to "rubber band." Move it around, using the mouse, until the window is the rectangle of the size and proportion that you want, then release the left mouse button. The contents of the reframed window will re-format themselves, as appropriate, to fill the newly-indicated window space.

Some windows are fixed in size and cannot be framed. In this case, **frame** works just like **move**.

### Collapse/expand

The selections **collapse** and **expand** appear in place of each other in the right mouse button popup menu. **Collapse** is available when a window is open and active. **Expand** is available when a window is collapsed.

Selecting **collapse** allows you to compress any active window down to its title tab and place that tab anywhere on the screen. When the left mouse button is released, the selected window will be collapsed to its tab alone and you can move the tab about the screen and place it where you want it. To release the tab at the desired location, click the left mouse button.

Since the tabs make up only a small fraction of the space of the window itself, and because the title in the tab is generally descriptive of the window, a number of open windows can be kept and organized on the screen without the display looking cluttered and confusing.

Selecting **expand** on the right mouse button pop-up menu of a collapsed window will restore the window to its precollapsed size and location.

### Close self

When you have finished with a window and want to remove it from the group of open windows on the screen, you can close it by selecting **close self**. The window to be closed must be the active window. When the mouse button is released, the window will be closed. Depending on the type of window and what you have been doing with its contents, a **Confirmer** may appear to ask if you want to close that particular window without saving the contents.

## The Preview Window

### OVERVIEW

The Preview window is a tool that allows you to compose documents which combine pictures with text files and/or to perform some editing functions that cannot be done in a regular text window. The Preview window requires several steps to set up:

- First, the image and text files are created separately.
- Second, when you are ready to combine

pictures and text, select **hardcopy** from the text window middle mouse button popup, which will bring up a "Select Hardcopy Method" Q-Box. The Q-Box allows you to either send the text file to the printer to make a hardcopy of it (by selecting **Direct**) or to put the text file into Preview form (by selecting **Preview**).

- Third, select **Preview**, then **accept** from the Q-Box. This will cause an "Item Label" Q-Box to appear.

| Select Hardcopy Method |                 |                  |
|------------------------|-----------------|------------------|
| <b>accept</b>          | <b>cancel</b>   | <b>bailOut</b>   |
| <b>Choose either:</b>  | <b>Direct</b>   | <b>Preview</b>   |
| <b>if preview:</b>     | <b>Portrait</b> | <b>Landscape</b> |

- Fourth, type in the item label (the name you want to call the Preview window) then **accept**.

|                     |                   |                |
|---------------------|-------------------|----------------|
| <b>accept</b>       | <b>cancel</b>     | <b>bailOut</b> |
| <b>User Label:</b>  | <b>Item Label</b> |                |
| <b>Key Words:</b>   | <b>preview</b>    |                |
| <b>Info center:</b> | <b>demo</b>       |                |

- Fifth, a corner cursor will appear, attached to a rather large, fixed-size window outline. Place the outline at a convenient area on the screen and click the left mouse button to open the Preview window (but make sure the entire outline is on the screen when you do this). The text will now appear in the Preview window.

A few of the Preview window's features are:

- ★ Automatic text wrap-around of graphics images. When you transfer a picture or graphic image (chart, graph, etc.) into the Preview window area of your choice, you then select a popup menu item called **compose page** and the text in that area will position itself around or at the side(s) of the image. If you don't like the way the text has wrapped, a few simple manipulations on your part will alter the layout until it appears the way you want it to.

- ★ There are many editing functions available, as well as the ability to create multiple columns, change margin settings, vary line spacing, and set tabs.

★ A "text page break line" will break a page wherever you want it to. Since you are able to do this, you can avoid problems like single lines moving to the next page, or titles being separated from their appropriate text.

★ In addition to working with images and text wrap-around, you can create "blank spaces" of any size (in the shape of a rectangle or square) and wrap text around them, too. These blank spaces have many uses, such as a template for positioning later pictures or as a wedge for evening up columns.

★ The text and graphics you see in the Preview window are exactly the way they will appear when printed out. Thus, you can be sure that your screen layouts of text and images will be accurate and realistic.

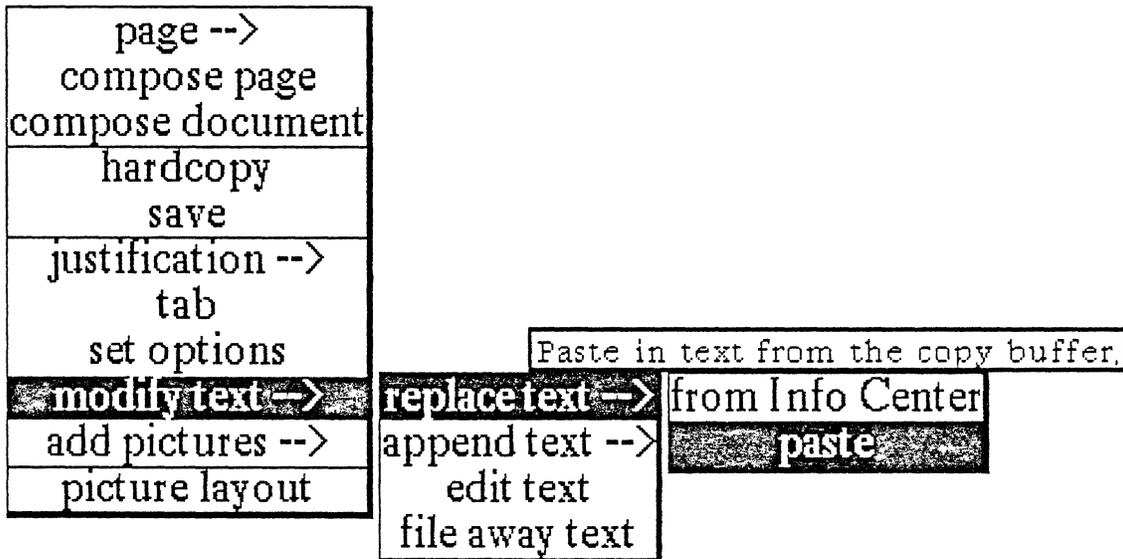
### NORMAL MODE

A Preview window has two modes: a "normal" mode and a "picture layout" mode. Normal is the default. You may switch back and forth between the two states by selecting picture layout from the "normal" mode middle mouse button popup, and back to normal from the "picture layout" mode middle mouse button popup.

Normal mode contains both text and pictures/blank spaces, while picture layout mode displays only pictures and blank spaces, and *no* text. If you have a picture that needs to go on a page that contains no text, your Preview window must be in picture layout mode.

For a Preview window that is currently in normal mode, the middle mouse button popup menu has many text editing options to choose from, which are described below. Remember, although you edit or change text in the Preview document, the material in the original text file remains the same.

### NORMAL MODE MIDDLE MOUSE BUTTON POPUP



## Page -->

### Forward

Moves you forward one page to the next page of the document. If you are on the last page when you select **forward**, a Prompter will appear that says "This is the last page!" meaning that you cannot go forward beyond this page. However, images (only) can be placed beyond the last page of a document when the Preview window is in picture layout mode.

### Back

Moves you back one page to the previous page of the document. If you are on the first page when you select **back**, a Prompter will appear that says "This is the first page!" meaning that you cannot go back beyond the first page (in either mode).

### Random

Causes a small scrollable popup to appear that can display up to five numbers. This option is useful when, for instance, you are currently working in a 15-page document, are on page 1, and want to get to page 4. Instead of having to go forward page by page to reach 4, selecting **random** will display a submenu; the numbers will read 1 through 5. While still holding down the left mouse button, select 4 and the document will jump immediately to page 4.

If you are somewhere in the same document and want to jump ahead more than five pages (or jump back—it works both ways), you can scroll the submenu forward through the available page numbers by pressing and holding down the left mouse button as you place the cursor at the bottom edge of the submenu. To scroll backwards, place the cursor at the top edge of the submenu. Select the appropriate page number when it appears by moving the cursor back inside the submenu.

### Compose page

Arranges (or re-arranges) the images and text within the current displayed page. This option should be used each time you change image or text positions. It will compose only what needs to be composed.

### Compose document

Arranges each page of the document at one time, starting with whatever page is currently displayed. While composing, the current page number is shown in the page break box below. If you want to stop the composing process before it has finished, hold down the left mouse button.

### Hardcopy

Prints the Preview document. The Q-Box that appears is similar to other hardcopy Q-boxes used throughout the system, except for several additional commands:

- You have a choice of printing the page currently on the screen or the whole document
- You may type in a major heading that will appear at the top left corner of the printed document
- You may also type in a minor heading, which will appear under the major heading.

### Save

Stores all the information that you have created up to the moment into a file.

### Justification -->

There are four types of text justification, as described below. You may justify one or several lines of a paragraph, the paragraph itself, or the whole page, as long as the line(s) in question have been selected with the left mouse button. When you select a type of justification, the cursor will change from the normal arrow into an appropriate illustrative shape.

After the designated justification has taken place, you may exit that state by clicking the left mouse button to return to the "regular" cursor, or just by selecting another command from the popup.

**Full**

This is the default justification setting for text in a Preview window. The software produces spacing between words so that lines of text starting at or near the left margin will end exactly at the right margin.

**Left**

Note that this is the only justification setting for text in a typical text item window (before putting it into Preview). The text begins at the left margin (unless there is a tab or spaces) and ends, with varying spacing, at or near the right margin, giving the right margin a "ragged" look.

**Center**

Sets selected text lines to center between the left and right margins. This is a convenient feature to use when centering titles.

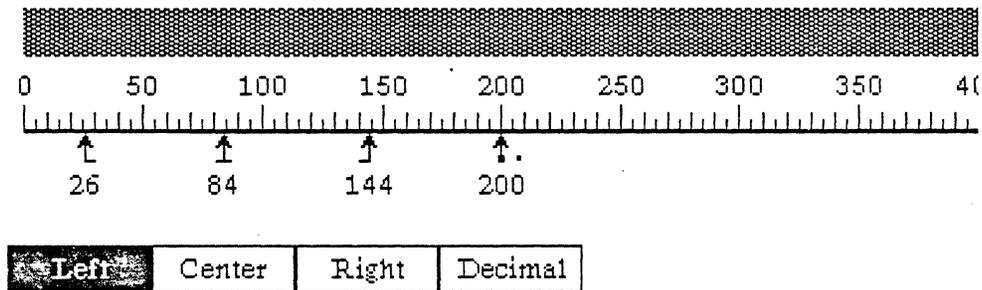
**Right**

Lines of text begin at the left margin with varying spacing, thus giving the left margin a "ragged" look. The lines end exactly at the right margin.

**Tab**

Tabs must first be entered into your text by pressing the Tab key on the keyboard (either in regular or Preview). Every tab has a default setting, which may only be changed while editing the Preview document. During this time you may also add new tabs, move existing tabs, or delete tabs. To use this feature:

**Preview Window Tab Rule**



- Select **tab**; the Origin cursor will appear. This lets you open and place a Tab Rule (which you will need to make tabs) into the Preview document. You may place the Tab Rule at the top of the document or anywhere within it, because the tab creations that you subsequently make from it will still apply to tabs anywhere in the document.

- The Tab Rule displays one preset tab (in the form of an arrow) with its numerical tab setting shown underneath. The units of measurement on the Tab Rule appear in *points* (there are 72 points to an inch). You can change the measurement unit ahead of time from points to *inches*, *centimeters*, or *picas* by using the "Margin, Column, and Line Settings" Q-Box (first select set options from the popup to make it appear).

- Below the Tab Rule is a list of the four types of tabs available: Left, Center, Right, and Decimal. You may select the type of tab ahead of time, or change the tab type after you have created it, by selecting the desired tab type, then clicking over the tab to be changed. Notice that the small tab arrow will change shape when you change the type of tab it represents.

- Tab manipulations on the Tab Rule are all done with the left mouse button. Tabs may be moved, deleted, or created:

- To move a tab and change its setting, first place the cursor over it (in the unit number area underneath); press and hold down the left mouse button. The tab will select and appear in reverse video, and the cursor takes on the shape of the left-tab arrow. Move the selected tab to the left or right along the Tab Rule. As you do, the number setting will blink and increase or decrease, depending on the direction you're going. Note that once you've selected the tab, you can move the left-tab arrow cursor above or way below the Tab Rule. It's not necessary to keep the cursor exactly over the tab as you attempt to move it. Release the mouse button when the tab has been moved to the desired location.

- To delete an unwanted tab, merely select it by pressing and holding down the left mouse button and moving the tab completely off the Tab Rule and outside the margin (in either direction). When you release the mouse button outside the margin, the tab will disappear. If it's necessary, you can move the tab "through" other tabs to get it out beyond the margin. You can also delete a tab by placing it precisely over another unselected tab: when you release the mouse button, the unwanted (selected) tab will disappear.

- To create a new tab, place the cursor at the desired location on the Tab Rule and either (1) click the left mouse button at the desired location, or (2) press and hold down the left mouse button and move the left-tab arrow cursor until you pinpoint the desired location, then release it.

- The final step in setting tabs is to bring up the Tab Rule's middle mouse button popup. There are two choices on it: apply and bailout.

- Apply will recompose and redisplay the page text with all the new tab settings.

- Bailout will undo all the new tab settings, return them to what they were before, and cause the Tab Rule to disappear from the Preview window.

#### Set options

Selecting set options opens a Q-Box called "Margin, Column, and Line Settings." This offers an opportunity to change the top, bottom, right or left margin settings, to channel the window text into one to four columns, to determine the width between columns (gutter width), to change line leading, and to change the type of tab setting.

| Margin, Column, and Line Settings     |                                       |                                       |                                    |                                        |
|---------------------------------------|---------------------------------------|---------------------------------------|------------------------------------|----------------------------------------|
| <input type="button" value="accept"/> |                                       | <input type="button" value="cancel"/> |                                    | <input type="button" value="bailOut"/> |
| Top                                   | <input type="text" value="1.0"/>      |                                       |                                    |                                        |
| Bottom                                | <input type="text" value="1.0"/>      |                                       |                                    |                                        |
| Right                                 | <input type="text" value="0.749999"/> |                                       |                                    |                                        |
| Left                                  | <input type="text" value="1.0"/>      |                                       |                                    |                                        |
| Columns                               | <input type="text" value="1"/>        | <input type="text" value="2"/>        | <input type="text" value="3"/>     | <input type="text" value="4"/>         |
| Gutter Width                          | <input type="text" value="5"/>        | <input type="text" value="10"/>       | <input type="text" value="15"/>    | <input type="text" value="20"/>        |
| Tab Unit                              | <input type="text" value="inch"/>     | <input type="text" value="cm"/>       | <input type="text" value="picas"/> | <input type="text" value="points"/>    |
| Line Spacing                          | <input type="text" value="1.0"/>      | <input type="text" value="1.5"/>      | <input type="text" value="2.0"/>   | <input type="text" value="3.0"/>       |

– The margin setting units are in inches; there is already a default for each margin that can be typed over to give it a new setting. The range of settings runs from 0.25 to 3 inches maximum for the left and right margins, and 0.75 to 2 inches maximum for the top and bottom margins.

– The gutter width between columns is measured in "screen" units; these units increase or decrease in increments of 5 between 5 and 30, and are selected with the left mouse button instead of being keyed in.

– Line spacing can be changed from the default of 1 (single-spaced) up to 3 (triple-spaced).

– Tab settings can be changed from the default, which is measured in *points*, to *inches*, *centimeters*, or *picas*.

When you select or type in a new setting in the Q-Box, the software will automatically rearrange the page to accommodate the new information.

#### **Modify text -->**

Permits you to replace the entire document text with text from another file, append text at the end of the document, and perform various editing functions. Ideally, text should be as "finished" as possible before placing it in a Preview window. However, it is realized that not every circumstance can be anticipated, and that it will often be necessary to do some "after-the-fact" editing by adding or deleting space, eliminating or copying text, changing fonts, and so on. **Modify text -->** contains a number of practical text manipulation features:

#### **Replace text -->**

##### **from Info Center**

Replaces all the text currently in the Preview window with text from a file selected from an Information Center. To accomplish this:

- Select the desired filename from the Information Center and select **copy** (or **cut**) from its middle mouse button popup in order to store the text in a transfer buffer.

- Next, move back into the Preview window and select **replace text -->** from Info Center. If text is already in the Preview window, a Confirmer will appear that says "Fatal to current text! Continue?" with a **yes** or **no** decision.

- Selecting **yes** will copy all the text from the transfer buffer into the Preview window. The new text will attempt to wrap around any images in the window (images are not overwritten by the text transfer).

##### **Paste**

Replaces all the text currently in the Preview window with text you have previously cut or copied from another text window.

#### **Append text -->**

##### **from Info Center**

Adds text from a file selected from an Information Center to the end of the text currently in the Preview window. To accomplish this:

- Select the desired filename from the Information Center and select **copy** (or **cut**) from its middle mouse button popup in order to store the text in a transfer buffer.

- Next, move back into the Preview window and select **append text -->** from Info Center.

- The file text will appear appended to the end of the current text.

##### **Paste**

Appends to text currently in the Preview window the text you have previously cut or copied from another text window.

### Edit text

Offers a variety of Preview editing features. It is also the only way you can type in, change, or delete text while in Preview. After selecting it, observe that the regular cursor arrow will have the word "Edit" attached to it. When it appears, you must select the particular text area that needs editing, which is done by holding down the left mouse button and moving the cursor down over each line of text (at this point, you can't select one word or one character only). You may select one line or the entire page this way. As you select each line, it goes into reverse video.

When you release the mouse button, the system will automatically frame the selected text area into a pane (with its own scroll bar). The text is no longer in reverse video. Now you can move the cursor into the pane and select one character, word, line, or paragraph, in order to do your editing.

Most of the text editing will be done from the options offered in the pane's middle mouse button popup. These are:

- again.** Repeats the last edit.
- undo.** Reverses the effects of the last edit.

**copy.** You may copy text from another text window or from within the Preview window. In either case you, must first put the text into a copy buffer ahead of time. Here is a typical sequence of actions if you want to copy text from the same Preview window:

- Select **edit text**.
- Select the text area that text will be copied *from* with the left mouse button.
- Wait for the editing pane to appear, then select the exact text that you want copied.
- Select **copy**.
- Select **done** from the pane popup.
- Select **edit text again** from the Preview window popup.
- Select the text area that text will be copied *to*. Wait for the pane to appear around the selected area.
- Place the insertion caret; select **paste** from the pane popup and wait for the text stored in the transfer buffer to appear at the caret.
- Select **accept** if you want to accept the change.
- Select **done**.

**cut.** Use cut if you want to remove the text completely from an area and place it somewhere else. It works almost exactly the same as copy. Here again is a typical sequence of actions if you intend to cut text from the same Preview window and move it somewhere else:

- Select **edit text**.
- Select the text area that text will be cut *from* with the left mouse button.
- Wait for the editing pane to appear, then select the exact text that you want removed.
- Select **cut**.
- Select **accept** from the pane popup.
- Select **done**.
- Select **edit text again** from the Preview window popup.
- Select the text area that text will be moved *to*. Wait for the pane to appear around the selected area.

- Place the insertion caret; select **paste** from the pane popup and wait for the text stored in the transfer buffer to appear at the caret.
- Select **accept** if you want to accept the change.
- Select **done**.

**paste.** Places, at the insertion caret, whatever text is currently in the copy or transfer buffer.

**accept.** Stores the editing changes.

**cancel.** Restores all edited text to its original form and takes you out of the edit text state.

**fonts -->.** Allows you to change selected text, via a scrollable tree popup submenu, to another typeface.

#### **File away text**

Files newly-edited text away to your designated Information Center's In Box. Since files that you edit in Preview then become different from their original text files, this is a way of storing the edited file. Selecting file away text will bring up a Q-Box where you may fill in the User Label (desired filename), any key words, which Information Center to store it in, and the filing method (manual or automatic).

#### **Add pictures -->**

This menu option lets you grab pictures (graphics images) from other parts of the Preview document or other documents and place them in the Preview window. It also lets you create and place blank spaces. It's probably a good idea to do a **compose page** after you have added another picture or blank space to the text.

#### **Paste**

Places an image (or text) currently in the copy buffer into the Preview document. A typical series of steps would be:

- In a Sketch Pad (or other type of graphics pad) frame the desired image there and select **copy** from the sketch pane middle mouse button popup.
- Move the cursor into the Preview window and select **add pictures --> paste**.
- The image will suddenly appear, represented by a movable gray rectangle (or square) with the cursor embedded in the center.
- Click the left mouse button to place the image into the Preview document. The gray rectangle disappears and the copied image takes its place.
- Since the image has no name, the system keeps track of it by calling it "Pasted.image-+x" ("x" is a number). See the description of **from my list** for more information about this.

#### **Blank space**

A "blank space" is like a blank picture. Its shape, which you frame for size, is that of a square or rectangle. A blank space can do such things as act as a template for positioning later images, as a wedge for opening space between paragraphs or titles and paragraphs, or as a means for evening up column endings. The many uses of variable blank spaces in your Preview document will become apparent as you use them. After selecting **blank space**, the following steps will take place:

- The Origin cursor appears, which allows you to begin to frame the size of your blank space.
- When you have finished framing, the blank space is represented by a movable gray square or rectangle with the cursor embedded at the bottom.
- Click the left mouse button to place the blank space into the Preview document. The gray color will then disappear, replaced by a blank, bordered square or rectangle.

### From screen

Allows you to frame an area of the Preview window or an area of another currently opened window. These framed areas, whether of images or text, are treated as pictures and can be placed into the Preview document by using the following steps:

- Select **add picture --> from screen** to bring up the Origin cursor. You can now frame an appropriate area of the Preview window or some other open window.
- The newly-framed image is represented by a movable gray rectangle with the cursor embedded at the bottom.
- Click the left mouse button to place the image into the Preview document.
- Since the image has no name, the system keeps track of it by calling it "Screen.image- + x" ("x" is a number). See the description of **from my list** for more information about this.

### From my list

Brings up the list of "Paste.image" and "Screen.image" pictures appearing in the Preview document, including pictures removed earlier in the current Preview session. The number to the left of each ".image" name is the page number that it appears on:

- Select the desired image name from the list.
- When the image appears, it is represented by a movable gray rectangle with the cursor attached.
- Click the left mouse button to place the image into the Preview document.

### from Info Center

Lets you select an image name from an Information Center and place the subsequent image into the Preview document:

- Select the image filename from the Information Center.
- Select **copy** from its middle mouse button popup.
- Move the cursor into the Preview window and select **add pictures --> from Info Center**. You'll immediately observe the representative movable gray rectangle with the cursor attached.
- Click the left mouse button to place the image into the Preview document.

### Picture layout

There are two modes or "states" in a Preview window: a "normal" state or a "picture layout" state. You will be in either one or the other. The normal state is that which contains all the text and images you are working on. The picture layout state contains the images and blank spaces of the document only—there is no text. This means you can edit and manipulate images faster, without having to constantly move or wrap text around them.

The picture layout state middle mouse button popup is almost identical to the normal state popup, except that it contains no menu options that deal with text manipulations.

When you are in the picture layout state and wish to return to the normal state, you merely select **back to normal** from the middle mouse button popup.

## THE TEXT PAGE BREAK LINE

One of the special features of the Preview window is the ability to designate where you want a page to break. Thus, you can avoid things like single lines moving to the next page ("widows") or titles being separated from their text. This is accomplished with the *text page break line*.

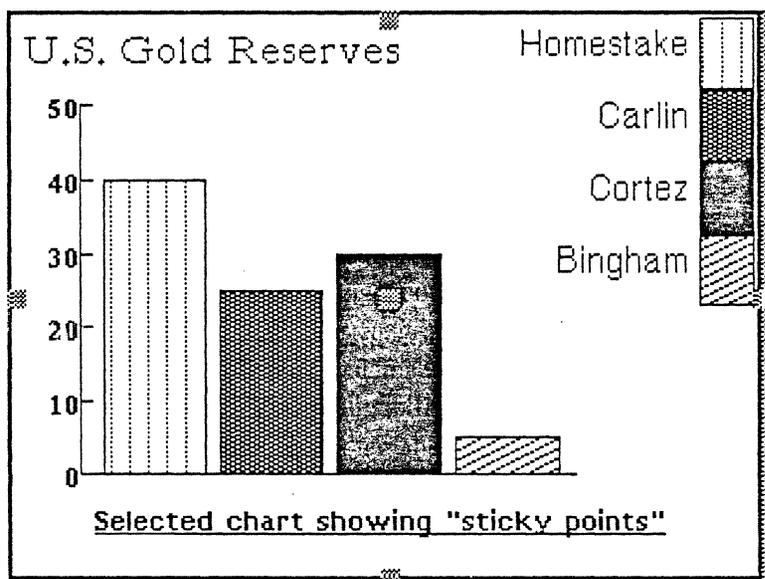
The text page break line will only separate text material, not graphics. Even if an image appears underneath a text page break line, the image will still remain on the same page, and not move to the next page. You can place an image by itself on the next page only if you are currently in picture layout mode.

To use the text page break line, move the cursor over the page number located in the square at the bottom right section of the Preview window. Press and hold down the left mouse button. The square turns gray and is then easily moved up and down the window edge, dragging the bottom line up or down with it. When you release the mouse button, the lines of text rearrange themselves.

## THE PICTURE AND THE BLANK SPACE

In a Preview document, there are two types of graphics that you will work with:

- ★ A *picture*, which is a chart, graph, sketch, or some other type of graphical object.
- ★ A *blank space*, which is a bordered rectangular or square area that contains no graphical material. You frame a blank space to whatever size is needed. Its uses range from acting as a preliminary picture layout device to being a means of adding space anywhere within the text material. Although the blank space appears to have a border (so that you can see it), the border does not appear when the document is printed. However, you *can* deliberately add a border if you want to via a popup option.



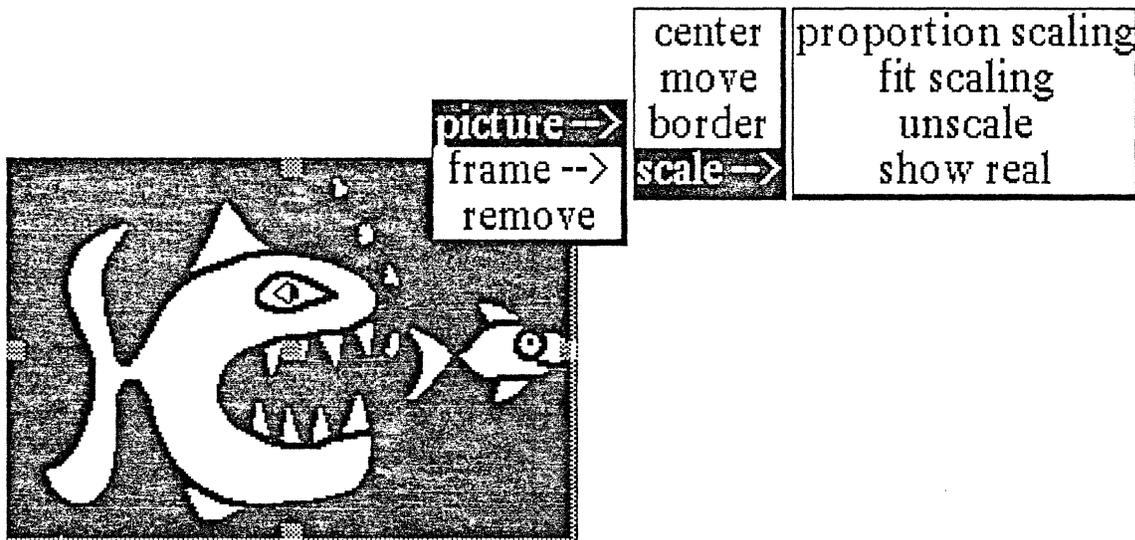
Both a picture and a blank space must first be selected in order for you to perform editing functions on them, such as moving, adding/removing borders, and other options. Either type of object is selected by placing the cursor into its center area and clicking the left mouse button. You will then see gray "sticky points" at the sides and center.

While a picture or blank space is selected, you cannot perform any text editing (if you're in "normal" state), as the popup menu that contains those options will be unavailable. Instead, the picture or blank space will acquire its own middle mouse button popup menu.

When you've finished editing the graphics object and want to deselect it, move the cursor outside the object anywhere in the Preview window and click the left mouse button. The sticky points will disappear and the regular middle mouse button popup menu is again available.

Since a selected picture menu popup is different from a selected blank space popup, each one will be discussed separately.

### SELECTED PICTURE MIDDLE MOUSE BUTTON POPUP



#### Picture -->

##### Center

Centers the picture with respect to the outer rectangle so that there is even spacing on all four sides.

##### Move

Allows you to move the picture inside its outer rectangle or border, permitting you to "fine tune" the placement of the picture within that area. This means the movement of the picture is bounded or restricted by the outer rectangle, and there is a difference between moving the picture and moving the rectangle.

In order to actually pick up and move the rectangle that contains the picture to another area of the window, you do not use a command from the popup. Instead, you place the cursor into the sticky point at the center of the picture and press down and hold the left mouse button. The picture will temporarily turn into a gray rectangle that follows the cursor's movements. When you come to the right location, release the left mouse button to place the picture.

##### Border

Draws a 2-pixel-wide border around the picture (not the outer rectangle). This is a toggle command, which means that if you select **picture --> border** and place a border around the picture, you can remove the border by selecting **picture --> border** again.

##### Scale -->

The following four submenu options deal with scaling or resizing pictures. Due to system graphics constraints, a proportion-scaled or fit-scaled image (explained below) cannot be shown on the screen as it will appear when it's printed. Instead, the newly scaled image is represented by a gray rectangle of the correct size that overlays the original image. If you need to view the original image again, you can select **show real**. If you decide not to scale the image after all, you then select **unscale**.

### Proportion scaling

Allows you to scale an image to a larger or smaller size in the same ratio aspect as the original:

- Upon selection, the Origin cursor appears in order for you to frame the new size of your image.

The frame will always stay in direct proportion to the original.

- After framing, release the left mouse button. The image is represented by a blinking, movable gray rectangle attached to the cursor. Click the left mouse button to place the rectangle in the Preview document.

- Even though your image has in actuality been scaled, it can only be shown as a solid gray rectangle with the words "Scaled Image/Prop" appearing in the upper lefthand corner.

- The rectangle can be moved around or deselected.

### Fit scaling

Allows you to scale an image to a larger or smaller size within a rectangular area that you specify. It is possible to deliberately distort the image's x and y parameters:

- Upon selection, the Origin cursor appears in order for you to frame the new size of your image.

The frame is flexible and can be sized as desired.

- After framing, release the left mouse button. The image is represented by a movable gray rectangle attached to the cursor. Click the left mouse button to place the rectangle in the Preview document.

- Even though your image has in actuality been scaled, it can only be shown as a solid gray rectangle with the words "Scaled Image/Fit" appearing in the upper lefthand corner.

- The rectangle can be moved around or deselected.

### Unscale

Returns you to your original image:

- Upon selection, a movable gray rectangle attached to the cursor appears. It is the size of the original image.

- Click the left mouse button to place the rectangle into the Preview document. The original image will then re-appear.

### Show real

Shows the original image for comparison in the upper lefthand corner of the newly-scaled image. If the scaled image is much bigger or smaller than the original, show real may show a slightly clipped or smaller original image because of system graphics constraints.

While the original image is being shown, a Prompter appears on the scaled object that says "This is the scaled image!" When you are finished viewing the original image, you may click the left mouse button in the bottom part of the Prompter, and the image will disappear.

### Frame -->

#### Fit picture

Automatically resizes or returns the frame to a size that fits around the picture.

### Border

Draws a 2-pixel-wide border around the outer rectangle of a picture. This is a toggle command, which means that if you select **frame --> border** and place a border around the rectangle, you can remove the border by selecting **frame --> border** again.

Note: a picture does not normally appear with an outside border or outer rectangle around it. The outer rectangle must be created by you. This is accomplished by placing the cursor over the sticky points located in the picture on the top, bottom, left or right side. If you now press and hold down the left mouse button, the cursor will grab and drag the side along as you move the it. Release the mouse button when you've reached the desired width.

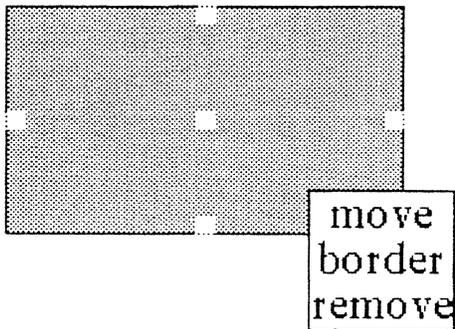
Even though a border appears around the outer rectangle, this is just to define the outer rectangle for you as it appears on the screen; it will actually print out as white space. If you want a real border you must now select **frame --> border**, so the 2-pixel-wide border can be drawn around the outer rectangle.

You may create a border on one side of the picture, or up to all four sides. If the border is not even on all sides, you can select **picture --> center** to correct the spacing.

### Remove

Takes the selected picture off the page. The removed picture is placed in a buffer in case you want to use it later. You can get to it again by selecting **add pictures --> from my list**, which contains all the "Paste.image" and "Screen.image" pictures appearing in the Preview document, including pictures removed earlier in the current Preview session. However, when you quit from Golden Tiger, the removed pictures will not be saved.

### A "blank space" with its popup



### SELECTED BLANK SPACE (Rectangle) MIDDLE MOUSE BUTTON POPUP

The selected blank space has its own middle mouse button popup. It also contains "sticky points" (as does a selected picture), which means that you can move a blank space by selecting its center sticky point, or increase or decrease the size of the blank space by selecting the sticky point at each side.

Bordered picture and frame



### **Move**

Allows you to pick up and move the blank space to another area of the Preview window. The blank space will temporarily turn into a gray rectangle that follows the cursor's movements. When you come to the right location, click the left mouse button to place the blank space.

Another way to move the blank space is by placing the cursor into the sticky point at the center of the blank space and pressing and holding down the left mouse button. The blank space will turn into a gray rectangle that follows the cursor's movements. Again, when you come to the right location, click the left mouse button to place the blank space.

### **Border**

Draws a 2-pixel-wide border around the blank space. This is a toggle command, which means that if you select **border** and place a border around the blank space, you can remove it by selecting **border** again.

### **Remove**

Deletes the blank space completely from the Preview document.

## **PICTURE LAYOUT MODE**

There are two modes in a Preview window: a "normal" mode or a "picture layout" mode. You will be in either one or the other. The normal mode is that which contains all the text and images you are working on. The picture layout mode contains the images and blank spaces of the document only—there is no text. This means you can edit and manipulate images faster, without having to constantly move or wrap text around them.

## **PICTURE LAYOUT MODE MIDDLE MOUSE BUTTON POPUP**

The picture layout mode middle mouse button popup is almost identical to the normal mode popup, except that it contains no menu options that deal with text manipulations. For a Preview window that is currently in picture layout mode (with no selected picture or blank space), the popup menu contains the following items:

### **Page -->**

#### **Forward**

Moves you forward one page to the next page of the document. If you are already on the last page when you select **forward**, a Prompter will appear that says "This is the last page!" meaning that you cannot go forward beyond the last page. However, images (regular or blank space) can be placed beyond the last page of a document when the Preview window is in picture layout mode.

#### **Back**

Moves you back one page to the previous page of the document. If you are already on the first page when you select **back**, a Prompter will appear that says "This is the first page!" meaning that you cannot go back beyond the first page (in either mode).

#### **Random**

Causes a small scrollable popup to appear that can display up to five numbers. This option is useful when, for instance, you are currently working in a 15-page document, are on page 1, and want to get to page 4 next. Instead of having to go forward page by page to reach 4, selecting **random** will display the popup; the numbers will read 1 through 5. While still holding down the left mouse button, select **4** and the document will jump immediately to page 4.

If you are somewhere in the same document and want to jump ahead more than five pages (or jump back—it works both ways), you can scroll the popup forward through the available page numbers by pressing and holding down the left mouse button as you place the cursor at the bottom edge of the popup. To scroll backwards, place the cursor at the top edge of the popup. Select the appropriate page number when it appears by moving the cursor back inside the popup.

#### **Add pictures -->**

This menu option lets you grab pictures from other parts of the Preview document or other documents and place them in the Preview window. It also lets you create and place blank spaces.

#### **Paste**

Places an image or blank space currently in the copy buffer into the Preview document. A typical series of steps would be:

- In a Sketch Pad (or other type of graphics pad) frame the desired image there and select **copy** from the sketch pane middle mouse button popup.
- Move the cursor into the Preview window and select **add pictures --> paste**.
- The image will suddenly appear, represented by a movable gray rectangle (or square) with the cursor embedded in the center.
- Click the left mouse button to place the image into the Preview document. The gray rectangle disappears and the copied image takes its place.
- Since the image has no name, the system keeps track of it by calling it "Pasted.image- +x" ("x" is a number). See the description of **from my list** for more information about this.

#### **Blank space**

A "blank space" is like a blank picture. Its shape, which you frame for size, is that of a square or rectangle. A blank space can do things like act as a template for positioning later images, as a wedge for opening space between paragraphs or titles and paragraphs, or as a means for evening up column endings. The many uses of variable blank spaces in your Preview document will become apparent as you use them. After selecting blank space, the following steps will take place:

- The Origin cursor appears, which allows you to begin to frame the size of your blank space.
- When you have finished framing, the blank space is represented by a movable gray square or rectangle with the cursor embedded at the bottom.
- Click the left mouse button to place the blank space into the Preview document. The gray color will then disappear, replaced by a blank, bordered square or rectangle.

#### **From screen**

Allows you to frame an area of the Preview window or an area of another currently opened window. These framed areas, whether of images or text, are treated as pictures and can be placed into the Preview document by using the following steps:

- Select **add picture --> from screen** to bring up the Origin cursor. You can now frame an appropriate area of the Preview window or some other open window.
- The newly-framed image is represented by a movable gray rectangle with the cursor embedded at the bottom.
- Click the left mouse button to place the image into the Preview document.
- Since the image has no name, the system keeps track of it by calling it "Screen.image- +x" ("x" is a number). See the description of **from my list** for more information about this.

#### From my list

Brings up the list of "Paste.image" and "Screen.image" pictures appearing in the Preview document, including pictures removed earlier in the current Preview session. The number to the left of each ".image" name is the page number that it appears on:

- Select the desired image name from the list.
- When the image appears, it is represented by a movable gray rectangle with the cursor attached.
- Click the left mouse button to place the image into the Preview document.

#### from Info Center

Lets you select an image name from an Information Center and place the subsequent image into the Preview document:

- Select the image filename from the Information Center.
- Select copy from its middle mouse button popup.
- Move the cursor into the Preview window and select add pictures --> from Info Center. You'll immediately observe the representative movable gray rectangle with the cursor attached.
- Click the left mouse button to place the image into the Preview document.

#### Back to normal

There are two modes or "states" in a Preview window: a "normal" state or a "picture layout" state. You will be in either one or the other. The normal state is that which contains all the text and images you are working on. The picture layout state contains the images and blank spaces only—there is no text. This means you can edit and manipulate images faster, without having to constantly move or wrap text around them.

When you are in the picture layout state and wish to return to the normal state, you merely select back to normal from the middle mouse button popup.

### RIGHT MOUSE BUTTON POPUP

The right mouse button in a Preview window brings up the standard window manipulation popup menu with the following functions:

#### Help

To use the window Help tool, press the right mouse button and release with help selected from the pop-up menu. A window will appear on the screen with a brief explanation of the window's function and a reference to the User Guide, and to where more information about the window may be found.

#### Classification

The classification of any data window may be changed by the user to reflect its new status. A Change Window Classification input form appears and the new classification is selected by the user. Select accept on the input form and the data window classification bars, top and bottom, will change to reflect the selection. If the data item has no classification there are no classification bars.

#### Close others

When a display becomes very crowded with windows after an extended period of work, chances are that most are not being used. To keep the window that you are currently working in, and close all of the others, select close others from the pop-up menu and release the button. If any of the windows selected for closure have contents that require saving, a Confirmer will appear and ask if you are sure you want to close that specific window (yes or no).



### Select and close

Permits you to select any number of the windows currently on the screen and close them. After this selection has been made, another popup menu will appear that lists the title tabs of all the open windows. Move the cursor over this list and click the middle mouse button over your choice(s), which will select a window for closing, and also cause the actual title for the window to fade in-and-out on the screen at that window's location.

More than one window may be selected with this function. Execution of this command begins when you move the cursor outside of the displayed list and click a mouse button. If any of the windows selected for closure have contents that have not been saved, a Confirmer will appear and ask if you are sure you want to close that specific window.

### Find

Permits you to transfer control from the window you are in to any other window currently on the screen. The tool works very similarly to **select and close** above. A popup menu will appear on the screen with the titles of all the open windows. Moving the cursor over this list while pressing the middle mouse button will cause the label of the window selected for finding to be highlighted, and also cause the actual title for the window to fade in-and-out on the screen at the location of that window.

Releasing the middle mouse button while any one of the items is selected (the title in the popup menu is highlighted) will cause the selected window to become the active window.

The **find** command can be aborted by moving the cursor anywhere outside of the displayed list and clicking any mouse button.

### Move

If you do not like where a window is on the screen, you can move it elsewhere. Place the cursor in the window to be moved and select **move** on the window popup menu. The action of selecting this tool will cause an outline of the window to be formed, with the cursor grabbing the nearest corner. You can then drag the window frame around by this corner to position it on the screen exactly where you want it.

To dismiss the move tool and open the window where the frame is, click the left mouse button.

### Frame

Allows you to change the size of a window. When you select **frame** on the window popup menu, the cursor changes into the Origin cursor, which is used to mark the location of the upper left corner of the new window. You can move the Origin cursor around the screen until it is positioned where you want it. Pressing the left mouse button will cause the upper left corner of the window to become anchored, and the cursor changes to a small Corner cursor marking the lower right corner of the new window frame. Moving this cursor about will cause the frame of the window to "rubber band." Move it around, using the mouse, until the window is the rectangle of the size and proportion that you want, then release the left mouse button. The contents of the reframed window will re-format themselves, as appropriate, to fill the newly-indicated window space.

Some windows are fixed in size and cannot be framed. In this case, **frame** works just like **move**.

### Collapse/expand

The selections **collapse** and **expand** appear in place of each other in the right mouse button popup menu. **Collapse** is available when a window is open and active. **Expand** is available when a window is collapsed.

Selecting **collapse** allows you to compress any active window down to its title tab and place that tab anywhere on the screen. When the left mouse button is released, the selected window will be collapsed to its tab alone and you can move the tab about the screen and place it where you want it. To release the tab at the desired location, click the left mouse button.

Since the tabs make up only a small fraction of the space of the window itself, and because the title in the tab is generally descriptive of the window, a number of open windows can be kept and organized on the screen without the display looking cluttered and confusing.

Selecting **expand** on the right mouse button pop-up menu of a collapsed window will restore the window to its precollapsed size and location.

#### **Close self**

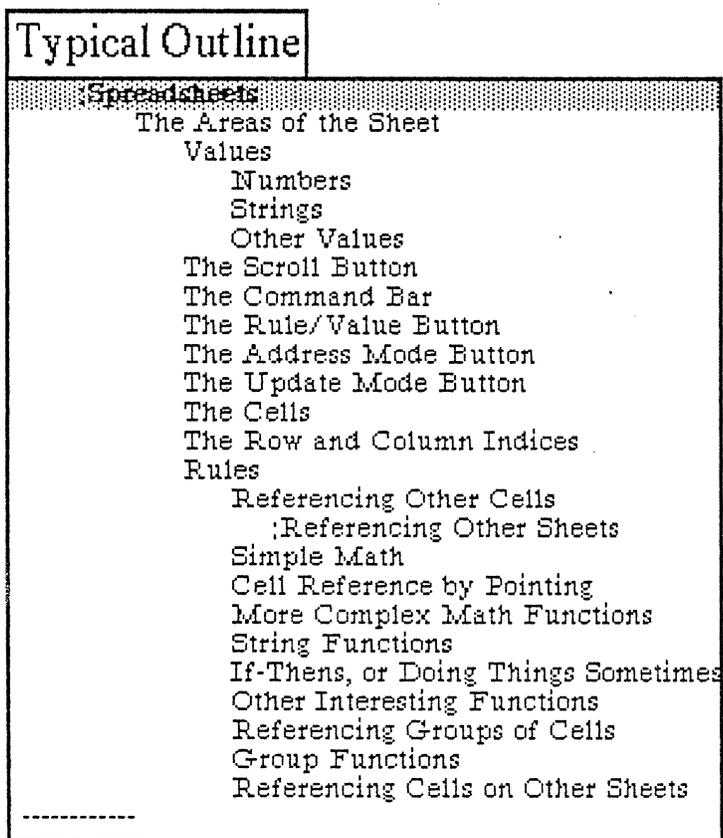
When you have finished with a window and want to remove it from the group of open windows on the screen, you can close it by selecting **close self**. The window to be closed must be the active window. When the mouse button is released, the window will be closed. Depending on the type of window and what you have been doing with its contents, a **Confirmer** may appear to ask if you want to close that particular window without saving the contents.

## Outlines

### OVERVIEW

Outlines are a method of producing structure for a report or document. As in the technique taught in school, outlines are used to indicate the principal features or different parts of a topic. The outline method consists of a series of entries, each of which has a name, some place in the organization, and a paragraph associated with it. The outline window allows you to move these entries around, organize them, and change the names and paragraphs of each one.

Outlines are very useful for structuring large documents and reports; this *Golden Tiger User's Guide* is an example of a large and complex document created with outlines. Once a suitable outline has been built, the outline window is capable of taking part of all of it and producing an organized document from it. Since the outline window has only one pane to work in, it will be referred to as "outline" from now on.



### DESCRIPTION

In a typical outline, you will see a list of entries (individual filenames). Some of these entries are preceded by a "-" (dash), which means that there are subentries hidden under that entry.

If the outline contains no entries, you will see a window with the entry "Empty Outline" in it, and it will be preceded by a ";" (semicolon). This means that particular entry has no text in it. Any entry that currently has no text will display the semicolon.

If there are several or more entries, you will notice that some are more indented than others; thus, the more indented an entry is, the deeper it is in the document's organization.

### SELECTING AN ENTRY

Selecting an entry in the outline is done by pointing at it with the cursor and clicking the left mouse button. You will know the entry name is selected when a narrow rectangle surrounds it, just as it does when selecting an entry in a folder window.

## OUTLINES MIDDLE MOUSE BUTTON MENU

### Copy

First select whatever entry is to be copied. After copy is used, the selected entry (along with its subentries, if any) is placed into something called the "copy buffer," which temporarily holds it. If you use paste --> next from the popup, the entry will be placed wherever in the outline you have chosen. The original entry will remain where it was.

### Cut

First select whatever entry is to be cut. After cut is used, the selected entry (along with its subentries, if any) is placed into something called the "copy buffer," which temporarily holds it. If you use paste --> next from the popup, the entry will be placed wherever in the outline you have chosen. The original entry will be deleted.

### Paste -->

In a typical outline, things are organized in terms of entries and subentries. This appears on the screen as an indentation, with all subentries indented further than the main entry. The following three paste functions are used to specify where to paste items into the outline:

**Before.** Places the entry in the copy buffer right before the selected entry on the same level.

**After.** Places the entry in the copy buffer right after the selected entry on the same level.

**Under.** Places the entry in the copy buffer into the outline as the first entry under the selected entry at the next level of indentation.

As an example, in the outline

Joseph  
Philip  
John  
Mary  
Susan

Joseph is before Mary, Susan is under Mary, and John is after Philip. Susan is not under Joseph, nor is John before Mary.

### Add -->

This works in the same way as the paste function, except that in each case a new entry is placed into the outline. The system will ask you the name of the entry before it puts it in.

**Before.** Places the entry in the copy buffer right before the selected entry on the same level.

**After.** Places the entry in the copy buffer right after the selected entry on the same level.

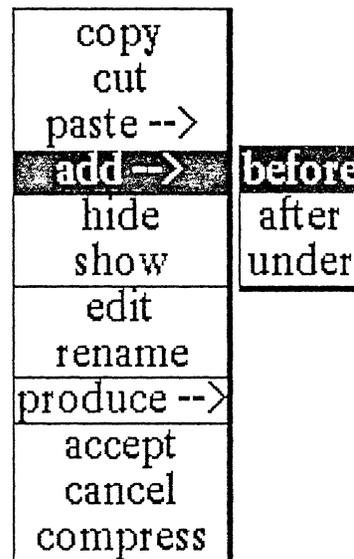
**Under.** Places the entry in the copy buffer into the outline as the first entry under the selected entry at the next level of indentation.

### Hide

By selecting an entry and using hide, you can conceal those entries under it that have no immediate interest. After this is done a dash (-) will precede the selected entry.

### Show

Restores a selection's hidden entry to visibility.



### **Edit**

Select the entry of choice first; when edit is used it will open the entry into a text window that can be changed and edited.

### **Rename**

Gives an entry a new name. Selecting the entry first and rename will cause a Prompter to appear that asks "New Headline Label?". After you have typed in the new name/label, press <return>. The selected entry will acquire the new name.

### **Produce -->**

There may be several classification levels within an outlined document. This feature allows you to print only the text existing at a lower classification level and exclude from printing all text existing at a higher level. Selecting produce --> will bring up a "Maximum classification level to print?" Q-Box, wherein you can specify the desired level. There are three types of text affected:

Text. Regular text.

Structure. The outline hierarchy.

EZPub text. A differently formatted text file compatible with a VM system.

Hardcopy. Allows you to make a hardcopy of the selected entry (and any entries under it). In obtaining a hardcopy, the first of two Q-Boxes will appear, asking if this file is Direct or Preview (select Direct). The next Q-Box needs the printer name (unless it's already there), number of copies (if more than one), and so on. Select accept from the top of both Q-Boxes when you're finished with them. When the hardcopy is complete, a message to that effect will appear in the top right portion of the screen.

### **Accept**

Saves a new file or the changes to a file. Until this is used, editing changes will not be remembered. Accept is used twice for outlines—once from the popup in the opened text window and again here in the outline window (make sure the entry is selected first).

### **Cancel**

When this is used, the outline reverts to the state it was in when it was last saved (accept).

### **Compress**

"Cleans up" an outline file after a number of changes or additions have been made to it. Every time changes are made to an outline, extra information is added to the file the outline is saved in. Eventually, this could overburden the file. Compress is best used after the outline or an entry has been finished.

## **OUTLINES RIGHT MOUSE BUTTON MENU**

The right mouse button popup contains the standard set of window menu commands:

### **Help**

To use the window Help tool, press the right mouse button and release with help selected from the pop-up menu. A window will appear on the screen with a brief explanation of the window's function and a reference to the User Guide, and to where more information about the window may be found.

### **Classification**

The classification of any data window may be changed by the user to reflect its new status. A Change Window Classification input form appears and the new classification is selected by the user. Select accept on the input form and the data window classification bars, top and bottom, will change to reflect the selection. If the data item has no classification there are no classification bars.

### **Close others**

When a display becomes very crowded with windows after an extended period of work, chances are that most are not being used. To keep the window that you are currently working in, and close all of the others, select close others from the pop-up menu and release the button. If any of the windows selected for closure have contents that require saving, a Confirmer will appear and ask if you are sure you want to close that specific window (yes or no).

### **Select and close**

Permits you to select any number of the windows currently on the screen and close them. After this selection has been made, another popup menu will appear that lists the title tabs of all the open windows. Move the cursor over this list and click the middle mouse button over your choice(s), which will select a window for closing, and also cause the actual title for the window to fade in-and-out on the screen at that window's location.

More than one window may be selected with this function. Execution of this command begins when you move the cursor outside of the displayed list and click a mouse button. If any of the windows selected for closure have contents that have not been saved, a Confirmer will appear and ask if you are sure you want to close that specific window.

### **Find**

Permits you to transfer control from the window you are in to any other window currently on the screen. The tool works very similarly to select and close above. A popup menu will appear on the screen with the titles of all the open windows. Moving the cursor over this list while pressing the middle mouse button will cause the label of the window selected for finding to be highlighted, and also cause the actual title for the window to fade in-and-out on the screen at the location of that window.

Releasing the middle mouse button while any one of the items is selected (the title in the popup menu is highlighted) will cause the selected window to become the active window.

The find command can be aborted by moving the cursor anywhere outside of the displayed list and clicking any mouse button.

### **Move**

If you do not like where a window is on the screen, you can move it elsewhere. Place the cursor in the window to be moved and select move on the window popup menu. The action of selecting this tool will cause an outline of the window to be formed, with the cursor grabbing the nearest corner. You can then drag the window frame around by this corner to position it on the screen exactly where you want it.

To dismiss the move tool and open the window where the frame is, click the left mouse button.

### **Frame**

Allows you to change the size of a window. When you select frame on the window popup menu, the cursor changes into the Origin cursor, which is used to mark the location of the upper left corner of the new window. You can move the Origin cursor around the screen until it is positioned where you want it. Pressing the left mouse button will cause the upper left corner of the window to become anchored, and the cursor changes to a small Corner cursor marking the lower right corner of the new window frame. Moving this cursor about will cause the frame of the window to "rubber band." Move it around, using the mouse, until the window is the rectangle of the size and proportion that you want, then release the left mouse button. The contents of the reframed window will re-format themselves, as appropriate, to fill the newly-indicated window space.

Some windows are fixed in size and cannot be framed. In this case, frame works just like move.

#### **Collapse/expand**

The selections **collapse** and **expand** appear in place of each other in the right mouse button popup menu. **Collapse** is available when a window is open and active. **Expand** is available when a window is collapsed.

Selecting **collapse** allows you to compress any active window down to its title tab and place that tab anywhere on the screen. When the left mouse button is released, the selected window will be collapsed to its tab alone and you can move the tab about the screen and place it where you want it. To release the tab at the desired location, click the left mouse button.

Since the tabs make up only a small fraction of the space of the window itself, and because the title in the tab is generally descriptive of the window, a number of open windows can be kept and organized on the screen without the display looking cluttered and confusing.

Selecting **expand** on the right mouse button pop-up menu of a collapsed window will restore the window to its precollapsed size and location.

#### **Close self**

When you have finished with a window and want to remove it from the group of open windows on the screen, you can close it by selecting **close self**. The window to be closed must be the active window. When the mouse button is released, the window will be closed. Depending on the type of window and what you have been doing with its contents, a **Confirmer** may appear to ask if you want to close that particular window without saving the contents.

## The OIT Text Window

### OVERVIEW

The OIT Text Window provides a terminal interface to a host computer. It is meant to be used in a manner similar to the Delta Data terminal.

| AIM                          |                  |                |
|------------------------------|------------------|----------------|
| Browsing pages 1 thru 1 of 1 |                  |                |
| aim                          |                  | -----<br>Howdy |
| Hi There                     | clear memory     | cat            |
| chases dog.                  | again            | ERASE          |
| 9469415                      | undo             | SEND           |
| 1442524                      | copy             | COPY           |
|                              | cut              | MOVE           |
|                              | paste            | QUIT           |
|                              | file it          | WAIT           |
|                              | strip CRs        | CREATE         |
|                              | search           | CREATE         |
|                              | hardcopy         | LIST FOL       |
|                              | fonts -->        | LIST INBO      |
|                              | paging -->       | LIST OUT       |
|                              | end browse       | D NEWM         |
|                              | get prev page    | Enter          |
|                              | get next page    | 7              |
|                              | get page(s) =>   | 8              |
|                              | add next page(s) | 9              |
|                              | add prev page(s) | 4              |
|                              |                  | 5              |
|                              |                  | 6              |
|                              |                  | 1              |
|                              |                  | 2              |
|                              |                  | 3              |
|                              |                  | Tab            |
|                              |                  | 0              |
|                              |                  | VM1            |
|                              |                  | L COPPOI       |
|                              |                  | Enter          |
|                              |                  | SAFE           |
|                              |                  | ARMOUR         |
|                              |                  | ATA            |
|                              |                  | -----          |

### WINDOW PANE LAYOUT

The OIT Text Window has five subwindows or panes, which act differently depending on the overall state of the system. The window label corresponds to the menu item selected from OIT Services -->. The short, wide "window status" pane beneath it always shows the current state of the system. Below it is the "receive" pane (which itself has a subpane at the top written to by some OIT programs), and below that is the "transmit" pane. Along the right side is the "function keys" pane, with a small "function keys status" pane above it for use during editing.

## HOW TO OPEN THE OIT TEXT WINDOW

An OIT text window is opened by selecting the appropriate item from the OIT Services --> list located in the main system middle mouse button popup menu. (The items in this list are defined in your OIT window access "profile"). For each item selected you are provided with the following information: the label for the window, what type of window to open (Delta Data or Tektronix emulation), and optionally, an automatic login sequence to be sent to the host once the window is open.

## EDITING THE OIT WINDOW ACCESS PROFILE

The OIT window access profile can be edited. Select User Profile --> OIT Edit from the main system middle mouse button popup; this will produce a menu list of all the currently existing OIT window access profiles existing on your local disk. Selecting one of these will bring up a window showing whatever OIT services have been put there.

Each item in the list consists of its name, the window type, the auto login sequence, and a set of function keys. The window type is either "Delta Data" or "Tek," indicating which type of window to open. "Delta Data" is a text-only window that does many of the things a Delta Data will do. "Tek" is the graphics window that does many of the things a Tektronix terminal does.

The auto-login sequence takes the form response1, response2, . . . , responseN. These are the text strings that are sent in succession as responses to the host computer—when the OIT window is opened, response1 is sent, something comes back from the host, then response2 is sent, and so on. If any response is left empty (indicated by two commas next to each other) the auto-login sequence will wait for you to enter the response (useful for passwords). Since response1 is the first message to be sent when the window is opened, this would normally contain the switching characters.

The commands for editing the window access profile list are in the middle mouse button popup menu. Only a subset of commands is available in the profile windows of persons other than a logged-in user, unless the logged-in user is a System Administrator. Access profile editing windows may be opened to several users at once so that items can be copied from one user to another.

The full list of popup commands is as follows:

### Edit keys

Opens a function key editing window to the function keys associated with the selected item.

### Edit auto login

Brings up a Q-Box that allows editing of the name (rename), window type, and/or auto-login sequence of the selected item.

### Create empty

Brings up a Q-Box to allow entry of the name, window type, and an auto-login sequence for a new item. After selecting accept, this new item will automatically be pasted into the list. The new item will have an empty set of function keys.

### Copy

Makes a copy of the selected item (name, window type, auto-login, and associated function keys) and places it into a copy buffer shared by all the OIT access profile editing windows. As an aid in remembering what is in this buffer, the name of the item is displayed in the small pane at the top of the window.

### Cut

Removes the selected item from the list and places it into the copy buffer.

### **Paste**

Adds the item in the copy buffer to the list in front of the selected item, or if nothing is selected, at the end of the list. Selecting paste brings up a Q-Box that allows changing the name, window type, or auto-login. If the accepted name matches one which is already in the list, a Confirmer will appear asking whether the existing entry should be overwritten. If the answer is no, the paste will be aborted.

## **OIT TEXT WINDOW STATES**

The OIT Text Window has five basic states: Transmit, Receive, Browse, Full Screen Editing, and Edit Function Keys. The state of the window dictates the behavior of each pane.

The window opens into Transmit state, which is the state for sending to the host. When receiving from the host it is in Receive state. Browse state is for editing received text. Full Screen Editing is a form of the browse state entered when using full screen editing. When you are editing a list of function keys, it is in Edit Function Keys state.

### **Transmit State**

Transmit State is essentially the default state for the window. Here, only the Transmit pane is fully active for typing and text editing. When a <return> is used (or received as an "enter" from a function key), the text in the pane will be sent out to the host computer, echoed in the Receive pane, and deleted from the Transmit pane. The state will then be changed to Receive, in order to receive the host computer's response.

If multiple lines of text or text greater than 80 characters long has been pasted into the Transmit pane, a <return> will cause the text to be sent out a line at a time, with lines over 80 characters broken at the nearest space before 80.

The middle mouse button menu that is available in both the Receive and Transmit panes provides the standard text editing functions as well as several additional functions. These are described below:

#### **Again**

Repeats the previous action.

#### **Undo**

Undoes the previous action.

#### **Copy**

Makes a copy of the selected item and places it into a copy buffer.

#### **Cut**

Removes the selected item from the list and places it into the copy buffer.

#### **Paste**

Adds the item in the copy buffer to the list in front of the selected item, or if nothing is selected, at the end of the list.

#### **Clear memory**

Clears the machine's memory of what has been received.

#### **Browse**

Switches the window to Browse state.

#### **Full screen**

Starts a sequence to get to the Full Screen Editing state and assumes you are already editing a file. You will be asked to specify the number of lines to bring in from that file to be edited at one time. It will then ask the host to send that many lines and enter Full Screen Editing state on whatever text is sent back.

#### **Re-send**

Sends the last line that was transmitted to the host again.

#### **Fix**

Puts the last line that was transmitted into the Transmit pane so it can be edited for retransmission.

The first mouse button may also be used to select text in the Receive pane, causing it to be copied into the Transmit pane, and for selection of function keys in the Function Key pane.

The Function Key pane's activity is limited to:

- Selection of function keys (causing the key's text to be sent to the Transmit pane)
- edit from the middle mouse button menu (which changes the state to Edit Function Keys)
- Scroll up (to scroll the list up if there are more function keys than can be displayed at once)
- Scroll down.

#### **Receive State**

In this state, the Receive pane has total control in order to display the text as it is received. The window will return to Transmit State when it receives the proper command from the host, or when you select **break** or **abort** in the middle mouse button menu. Selecting **break** causes it to try to tell the host to stop whatever its doing, and clears the input buffer of any data that has been received but not yet displayed. Selecting **abort** causes termination of any auto-login sequence in progress, dumps anything that has not yet been transmitted into the Transmit pane, and returns the window to Transmit State (but does not notify the host that anything has happened).

#### **Browse State**

In this state the Receive pane is transformed into a fully functional text editing pane with some special functions. Browse State is reached by selecting **browse** in the middle mouse button menu while in Transmit State. When Browse State is entered the Receive pane is given full text editing control (becoming a Browse pane), and the last page of text received is put in it. The window status pane indicates which pages of the total number are being browsed. The Transmit and Function Keys panes are not available while in Browse State.

Along with the standard text window functions, the Browse State popup menu has the following additional options:

#### **Again**

Repeats the previous action.

#### **Undo**

Undoes the previous action.

#### **Copy**

Makes a copy of the selected item and places it into a copy buffer.

#### **Cut**

Removes the selected item from the list and places it into the copy buffer.

#### **Paste**

Adds the item in the copy buffer to the list in front of the selected item, or if nothing is selected, at the end of the list.

#### **Strip CRs**

Removes unneeded <return>s from text that is received from another data source.

### Search

Looks through an Information Center for any occurrences of your selected text in any of its labels or keywords.

### Hardcopy

Causes a Q-Box to appear requesting necessary information for printing. When this is done the hardcopy request will be placed in the background printing queue.

### Fonts -->

Allows you to change selected text to whatever typeface is chosen from the resulting scrollable tree popup menu.

### Clear memory

Clears the machine's memory of what has been received.

### FileIt

The same as file as new item in the standard text window. It puts the selected text (or if nothing is selected, all text) in the window (edited page) into a file in an Information Center of your designation.

### Paging -->

Note that editing while in Browse State does not affect the page contents stored in memory. Therefore, getting the same or other pages in place of those currently displayed, overwrites any editing that was done.

**Get prev page.** Replaces the current contents of the Browse pane with the contents of the page previous to the first one currently displayed. Does nothing if you already have page one.

**Get next page.** Replaces the current contents of the Browse window with the contents of the next page that was received after the last one currently displayed. Does nothing if you already have the last page.

### Get page(s) -->

Sliding to the right will bring up a scrollable menu containing each page number available. Selecting one number causes that page to be displayed in the Browse pane. Selecting one number and sliding to the right again brings up another scrollable menu containing each page number from which the other end of a range of pages to be displayed can be selected.

**Add next page(s).** Adds the user-specified number of pages after the last one now displayed to the current contents of the Browse window.

**Add prev page(s).** Inserts the user-specified number of pages in front of the first one now displayed in the current contents of the Browse window.

**End browse.** Returns to Transmit State.

## Full Screen Editing State

Full Screen Editing State is just like Browse State, except no paging is allowed. It also has the following special full screen commands:

### Full screen -->

**Abort.** Terminates Full Screen Editing State. Any editing done on the currently displayed page will be lost.

**Continue -->.** Contents of the pane are sent to the host and the next page of text is received and brought into Full Screen Editing State.

**Save.** The host is told to automatically save the text being sent back.

**No save.** The host is not told to automatically save the text being sent back.

- Accept -->. Contents of the pane are sent to the host. Full Screen Editing State is then terminated.
- Save. The host is told to automatically save the text being sent back.
- No save. The host is not told to automatically save the text being sent back.

### **Edit Function Keys State**

In Edit Function Keys State, only the Function Keys pane is operable. A menu is provided which allows changing the order of appearance of the keys in the list, adding new user-defined keys, removing keys, re-labeling, and re-defining keys. The small pane on top of the Function Keys pane shows the contents of the function key buffer during editing.

The Function Keys pane contains a list of the labels for all the defined function keys. Upon opening an OIT window, the list of labels is set up from the definitions in the logged-in user's OIT access profile. The list, and the functions performed upon selection of a label, will only change if you edit them, or when the host sends Function Keys loads. The current Function Keys definitions will automatically be saved when the OIT window is closed, as long as the contents have been saved.

### **HOW TO EDIT**

Edit Function Keys is entered by selecting edit from the middle mouse button menu in the Function Keys pane while in Transmit State. The Function Keys window becomes fully active. The small status pane above the Function Keys pane shows the label of the function key in the function key buffer. The function key buffer is used to temporarily store the definition of a key which has been created, copied, or cut, so that it can be pasted somewhere else. This window's middle mouse button menu displays the following options:

#### **End edit**

Ends the editing session and returns the OIT window to Transmit state.

#### **Accept**

Saves the current function key definitions.

#### **Cancel**

Returns the list to the last accepted definitions.

#### **Copy**

Copies the definition of the currently selected key and places it in the function key buffer.

#### **Cut**

Removes the currently selected key from the list, placing its definition in the function key buffer.

#### **Paste**

Inserts the key from the function key buffer into the list in front of the currently selected key. If no key is selected, adds it on the end of the list.

#### **Create**

Creates a user-defined function key, puts it in the function key buffer, and pastes it into the list. It asks for a label, the text to be sent, and whether that text should be entered (sent to the host) automatically.

#### **Edit label**

Changes the label of the currently selected key.

#### **Edit text**

Changes the text to be sent when the currently selected key is selected in Transmit state.

#### **Edit enter key**

Specifies whether the text should be entered (sent) immediately, or allow more to be added.

~ ~ ~ ~ ~

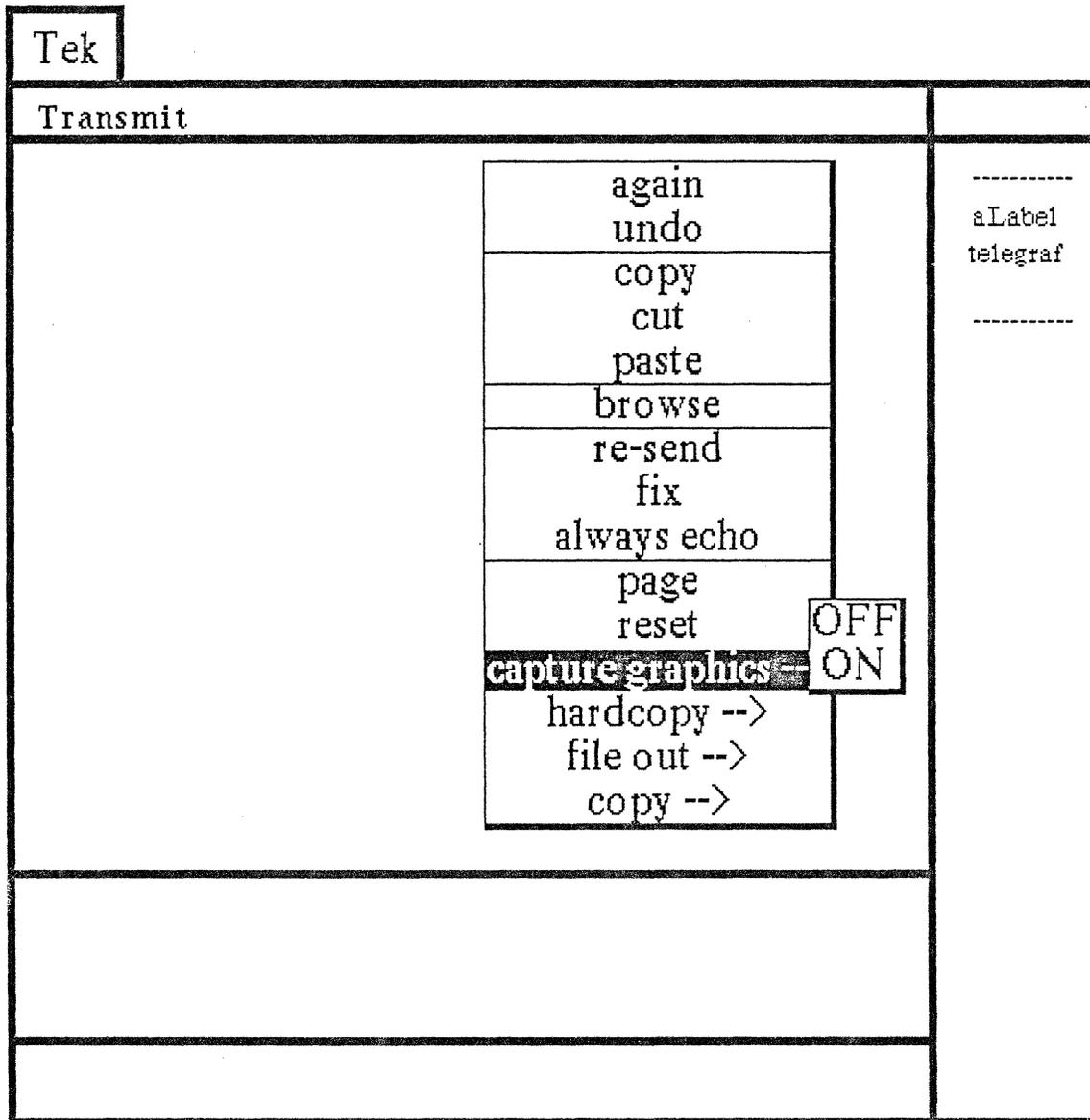
There are some special things that can be put into Function Keys text:

- A double ampersand (&&) will be replaced by whatever is in the Transmit pane when the function key is selected.
- A hex specification for a character inside of double angle brackets will cause that hex value to be sent (e.g., "<<1B>>" is an ESC).

## The OIT Graphics Window

### OVERVIEW

The OIT Graphics Window provides a graphics terminal interface to a host computer. It is meant to be used in a manner similar to the Tektronix terminal.



### WINDOW PANE LAYOUT

The OIT Graphics Window can be opened into two different sizes, each of which has a different window layout. When the OIT Services menu selection opens a "Tek" window, a Q-Box appears on the screen to let you specify making the window either half or full size, and where incoming text should be displayed. (Tack text style displays it in the Graphics Display pane; non-Tack style displays it in the Receive pane).

The half-size OIT Graphics Window has six subwindows or panes:

- Starting from the top left, below the window label, is the "window status" pane
- Beneath it, in order, are the 512 pixel x 512 pixel "graphics display" pane
- The "receive" pane
- The "transmit" pane
- Appended on the right side is the "function keys" pane
- Lastly, a small "function keys status" pane on top for editing.

The full-size OIT Graphics Window has four subwindows or panes (it has no Function Keys panes):

- Starting at the top-left and covering most of the screen is the 1024 wide by 780 high "graphics display" pane
- Within its borders, starting about one-and-a-half inches to the right of it, and only displayed while in use, is the "receive" pane
- Below it is the "transmit" pane on the left
- The "window status" pane on the right.

## HOW TO OPEN THE WINDOW

An OIT Graphics Window is opened by selecting the appropriate item from the OIT Services --> list located in the main system middle mouse button popup menu. (The items in this list are defined in your OIT window access "profile"). For each item selected you are provided with the following information: the label for the window, what type of window to open (Delta Data or Tektronix emulation), and optionally, an automatic login sequence to be sent to the host once the window is open. The OIT window access profile can be edited by selecting Edit OIT from the User Profile --> submenu of the main system screen menu.

## WINDOW STATES

The OIT Graphics Window has four basic states: Transmit, Receive, Browse, and Edit Function Keys. The state of the window dictates the behavior of each pane.

The window opens into Transmit State, which is the state for sending to the host. When receiving from the host it is in Receive State. Browse State is for editing received text. When you are editing your list of function keys, the window is in Edit Function Keys State.

### Transmit State

Transmit State is essentially the default state for the window. Here, only the Transmit pane is fully active for typing and text editing. When a <return> is used (or received as an "enter" from a function key), the text in the pane will be sent out to the host computer, echoed in the Receive pane, and deleted from the Transmit pane. The state will then be changed to Receive, in order to receive the host computer's response.

The middle mouse button menu available in both the Receive and Transmit panes provides the standard text editing functions as well as several additional functions:

#### Again

Repeats the previous action.

#### Undo

Undoes the previous action.

**Copy**

Makes a copy of the selected item and places it into a copy buffer.

**Cut**

Removes the selected item from the list and places it into the copy buffer.

**Paste**

Adds the item in the copy buffer to the list in front of the selected item, or if nothing is selected, at the end of the list.

**Clear memory**

Clears the machine's memory of what has been received.

**Browse**

Switches the window to Browse State.

**Re-send**

Sends the last line that was transmitted to the host again.

**Fix**

Puts the last line that was transmitted into the Transmit pane so it can be edited for retransmission.

**Always echo**

Sets the Transmit pane to "always echo" anything that is typed, including passwords. This is useful because when drawing, the pane is put in a "no echo" state and is not switched back automatically.

**Page**

Puts a page break in the saved text and clears both text and graphics windows

**Reset**

Does everything page does, but also resets the location to 0,0.

**Capture graphics -->**

For creation of map style data, hints, and control files from any vector data that comes in while this option is on (default is off). When on is selected, it will ask you to provide information for creation and Information Center filing.

**Hardcopy -->**

Gives the standard image hardcopy sequence for either the entire image or the area framed by the user.

**File out -->**

Gives the standard fileout (save) sequence to put either the entire image or the area framed by the user as an image in an Information Center.

**Copy-->**

Puts a copy of either the entire image or an area you have framed into the image copy buffer; after doing this, you can go to any of the image editing windows and paste the copy into the window or brush.

The Function Key pane's activity is limited to:

- Selection of function keys (causing the key's text to be sent to the Transmit pane)
- edit from the middle mouse button menu (which changes the state to Edit Function Keys)
- Scroll up (to scroll the list up if there are more function keys than can be displayed at once)
- Scroll down.

### **Receive State**

In this state the Receive and/or Graphics Display pane(s) have total control in order to display the text and graphics as they are received. The window will go back to Transmit State when it receives the proper command from the host, or when you select **break** or **abort** in the middle mouse button menu. Selecting **break** causes it to try to tell the host to stop whatever its doing, and clears the input buffer of any data that has been received but not yet displayed. Selecting **abort** causes termination of any auto-login sequence in progress, dumps anything that has not yet been transmitted into the Transmit pane, and returns the window to Transmit State (but does not notify the host that anything has happened).

### **Browse State**

In this state the Receive pane is transformed into a fully functional text editing pane with some special functions. Browse State is reached by selecting **browse** in the middle mouse button menu while in Transmit State. When Browse State is entered the Receive pane is given full text editing control (becoming a Browse pane), and the last page of text received is put in it. The Window Status pane indicates which pages of the total number are being browsed. The Transmit and Function Keys panes are not available while in Browse State.

Along with the standard text window functions, the Browse state popup menu has the following additional options:

#### **Again**

Repeats the previous action.

#### **Undo**

Undoes the previous action.

#### **Copy**

Makes a copy of the selected item and places it into a copy buffer.

#### **Cut**

Removes the selected item from the list and places it into the copy buffer.

#### **Paste**

Adds the item in the copy buffer to the list in front of the selected item, or if nothing is selected, at the end of the list.

#### **Strip CRs**

Removes unneeded <return>s from text that is received from another data source.

#### **Search**

Looks through an Information Center for any occurrences of your selected text in any of its labels or keywords.

#### **Hardcopy**

Causes a Q-Box to appear requesting necessary information for printing. When this is done the hardcopy request will be placed in the background printing queue.

#### **Fonts -->**

Allows you to change selected text to whatever typeface is chosen from the resulting scrollable tree popup menu.

#### **Clear memory**

Clears the machine's memory of what has been received.

#### **FileIt**

The same as file as new item in the standard text window. It puts the selected text (or if nothing is selected, all text) in the window (edited page) into a file in an Information Center of your designation.

#### Paging -->

Note that editing while in Browse State does not affect the page contents stored in memory. Therefore, getting the same or other pages in place of those currently displayed overwrites any editing that was done.

**Get prev page.** Replaces the current contents of the browse pane with the contents of the page previous to the first one currently displayed. Does nothing if already have page one.

**Get next page.** Replaces the current contents of the Browse window with the contents of the next page that was received after the last one currently displayed. Does nothing if you already have the last page.

#### Get page(s) -->

Sliding to right will bring up a scrollable menu containing each page number available. Selecting one number causes that page to be displayed in the Browse pane. Selecting one number and sliding to the right again brings up another scrollable menu containing each page number from which the other end of a range of pages to be displayed can be selected.

**Add next page(s).** Adds the user-specified number of pages after the last one now displayed to the current contents of the Browse window.

**Add prev page(s).** Inserts the user-specified number of pages in front of the first one now displayed in the current contents of the Browse window.

**End browse.** Returns to Transmit State.

### Edit Function Keys State

In Edit Function Keys State, only the Function Keys pane is operable. A menu is provided which allows changing the order of appearance of the keys in the list, adding new user-defined keys, removing keys, re-labeling, and re-defining keys. The small pane on top of the Function Keys pane shows the contents of the function key buffer during editing.

The Function Keys pane contains a list of the labels for all the defined function keys. Upon opening an OIT window, the list of labels is set up from the definitions in the logged-in user's OIT access profile. The list, and the functions performed upon selection of a label, will only change if you edit them, or when the host sends Function Keys loads. The current Function Keys definitions will automatically be saved when the OIT window is closed, as long as the contents have been saved.

### HOW TO EDIT

Edit Function Keys is entered by selecting edit from the middle mouse button menu in the Function Keys pane while in Transmit State. The Function Keys window becomes fully active. The small status pane above the Function Keys pane shows the label of the function key in the function key buffer. The function key buffer is used to temporarily store the definition of a key which has been created, copied, or cut, so that it can be pasted somewhere else. The window middle mouse button menu displays the following options:

#### End edit

Ends the editing session and returns the OIT window to Transmit State.

#### Accept

Saves the current function key definitions.

#### Cancel

Returns the list to the last accepted definitions.

#### Copy

Copies the definition of the currently selected key and places it in the function key buffer.

**Cut**

Removes the currently selected key from the list, placing its definition in the function key buffer.

**Paste**

Inserts the key from the function key buffer into the list in front of the currently selected key. If no key is selected, adds it on the end of the list.

**Create**

Creates a user-defined function key, puts it in the function key buffer, and pastes it into the list. It asks for a label, the text to be sent, and whether that text should be entered (sent to the host) automatically.

**Edit label**

Changes the label of the currently selected key.

**Edit text**

Changes the text to be sent when the currently selected key is selected in Transmit State.

**Edit enter key**

Specifies whether the text should be entered (sent) immediately, or allow more to be added.

~ ~ ~ ~ ~

There are some special things that can be put into Function Keys text:

- A double ampersand (&&) will be replaced by whatever is in the Transmit pane when the function key is selected.
- A hex specification for a character inside of double angle brackets will cause that hex value to be sent (e.g., "<<1B>>" is an ESC).

## The Database Tool

### OVERVIEW

Database is a powerful data management tool by which you are able to rapidly bring up your data, make many kinds of additions or changes to it, create new data, and manage the various data according to your particular needs. Database information is flexibly integrated, and can be sent on to a Chart Editor as well as accessed from a Spreadsheet.

The basic functions of Database are data entry, data manipulation, and data output. You can manipulate your data with queries, sort the data, then produce a report that can immediately be hardcopied.

| Sales office                                                          |                                                                             |                                                                                                                                   |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| <b>FIELDS</b><br>-----<br>Label<br>Icon<br>lat<br>lon<br>key<br>----- | <b>HITS</b><br>-----<br>Pasadena<br>Washington D.C.<br>Saint Louis<br>----- | <b>Label:</b> Washington D.C.<br><b>Icon:</b> J<br><b>lat:</b> 38,8992<br><b>lon:</b> 283,015<br><b>key:</b> DC's cherry blossoms |
| <b>QUERIES</b><br>-----<br>Label contains 'Pas'<br>-----              |                                                                             | <b>REPORT FORMATS</b><br>-----<br>Icon<br>Label Icon lat lon key                                                                  |

### WINDOW DESCRIPTION

A Database is created when you select the middle mouse button create --> database option from any Information Center or Folder. After this, an "Add Database" Q-Box appears that asks for the database name, any keywords, and its classification. Upon selecting accept, your typical Database window opens up. It is of fixed size and composed of two rows and five panes. The top row contains the Fields, Hits, and Text panes; the bottom row contains the Queries and Report Formats panes. Each pane's functions and popup menu options are described next.

#### Fields Pane

A "field" is a specific area in a record. The Fields pane lists your data fields and allows you to modify and update them as needed. When you select a listed item, its characteristics are displayed in the adjacent Hits pane. The Fields pane middle mouse button popup menu offers the following options:

#### Add

Adds a new field to your database. Selecting **add** brings up a "Field Entry" Q-Box. It requires the new field name, field length (the probable number of characters needed for the field; the default is 10), and field type, whether string (text) or number (number of data digits).

When you enter the new field *name*, don't type in spaces before or after the name. Furthermore, your field name should be unique among other field names to avoid confusion (no duplicates). The spaces between your field name words appear as dashes.

The field *length* is the integer character count for your data field. You must calculate how many characters will probably be needed to define this field. For instance, a typical longitude designation is "241.750" which requires a minimum of 7 characters (include the period in your count). If you specify a length of 30 for a field but use only 25, the length, as far as the system is concerned, will still be 30. There is no harm done here, except some disk space and memory are wasted, and after many such entries this could become significant. If you enter too small a number, the system will truncate the information. Thus, if the field "Los Angeles Basin" is given a length of 15, it will appear as "Los Angeles Bas". These situations are easily remedied with the **change length** menu option. You must enter field length using an integer only—no decimals, fractions, or negative numbers.

Your answer to field *type* will be determined by the kind of data being entered into the new field name. "String" refers to text material, while numeric material requires "number."

#### Delete

Eliminates the item in the Field pane that is currently selected. After selecting **delete**, a precautionary Confirmer appears that asks "Are you sure you want to delete filename?" to which you must click over **yes** or **no**.

#### Rename

Lets you assign a new field name to an already existing name. After selecting **rename**, a Prompter appears that asks "New field name?". You must then type in the new name and press the <return> key, so the name will be entered into the system.

#### Change Length

Allows you to change the field length. After selecting **change length**, a Prompter appears that asks "New field length?" You must type in the desired number and press the <return> key, so the number will be entered into the system. This command will truncate extra data if the new field length is shorter than the previous field length, and it will pad the fields with blank spaces if the new field length is longer.

#### Definition

Displays the characteristics of a selected field name. After selecting **definition**, a Notifier appears that lists the Field Name, Field Length, and Field Type in the top part. When you have finished reading the definition, click in the bottom part of the Notifier where it says "Click mouse here please."

#### Hits Pane

The Hits pane displays all the records resulting from field name that you selected from the Fields pane. Records can be listed, sorted, deleted, undeleted, and so on.

The Hits pane middle mouse button popup contains the following items:

#### Show all records

Lists all undeleted records residing in the Hits pane. The field listed is the same field currently selected in the Fields pane. If there is no selection in the Fields pane, it will default the selection to the first item in the Fields pane.

#### Sort hits

Sorts the current Hits pane information in ascending order (as in a, b, c ... 1, 2, 3). The program will only sort the field which is currently selected in the Fields pane. If there is no selection, the program will use the first item in the Fields pane for sorting.

#### Reverse hits

Reverses the current Hits pane list. In other words, the first item on the list becomes the last item on the list, the second item on the list becomes the second-to-the-last item on the list, and so on.

#### Show deleted records

Displays those records that have been eliminated with delete record. When you have finished viewing the list of deleted records and wish to return to the previous list, select undo query from the Queries pane middle mouse button popup. You may also select show all records from the Hits pane (which may or may not be the previous list).

#### Delete record

Deletes the record currently selected in the Hits pane. When delete record is selected, a Confirmer appears that asks "Are you sure about deleting this record?" You then have a choice of clicking over yes or no.

#### Undelete record

Brings back a record that has been deleted earlier. To do this, first select show deleted records from the popup. Next, select (with the left mouse button) the record from the resulting list that you wish to undelete, then select undelete record from the popup. If you now select show all records from the popup, you will get a display of the full list, including the record that you have just undeleted.

#### Make new database

Takes the list of records from the current Hits pane list and makes a new database window from them. To do this, select make new database. A Q-Box appears, and you must fill in the new database label (name), classification, what Information Center to file it into, etc. After selecting accept, the new database will be filed into the designated Information Center. You may then get to it by either selecting paste from the Information Center's middle mouse button popup and selecting and opening the file when it appears in the List pane, or by selecting in box from the same popup and selecting and opening the file from there.

#### Chart data

Transfers the records information currently in the Hits pane to a Chart Editor, where the information will automatically be drawn or charted for you. To accomplish this, the following steps are taken:

- Select chart data, and observe the "Chart data" Q-Box that subsequently appears. Here you must choose how to label the chart, what value(s) are to be assigned to it, and whether the information should be compressed.

- The selectable items appearing after Labels: will be the same data field items currently listed in the Fields pane. The selection from this option will display below the x axis of the chart. If you plot an xy chart, select a label for your x axis and a single value for your y axis.

- Unlike other Q-Box entries, Value: information is not entered by keying it in or selecting from different boxes. When you move the cursor into that area and click the left mouse button, the cursor changes into the shape of a mouse with the middle mouse button highlighted. This means that you are to press the middle mouse button to start entering your value(s).

- After pressing the middle mouse button, a tiny popup appears that contains:

- backspace. Eliminates (or backspaces over) the current displayed value.

- cancel. Eliminates all current displayed values.

– The remaining choices in the popup can vary, as they represent the current applicable numeric fields associated with the information in the Hits pane that you are charting. You are able to input multiple fields for your values, so that you can plot cluster bar charts, stack bar charts, and stack line charts. You can also utilize one field to plot bar charts, line, charts, pie charts, and xy charts.

– **Compress?** if selected yes (default is no), the resulting chart will sum or group like items into one comprehensive item. In other words, a "compress" will group all names of the same name together in your label selection, so that the final result will encompass all of them.

Before compression:

**LabelValue**

regionA100  
regionB200  
regionA 300

After compression:

**LabelValue**

regionA400  
regionB200

- When you have filled in the Q-Box and selected accept, the Origin (top left) cursor appears in order for you to frame the chart to your desired size. After the chart is framed and you've released the left mouse button, another Origin cursor appears. This represents the top left corner of the complete Chart Editor window; the chart itself is in the middle pane section. Click the left mouse button once to place the window upon the screen.

- If you now wish to edit the displayed chart, add or delete features, increase/decrease the chart font size, and so on, use the chart area middle mouse button popup. Every menu item is described below:

#### LEFT MOUSE BUTTON

If you press and hold down this mouse button and move the cursor around via the mouse, the cursor becomes a pencil or paintbrush that will draw within the pane whatever movements you make with the cursor; this is a "freehand drawing" feature. The cursor can also become whatever shape the current Brush is. The Brush shape is added to the chart by clicking (or pressing) the left mouse button. The exact manner in which the Brush shape is added to the chart will be determined by the state of the five graphic control "buttons" in the bottom Button pane.

#### MIDDLE MOUSE BUTTON

The middle mouse button accesses a popup menu that contains these chart manipulation functions:

**Reset**

Sets all five buttons in the Button pane below to their default settings.

#### Accept

Takes a "snapshot" of the chart you are currently working on. That is, the chart will be saved, so that if you do a cancel afterwards, the editor will return you to this image. If you are annotating a complex chart, it's a good idea to do an accept as you complete each stage of your work.

#### Cancel

Returns you to the chart that existed after the last accept. It will undo everything you have done since then. If you started with a blank chart, a cancel without any previous accept will put you back to a blank chart editing pane.

#### Copy

Stores the current chart in the editing pane into a buffer, so that you may transfer the chart to another compatible window or to a Brush. for example, you may copy the chart and then paste it into another graphics editor or image-type window. You cannot transfer a chart into a text window.

#### Paste

Places the contents of the buffer into the chart pane. For example, when you use the upper text pane to create text, select it, and copy it, you can then (with paste) place the text into the middle pane below. Paste will always locate the object beginning at the Origin cursor which is at the upper left corner of the chart pane.

If you want to specify where the text is to go, use paste in the Brush button menu. The brush shape will change to whatever is in the buffer. You then go to the desired location for the text in the chart creating pane and click the left mouse button to add the text to the chart.

#### Erase

Gets rid of all pane contents and the pane is wiped clean. If you accidentally use this function, then selecting cancel will recover the last chart saved with an accept.

#### Magnify

After selecting this function, you specify the area to be magnified by framing a rectangular area in the chart creating pane (the system will ignore any areas outside of the chart pane). The amount of magnification that occurs is determined by the size of the area that is framed. In order to display the magnified area on the screen, the larger the framed area, the smaller the magnification used.

After framing the desired area, a magnified form of it appears. You will then find a suitable screen location and place the magnified form by clicking the left mouse button at that point. Do *not* place the magnified form over the site of the original selected area, as the system has trouble handling this type of overlay. As you edit the magnified form, the changes you are making there are also occurring on the normal-sized chart form. When you have finished editing, move the cursor out of the magnified form and click the left mouse button to close the form and return to normal.

#### Chart data

Returns the displayed chart to the version currently stored in memory.

#### Change chart -->

Allows you to change the physical characteristics of the chart by using the following options:

**Parameters.** Selecting this will cause a "Change set up" Q-Box to appear, which will allow you to change the chart type (pie, bar); chart title; whether to include/not include a label, legend, fill, label by percent, or automatic scaling; and label text size (four available).

**Size.** Allows you to frame your chart to a larger or smaller size. The original chart also remains on the screen. You can keep it or close it.

**Add labels.** Adds relevant labels at the bottom of the chart (if they are not already there). This is also an option in the "Change set up" Q-Box.

**Add legend.** Adds a relevant legend at the top right of the chart. This is also an option in the "Change set up" Q-Box.

**Change data -->**

Allows you to modify existing chart data or create new chart data by using the following options:

**New data.** Selecting this will bring up a "Make new chart" Q-Box. Here you can put in completely new information for the chart by changing its title, data type, and/or type of chart. After selecting accept in the Q-Box, a "Making new chart data: window next appears, waiting for you to key in appropriate material. This window's middle mouse button popup has several text editing options:

**copy.** Places a selected item into the copy buffer.

**cut.** Removes a selected item and places it into the copy buffer.

**paste.** Places the item currently in the copy buffer at the insertion mark (caret).

**enter data.** Brings up an "Enter data" Q-Box. This allows you to fill in your data name or label and the numerical value attached to the label; values must be entered as integers, not fractions or decimals. After you select accept, the new data material will be placed into the "Making new chart data" window. Immediately after that, another "Enter data" Q-Box appears. You can either enter additional data now, or select done if you have finished entering data. The Q-Box will re-appear every time you select accept. Cancel will cancel to the last accepted value.

**edit data.** With the left mouse button, select the data label to be edited, then edit data from the popup, which brings up an "Edit data" Q-Box. This allows you to change the Label or Value for that particular data (you must select accept to complete the edit). Cancel will cancel typed changes to the last accepted values; bailOut causes the Q-Box to disappear, with no changes having been made.

**chart data.** Causes the information that has been entered into the "Enter data" or "Edit data" Q-Box to be displayed (in chart form) in the New Chart Editor window, according to the chart's previously-determined parameters.

**Modify data.** Selecting this brings up an "Editing chart data" window. The current data labels and values are listed in the window. You will be able to alter the information by using the options from the window's middle mouse button popup:

**copy.** Places a selected item into the copy buffer.

**cut.** Removes a selected item and places it into the copy buffer.

**paste.** Places the item currently in the copy buffer at the insertion mark (caret).

**enter data.** Brings up an "Enter data" Q-Box. This allows you to fill in your data name or label and the numerical value attached to the label; values must be entered as integers, not fractions or decimals. After you select accept, the new data material will be placed into the "Making new chart data" window. Immediately after that, another "Enter data" Q-Box appears. You can either enter additional data now, or select done if you have finished entering data. The Q-Box will re-appear every time you select accept. Cancel will cancel to the last accepted value.

**edit data.** With the left mouse button, select the data label to be edited, then edit data from the popup, which brings up an "Edit data" Q-Box. This allows you to change the Label or Value for that particular data (you must select accept to complete the edit). Cancel will cancel typed changes to the last accepted values; bailOut causes the Q-Box to disappear, with no changes having been made.

**chart data.** Causes the information that has been entered into the "Enter data" or "Edit data" Q-Box to be displayed (in chart form) in the New Chart Editor window, according to the chart's previously-determined parameters.

**Compress data**

This is a computational device that groups or puts together like items. For instance, if you have a label entry for "Jones" and a value "20" with it, and later on there is another label entry of "Jones" with a value of "10," compress data will combine the two entries into a single label "Jones" with value "30."

**Save chart**

Stores the chart into an Information Center for later retrieval. Selecting save chart will cause a Confirmer to appear that asks if you want to overwrite the existing chart or create a new chart. In either case, an Info Center Q-Box next appears and here you will specify the label, keywords, and target Information Center to store the chart in.

**Hardcopy**

Causes a Hardcopy Q-Box to appear requesting necessary information for printing. Select accept at the top of the form when you're finished and the hardcopy request will be placed in the background printing queue.

- For a complete description of the other two panes of a Chart Editor window (the top Text pane and the bottom Button pane) and their respective popup menus, see the section titled "Chart Editor."

**Compress database**

Throws away all deleted items, thereby opening up additional disk space.

**Text Pane**

This is the (unlabeled) pane for editing information contained in the database records. It displays the relevant information corresponding to the currently selected item in the Hits pane, along with a predetermined set of data fields. The data fields are identical to those currently represented in the Fields pane, so they will vary as the data fields in the Fields pane change. The data fields are "protected," in that they cannot be edited or deleted; they appear in boldface.

Editing information in this pane is much like editing a record entry form. The editing features available are very simple and the pane is not meant to contain large amounts of text. Here a tab will jump you to the next field and highlight it, and a <return> will place the caret at the beginning of the next field. The pane middle mouse button popup contains some standard text editing options as well as some special options:

**Again**

Repeats the last copy or cut that you do.

**Undo**

Reverses the effects of the last command. For instance, if you have deleted text, undo will put it back in.

**Copy**

Puts a copy of the current selected text into the copy buffer for later placement.

**Cut**

Deletes the current selected text and puts it into the copy buffer for later placement; however, you cannot cut a protected data field.

**Paste**

Places, at the insertion mark, whatever information is currently in the copy buffer.

### Compute

Takes selected text, evaluates it, and displays the result. For example, if you type in "2 + 3" and select it, then select compute it, the number "5" will appear.

### Search Text

Searches for a text word or item as it is linked to a label or keyword within an Information Center.

To do this:

- Select the text word/item you want to search for, then select search text from the popup.
- Shortened title tab(s) of currently activated Information Center(s) will next appear in the Text pane. Select the desired title tab, then click the left mouse button once outside the Database window.
- When the text is found, the Origin cursor appears. You now use it to frame and open the resulting window called "Hits for:" All identified items are listed in the pane below.
- You may select an item from the list and manipulate it with the pane middle mouse button menu.

The menu choices are:

- **Open.** Opens up the selected item.
- **Duplicate.** Physically makes another file on the disk, as opposed to copying an existing file. Selecting duplicate causes a "New item label" Q-Box to appear. You must designate a name (the current name is highlighted), any keywords (keywords that belong to the current name are already there), and a classification. Selecting accept will put the duplicated file in the In Box of whatever Information Center the original file came from.
- **Copy.** Puts a copy of the current selected text into the copy buffer for later placement.
- **Cut.** Deletes the current selected text and puts it into the copy buffer for later placement.
- **Items keyed to.** Opens a Prompter that says "Key word?" Type in the desired key word and <return>. This in turn opens to a window with a title tab of "Items keyed by \*text\*" that lists below those items linked to the desired key word.
  - **Key words.** Brings up a "Key Word List" window that lists the key word(s) associated with the selected file. If you then select one of the listed key words, the window middle mouse button popup gives you three choices: "Get [items] [folders] [everything] keyed with this word." The resulting window is called "Items keyed by (key word) from (name of item)" and a list below of the relevant items.
  - **Make folder.** Brings up a "New folder label" Q-Box with the current name highlighted. Key words can be entered. Selecting accept will place the (new) folder name into the same Information Center where the original came from (look for it in the In Box).

### Require

A way of doing queries without having to invent a new query. While in a record in a text pane, double-click one of the fields; require will look at values, go through the Hits list and throw out everything that *doesn't* contain relevant information.

### Exclude

Given the same situation as in require above, exclude gets rid of everything that *does* have the information.

### Blank Record

Leaves the current data fields displayed but removes the information associated with them; this is like getting a blank form to work with.

**Add Record**

Adds a new record to the Hits pane list. You may either edit existing data field information or start with a blank form and key in the information before selecting add record.

**Accept Record**

Accepts editing changes made to data field information.

**Reset Record**

Puts the record information that you have changed back to the way it was before the last accept record or before you edited the text.

## Queries Pane

The Queries pane acts as a "filter" on the database. It allows you to enter and keep track of queries for your particular database; if you wish, these entries can be saved into a constantly updated file so that the next time you open your database, every query not previously deleted will be listed.

The pane's middle mouse button popup menu contains the following options:

### Show all records

Lists all undeleted records in the Hits pane. The field listed will be the same fields that you have currently selected in the Fields pane. If there is no selection, the program will use the first item in the Fields pane.

### Sort hits

Sorts the current Hits pane information in ascending order (a, b, c ... 1, 2, 3). The program will only sort the field which is currently selected in the Fields pane. If there is no selection, the program will use the first item in the Fields pane for sorting.

### Reverse hits

Reverses the current Hits pane list. In other words, the first item on the list becomes the last item on the list, the second item on the list becomes the second-to-the-last item on the list, and so on.

### Add

Allows you to add or construct a new query using a series of query "templates." You may then use them to query the whole database or just the Hits window.

When you select add to construct your new query, a different approach is used to enter most of the information. Instead of typing in text and numbers or selecting from various boxes, you will utilize a series of small popup menus. These menus are designed to keep track of your query syntax (field name – operator – value) and to guide you in forming the query correctly. In order to illustrate how this works, here is the procedure to add a typical latitude query, such as "latitudes greater than 30":

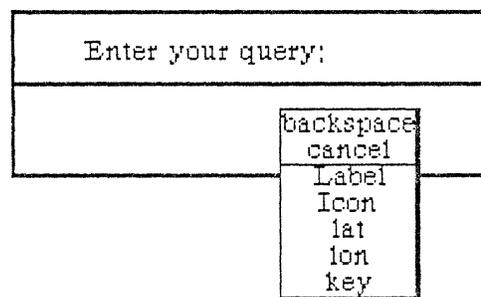
- Select add from the popup; A Prompter appears that says "Enter your query."
- Unlike other Prompters, you will not key in text or numbers and terminate it with a <return>.

Notice that a mouse cursor appears in the bottom part of the Prompter, with the middle mouse button highlighted. This means that you are to press the middle mouse button to start entering your query.

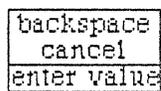
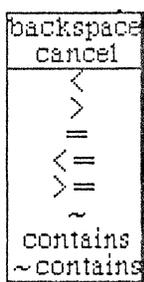
- After pressing the middle mouse button, a tiny popup appears that contains:  
backspace. Eliminates (or backspaces over) the current displayed value.  
cancel. Closes the popup and cancels the query.

The remaining choices in the popup vary, as they represent the current applicable list in the Fields pane. In this example, one of the variable selections is lat(itude).

- Select lat and press the middle mouse button again. (Notice that lat now appears at the bottom of the query Prompter).
- The second popup to appear contains a *fixed* list of operators: backspace cancel < > = <= >=  
~ contains ~ contains
- You want to query latitudes "greater than," so select > and observe that lat > appears in the Prompter. Press the middle mouse button again.



- The third popup contains another fixed list: `backspace cancel enter value`
- Since you're ready to enter the number value of the query, select `enter value`. A Prompter appears that says "Enter a number." This time, key in "30" then press <return>.



- The original Prompter reappears and displays the query `lat > 30` at the bottom. Press the middle mouse button again to bring up the last menu. Its fixed choices are: `backspace cancel ACCEPT and or xor`

- If your query is to be more complex than the three simple steps just described, you may extend the query as far as you need to by selecting the logic operators to connect the queries: `QueryA and QueryB or (and so on)`. However, you want to finish the query at this point, so select **ACCEPT** from the popup. This will place the new query at the bottom of the list in the Queries pane.

- If you now select `lat > 30` from the list with the left mouse button and then select query from the pane's middle mouse button popup, the query will be made against the whole database. The results will be displayed in the Hits pane.

#### Delete

Cuts the current list selection in the Queries pane off the list. If there is no selection, the window will flash and nothing will happen.

#### Delete all

Eliminates all the entries in the Queries pane. This command essentially erases every query entry and starts a new list.

#### Query

Queries the pane selection against the database, which does not include deleted records. If there is no selection, the window will flash and nothing will happen. You may return to the previous list by selecting `undo query`.

#### Query hits

Queries the pane selection against the current list in the Hits pane, not the entire database. This command is useful when you want to filter your data by stages. For example, if you want to find out those people living in Los Angeles who are over 65, you will query `city = Los Angeles` first to obtain the number of people living in Los Angeles, then query `age > 65` to get the correct answer.

#### Undo query

Returns the current Hits pane list to the previous list. The current Hits list is transferred into a buffer, so that if you select `undo query` again the Hits pane list will toggle back to the first list.

### Report Formats Pane

The Report Formats pane lists report formats that you have found to be useful for the database. A *report format* basically displays the order in which you wish certain fields to be listed. A report format can be saved and retrieved for later use. The pane's middle mouse button popup menu contains the following options:

#### Show all records

Lists all undeleted records residing in the Hits pane. The field that is listed is the same field currently selected in the Fields pane. If there is no selection, the program will list the first item in the Fields pane.

### Sort hits

Sorts the current Hits pane information in ascending order (a, b, c ... 1, 2, 3). The program will only sort the field which is currently selected in the Fields pane. If there is no selection, the program will use the first item in the Fields pane for sorting.

### Reverse hits

Reverses the current Hits pane list. In other words, the first item on the list becomes the last item on the list, the second item on the list becomes the second-to-the-last item on the list, and so on.

### Add

Allows you to add a new report format using a popup menu as a "template" instead of typing in text or numbers. The popup guides you in forming a report format that uses the correct fields. To do this, the following steps are taken:

- Select **add** from the pane popup. A Prompter appears that says "Enter your report."
- Observe that the cursor has changed to a mouse with the middle mouse button highlighted. This means that you are to press the middle mouse button and select the option(s) shown in the resulting popup:
  - backspace**. Eliminates (or backspaces over) the item that appears at the bottom of the Prompter.
  - cancel**. Closes the Prompter and stops making a report format.
  - Accept**. Saves the new report format.

The remaining choices in the popup vary, as they are the same as the current list in the Fields pane.

- Select one or several choices from among the variable list, then select **accept**. The popup will disappear and the new report format name will be at the bottom of the list in the Report Formats pane.

### Delete

Cuts the current selection in the pane off the list. If there is no selection, the window will flash and nothing will happen.

### Delete all

Eliminates all the entries in the pane. This command essentially erases every report format entry and starts a new list.

|                    |
|--------------------|
| show all records   |
| sort hits          |
| reverse hits       |
| add                |
| delete             |
| delete all         |
| <b>make report</b> |

|                |  |  |  |  |            |  |  |  |  |            |  |  |  |  |             |  |  |  |  |       |  |  |  |  |      |  |  |  |  |
|----------------|--|--|--|--|------------|--|--|--|--|------------|--|--|--|--|-------------|--|--|--|--|-------|--|--|--|--|------|--|--|--|--|
| accept         |  |  |  |  | cancel     |  |  |  |  | bailOut    |  |  |  |  |             |  |  |  |  |       |  |  |  |  |      |  |  |  |  |
| User Label:    |  |  |  |  | Item Label |  |  |  |  |            |  |  |  |  |             |  |  |  |  |       |  |  |  |  |      |  |  |  |  |
| Key Words:     |  |  |  |  | text       |  |  |  |  |            |  |  |  |  |             |  |  |  |  |       |  |  |  |  |      |  |  |  |  |
| Info center:   |  |  |  |  | demo       |  |  |  |  | ellersieck |  |  |  |  | nash        |  |  |  |  |       |  |  |  |  |      |  |  |  |  |
| Classification |  |  |  |  |            |  |  |  |  | Int        |  |  |  |  | XPers       |  |  |  |  | XPriv |  |  |  |  | XReg |  |  |  |  |
| Filing Method: |  |  |  |  | manual     |  |  |  |  |            |  |  |  |  | <b>auto</b> |  |  |  |  |       |  |  |  |  |      |  |  |  |  |

**Make report**

Allows you to create a report in a text window that already contains columns of field information (column spacing is determined by a Q-Box). This information is linked to the report format previously selected by you from the Report Formats pane list. Only the records currently in the Hits pane are used for reporting; to get a report of the whole database, select show all records from the Hits pane popup before you generate your report. In order to create a report, the following steps are taken:

- Select the desired report format from the list, then select make report from the pane's popup menu.

- A Q-Box will appear. Type in the label or name that you intend to give to the report, its classification, filing method, and so on. Select accept.

- Another Q-Box appears called "Enter Column Widths." It enables you to set the width (in inches only) for up to five columns.

|                             |   |
|-----------------------------|---|
| <b>Enter Column Widths</b>  |   |
| accept    cancel    bailOut |   |
| Column Width (inches): 1    | 1 |
| Column Width (inches): 2    | 1 |
| Column Width (inches): 3    | 1 |
| Column Width (inches): 4    | 1 |
| Column Width (inches): 5    | 1 |

When you've finished setting the desired width(s), select accept and your newly-named report window can next be opened.

- An Origin cursor will next appear, so that you may frame and open a text window. When it is opened, the name you've given to the report will be in the title tab at the top. Inside the window, the field information contained in your selected report format is displayed in columns. This information can be edited, and you can key in, and edit, additional text before or after the columns.

The text window has a middle mouse button popup tree menu that contains many standard text-editing options. These are:

#### **Again**

Searches for a piece of text or to do a search and replace. It will look for the next occurrence starting from the current selection; if the left shift key is also held down, it will repeat until the end of the text.

To find the next occurrence of a piece of text, copy or cut the text to be looked for (this places it in the copy buffer). Select the place to start looking for it, and then select **again**. It will either find the text being searched for and select it, or it will flash the window to indicate it couldn't find it.

Use of **again** after replacing a piece of text will cause it to look for the next occurrence of the replaced text and replace it with the same thing. If it doesn't find anything to replace, the window will flash.

The **again** function can be repeated over and over by selecting it repeatedly, or it can be automatically repeated by holding down the left-shift key while selecting **again** until it decides it is done.

#### **Undo**

Attempts to undo or reverse the last action performed. This is particularly useful to get back text that has been mistakenly replaced. **Undo** will replace the current selection with whatever was the last text to be replaced, copied, or cut.

#### **Copy**

Puts a copy of the current selection into the text copy buffer. Once text is copied into the buffer it can be placed anywhere into any text window (see **paste**), or **again** can be used to find other occurrences of it.

#### **Cut**

Deletes the current selection, and places the deleted text into the text copy buffer. If the next operation is a **paste**, the cut text has essentially been moved. Using **cut** and then **again** will find the next occurrence of the cut text.

#### **Paste**

Replaces the current selection with the contents of the text copy buffer. Thus, if the current selection is empty, **paste** is equivalent to inserting the copy buffer text at the caret.

**Paste** does not affect the contents of the copy buffer, so the same text can be pasted repeatedly. **Again** can be used after **paste** to perform a search and replace operation.

#### **Save**

Stores the file onto the disk.

#### **Strip CRs**

Removes unneeded <return>s from text that is received from another data source.

#### **Search**

Looks through an Information Center for any occurrences of your selected text in any of its labels or keywords.

#### **Hardcopy**

Causes a Q-Box to appear requesting necessary information for printing. You may designate whether the hardcopy is to be in portrait or landscape mode.

### Annotation -->

Annotations can be thought of as working notes, editorial comments, or footnotes which are kept attached to the text but are not displayed in it. In paper and pencil days, the common practice for adding annotations was to scribble comments in the margins of the paper. Instead, in the Golden Tiger software, a tool called an "annotation marker" is used. The marker appears right in the text, and it can be selected for display, deletion, or expansion of the annotation.

Annotation markers are numbers, starting at 100, enclosed within double colons and displayed in a 7-point (very small) font. They look like this: ::100:: . Every marker number is unique within a document, so if an annotation is copied and pasted elsewhere in the text, it will get a new number.

The text of an annotation (and any annotations in it) is really attached to the annotation marker. This means that if text with the marker in it is copied, cut, or pasted, the annotation travels along with it. Therefore, annotations are deleted by cutting their marker from the text, copied by copying their marker, and can be pasted into text in the same or another window.

Using **Annotation -->** is a much more elegant way of electronically scribbling notes in the margins; annotations can even be made on annotations *ad infinitum*. After moving the cursor to the right, the following submenu items appear:

#### Create

First, type the text that will comprise the contents of the annotation, select this text, then select **create**. The selected text is replaced by the annotation marker.

#### Display

An annotation is opened up by selecting its marker and then selecting **display**. If the marker has not been selected correctly, an error message will come up and you must re-try. If it was correctly selected, you will be presented with an Origin cursor to open up the annotation's window.

The annotation window popup menu has fewer items for text editing than the word processing text window popup, but those it does have are identical.

The label of the annotation window indicates exactly which annotation it is and where it came from by displaying the label of the original word processing window, followed by the sequence of annotation markers up to and including itself.

When the annotation window is closed, any annotation windows open on annotations within its text will also close.

#### Expand

A selected annotation marker is replaced by the text of the annotation by using **expand**. When an annotation marker is expanded, the annotation ceases to exist. Any annotations within the expanded annotation will not be expanded.

#### Fonts -->

Golden Tiger software comes with a variety of fonts that you can select from (the default font is Serif 10 regular). First, select the text that is to have its font style changed, then select **fonts -->** and move to the right to bring up the extensive scrollable font submenu. Select the desired font.

#### Utilities -->

Basically, these are functions that are useful but are not used in the mainstream or day-to-day editing tasks:

#### Add as key word

Automatically adds a new selected key word to the label/keywords designation of your text item name.

**Time stamp**

Causes the current text selection to be replaced with the current date and time, such as (4 May 1985 5:53:06 pm).

**Restore**

Returns the text to the way it was before the last save was used.

**File as new item**

Files the entire document or only selected text as a new text item. If you're filing only selected text, a Confirmer will appear that says "File only selected text?" to which you must select yes or no. Then a Q-Box will appear that needs the new item label, key words, classification, etc. If you're filing the entire document, only the Q-Box will appear.

**Compute it**

Takes selected text, evaluates it, and displays the result. For example, if you type in "2 + 3" and select it, then select compute it, the number "5" will appear.

**RIGHT MOUSE BUTTON**

The right mouse button in any of the five Database panes brings up the standard window manipulation popup with the following functions:

**Help**

To use the window Help tool, press the right mouse button and release with help selected from the pop-up menu. A window will appear on the screen with a brief explanation of the window's function and a reference to the User Guide, and to where more information about the window may be found.

**Classification**

The classification of any data window may be changed by the user to reflect its new status. A Change Window Classification input form appears and the new classification is selected by the user. Select accept on the input form and the data window classification bars, top and bottom, will change to reflect the selection. If the data item has no classification there are no classification bars.

**Close others**

When a display becomes very crowded with windows after an extended period of work, chances are that most are not being used. To keep the window that you are currently working in, and close all of the others, select close others from the pop-up menu and release the button. If any of the windows selected for closure have contents that require saving, a Confirmer will appear and ask if you are sure you want to close that specific window (yes or no).

**Select and close**

Permits you to select any number of the windows currently on the screen and close them. After this selection has been made, another popup menu will appear that lists the title tabs of all the open windows. Move the cursor over this list and click the middle mouse button over your choice(s), which will select a window for closing, and also cause the actual title for the window to fade in-and-out on the screen at that window's location.

More than one window may be selected with this function. Execution of this command begins when you move the cursor outside of the displayed list and click a mouse button. If any of the windows selected for closure have contents that have not been saved, a Confirmer will appear and ask if you are sure you want to close that specific window.

### Find

Permits you to transfer control from the window you are in to any other window currently on the screen. The tool works very similarly to select and close above. A popup menu will appear on the screen with the titles of all the open windows. Moving the cursor over this list while pressing the middle mouse button will cause the label of the window selected for finding to be highlighted, and also cause the actual title for the window to fade in-and-out on the screen at the location of that window.

Releasing the middle mouse button while any one of the items is selected (the title in the popup menu is highlighted) will cause the selected window to become the active window.

The find command can be aborted by moving the cursor anywhere outside of the displayed list and clicking any mouse button.

### Move

If you do not like where a window is on the screen, you can move it elsewhere. Place the cursor in the window to be moved and select move on the window popup menu. The action of selecting this tool will cause an outline of the window to be formed, with the cursor grabbing the nearest corner. You can then drag the window frame around by this corner to position it on the screen exactly where you want it.

To dismiss the move tool and open the window where the frame is, click the left mouse button.

### Frame

Allows you to change the size of a window. When you select frame on the window popup menu, the cursor changes into the Origin cursor, which is used to mark the location of the upper left corner of the new window. You can move the Origin cursor around the screen until it is positioned where you want it. Pressing the left mouse button will cause the upper left corner of the window to become anchored, and the cursor changes to a small Corner cursor marking the lower right corner of the new window frame. Moving this cursor about will cause the frame of the window to "rubber band." Move it around, using the mouse, until the window is the rectangle of the size and proportion that you want, then release the left mouse button. The contents of the reframed window will re-format themselves, as appropriate, to fill the newly-indicated window space.

Some windows are fixed in size and cannot be framed. In this case, frame works just like move.

### Collapse/expand

The selections collapse and expand appear in place of each other in the right mouse button popup menu. Collapse is available when a window is open and active. Expand is available when a window is collapsed.

Selecting collapse allows you to compress any active window down to its title tab and place that tab anywhere on the screen. When the left mouse button is released, the selected window will be collapsed to its tab alone and you can move the tab about the screen and place it where you want it. To release the tab at the desired location, click the left mouse button.

Since the tabs make up only a small fraction of the space of the window itself, and because the title in the tab is generally descriptive of the window, a number of open windows can be kept and organized on the screen without the display looking cluttered and confusing.

Selecting expand on the right mouse button pop-up menu of a collapsed window will restore the window to its precollapsed size and location.

### Close self

When you have finished with a window and want to remove it from the group of open windows on the screen, you can close it by selecting close self. The window to be closed must be the active window. When the mouse button is released, the window will be closed. Depending on the type of window and what you have been doing with its contents, a Confirmer may appear to ask if you want to close that particular window without saving the contents.

## The Spreadsheet

### OVERVIEW

A spreadsheet is a modeling device or tool that lets you explore different types of "what-if" scenarios. Spreadsheets can, in turn, be linked together to form powerful distributed spreadsheets.

| Spreadsheet Matrix Inverter |                             | TYPICAL SPREADSHEET |             |    |  |
|-----------------------------|-----------------------------|---------------------|-------------|----|--|
|                             | 1                           | 2                   | 3           | 4  |  |
| 1                           |                             |                     |             |    |  |
| 2                           | 'Matrix A'                  |                     |             |    |  |
| 3                           |                             | 4                   | 0           | -3 |  |
| 4                           |                             | 0                   | 1           | 0  |  |
| 5                           |                             | -3                  | 2           | 1  |  |
| 6                           |                             |                     |             |    |  |
| 7                           |                             |                     |             |    |  |
| 8                           | 'Matrix (A) <sup>-1</sup> ' |                     |             |    |  |
|                             | value                       | absolute            | auto update |    |  |

### CREATING A SPREADSHEET

Creating a spreadsheet is done from an Information Center in several stages; you will first select create --> spreadsheet from its middle mouse button popup menu. Immediately, an "Add Spreadsheet" Q-Box appears, into which you will key in the spreadsheet's name, any key words, and so on. After selecting accept, the new spreadsheet name will appear in the same Information Center from which it was created.

Now you must select the spreadsheet name with the left mouse button and select open from the middle mouse button popup. The resulting Q-Box, called "Enter Spreadsheet Dimensions," has a default of 5 horizontal rows and 3 vertical columns; you may keep or change either number.

Selecting accept from the Q-Box will cause the Origin cursor to appear, with which you can now frame and open the newly-made spreadsheet window.

## WHAT MAKES A SPREADSHEET

You will notice several things about a spreadsheet:

- ★ There is a set of four arrows in the upper left corner. This is the *scroll button*.
- ★ There is a sequential set of numbers with heavy boundaries on the top and left sides. These are the *row* and *column indices*.
- ★ There are the *cells* (which are probably blank at this point) immediately under and to the right of the index bars.
- ★ Under the cells there are a trio of boxes that are set at the default words "value," "absolute," and "auto update."
  - The one with "value" in it is the *value/rule button*.
  - The one with "absolute" in it is the *address mode button*.
  - The one with the phrase "auto update" in it is the *update mode button*.
- ★ Finally, at the very bottom, there's a long bar that says "nil" in it. This is the *command bar*. Each of these attributes is discussed next:

### The Scroll Button

The scroll button is used to get a *scrolling map* onto the screen. When you click the mouse in the arrowhead area, a rectangle will appear to the left side of the window. This is the scrolling map. It will probably be white in the beginning, but as you enter data into the spreadsheet, areas of it will become black or gray to signify that there is data in the sheet. This rectangle is a one-fifteenth scale map of how the entire sheet looks. There will also be a light gray area that shows what part of the entire sheet you are seeing right now. To make the scrolling map disappear, click in the center or outside of it.

### The Row and Column Indices

These areas are used mainly for changing the shape of a given row or column of cells. Cells can be made very tall, wide, or small. The means to do this are discussed in the "Changing Row/Column Size" section.

The indices give you a convenient reference to where you are in the sheet. They start at Row 1 and Column 1, and grow larger numerically as you go towards the right and the bottom.

### The Cells

This is where most things happen in a spreadsheet, as you point at cells and change their rules and values. This is also where you can copy, cut, and paste cells and rules from one place to another. The cell popup menu is described in "The Cell Menu" section.

Cells can contain almost any object, from simple numbers to charts, graphs, vectors, and matrices. Entire personal databases can be kept in cells, allowing you to both query and analyze them from within a spreadsheet.

### The Rule/Value Button

This area is a button that toggles back and forth between the words "rule" and "value" each time you click the left mouse button.

Every cell has two parts: a value (the information it holds), and a rule (how it relates to other cells). The rule/value button lets you tell the spreadsheet which part to show you in the command bar. Since all changes are made through the command bar, this button also tells the sheet which part of the cell you are trying to change—the rule or the value.

### **The Address Mode Button**

This is a simple area to deal with, but it controls a function that can be difficult to grasp at first. To start, this area is a button that toggles back and forth between the words "absolute" and "relative" each time you click the left mouse button.

To better understand the address mode button, you will need to read about what cell rules are, and how the cells refer to each other. Basically, cells can talk about one another in two different ways; that is, "absolute" and "relative." This button tells the system which way to do it when it is asked to name a cell.

### **The Update Mode Button**

The update mode tells the system whether you want everything to update as soon as any value is entered. This is handy, since the Golden Tiger software cannot update everything on a spreadsheet instantly, especially if it is complicated. It is an advantage to be able to save all your updates until you have made the desired changes in your spreadsheet.

The update mode button toggles the state of the system between "auto update" and "no updates." If the system is currently on "no updates," it will save information until you set the system back to "auto update," then it will update everything at that point.

### **The Command Bar**

The command bar gives a helping hand to the cells, letting you edit the value or rule of the cell you have selected. It is very much like a typical text window in that you can do all of the usual text editing things with the middle mouse button popup menu, which consists of the following options:

#### **Again**

Repeats the last replace, copy, or cut edits that you do.

#### **Undo**

Reverses the effects of the last command. For instance, if you have deleted text, undo will put it back in.

#### **Copy**

Puts a copy of the current selected text into the copy buffer.

#### **Cut**

Deletes the current selected text and puts it into the copy buffer.

#### **Paste**

Places, at the insertion mark, whatever information is currently in the copy buffer.

#### **Accept**

Puts the value or rule into the cell, depending upon how the Rule/Value button is currently set.

#### **Cancel**

Sets the contents of the window to where they were after the last accept was used.

## **USING THE SPREADSHEET**

After learning the basic terms associated with a spreadsheet, the next step is to become familiar with its workings.

### SELECTING A CELL

One of the most basic things to know is how to select a cell or group of cells. You must first select an individual cell or a group before you can do anything to it, such as adding values or rules, or moving it around.

To select a single cell, place the mouse within the cell and click the left button. The cell will turn from gray to a darker gray to signify that it has been selected. In the command bar below, the word "nil" will appear (if the cell was empty), or some value will appear (if the cell had contents).

You can also select a group (a rectangular block) of cells. To do this, find the upper left corner of the group to be selected, press the left mouse button, and drag the cursor to the bottom right corner before you release the mouse button. It's much like framing a window, but instead you're framing a group. You may also select a group vertically from top to bottom.

### THE CELL MIDDLE MOUSE BUTTON MENU

The cell popup menu is a collection of useful things to do to cells. Its operation is very similar to other system middle mouse button menus:

#### Clear

Sets the contents to "nil" and blanks the rule for every selected cell.

#### Update

Tells a selected cell to evaluate its rule and display the result.

#### Copy Cut Paste

You probably noticed the familiar copy, cut, and paste in the cell menu.

These menu items work the way they do in other areas of Golden Tiger software; however, there are a few differences when they are used with spreadsheets:

You may copy or cut groups of cells, as well as single cells. The main differences apply to pasting cells.

If you copy a single cell and paste to a selected group of cells, the cell will be duplicated in each. If you copy a group of cells and paste them into a smaller group, then the selected first group will be "clipped." If the second group is larger than the selected group, no cells will be clipped, and the cells left over will be unaffected.

If you copy a group and paste it into a single cell, the single cell will be set to the cell at the top left corner of the copied group.

#### Copy/Paste rule

Copying and pasting rules works somewhat like the copy, cut, and paste for cells in general. You may copy the rule only of a single cell. If a group is selected it will take the rule of the top left selected cell.

You may paste a rule into one cell or a group of cells, and all the cells selected will get the rule. Once the rule has been pasted, all the cells that just received it will evaluate the rule and update themselves.

#### Display links

Draws lines to all cells that either depend on the selected cell or supply data to it. This is how to find all of the cells associated with a given cell if you want to move it or change it.

If no cell has first been selected when this option is used, the sheet will display the links among all the cells.

#### Details

Opens the spreadsheet upon which the selected cell's value is dependent.

#### Save sheet

Stores the spreadsheet, with all present rules and values, onto the disk.

|                          |
|--------------------------|
| clear<br>update          |
| copy<br>cut<br>paste     |
| copy rule<br>paste rule  |
| display links<br>details |
| save sheet<br>hardcopy   |

### Hardcopy

Causes a Hardcopy Q-Box to appear. Select **accept** when the correct information has been entered, and the system will place the file into the printing queue.

### CHANGING ROW/COLUMN SIZE

If you want to change the height of a row or width of a column, you have to use the row and column indices to do it. The row indices are the numbers at the left, while the column indices are the numbers at the top.

- To change the height of a row, hold the Shift key down and press the left mouse button in one of the row indices. As you move the cursor up or down, the horizontal line corresponding to that row will move with it—it has the appearance of a sliding bar. You cannot make the row shorter than about one-third of an inch. When you release the mouse button, the window will redisplay itself to match the new height.

- To change the width of a column, hold the Shift key down and press the left mouse button in one of the column indices. As you move the cursor left or right, the vertical line corresponding to the column will move with it; it has the appearance of a sliding bar. You cannot make the column smaller than about one-third of an inch. When you release the mouse button, the window will redisplay itself to match the new width.

### SCROLLING AROUND THE SHEET

Not all of the spreadsheet is always visible in the window you have on the screen. When you want to see another part of the spreadsheet, you will use the scroll map:

- Click the left mouse button in the scroll bar area to make the scroll map appear. The rectangle that makes up the map represents the entire spreadsheet, while the light gray rectangle (the window marker) within the map represents what part you are able to see in the window.

- Move the window marker around by pressing and holding the left mouse button and moving it around the scroll map. When you let up the mouse button, the window will redisplay itself to accommodate the new location.

- At times you may want to select a group of cells that are larger than the window. In this case, if you want to keep selecting cells that are out of the window, continue dragging off the edge of the window. The window will scroll itself in order to get the cells you want onto the screen. When you eventually reach the cell you want, you can let up on the mouse button.

### VALUES

You will probably want to change Values in the cells quite often. This is done by selecting a cell, typing the desired value, and setting the rule/value button to "value." The cursor can be in either the cells or the command bar when you type.

Once you have the value typed in, you must accept (store) it. There are three ways to do this:

- Press the <return> key, which will accept the value and move the selection down one row.
- Press the ESC key, which will accept the value and move the selection right one cell.
- Use the **accept** command off the middle mouse button menu in the command bar.

In the following sections, you'll learn how to specify various types of values.

## NUMBERS

One of the kinds of values you can put into spreadsheets is a number. There are several types available, and these are:

| Type                     | Examples                   |
|--------------------------|----------------------------|
| Integer                  | -3, -2, -1, 0, 1, 2, 3     |
| Float (the real numbers) | 1.1, 38.8945, 2.0, 3.14159 |
| Fraction                 | (-2/3), (1/4)              |

You enter these numbers just as displayed above. There are special instances for some of these; for instance, to get the Golden Tiger version of pi, enter "Float pi."

Numbers understand numerous mathematical functions. For a list of those functions, look in the section titled "More Complex Math Functions."

## STRINGS

Numbers are not the only kinds of values that the spreadsheet can handle. Strings are collections of characters in sequence. They are useful for labelling areas of a sheet, giving additional information such as units of measurement, and many other like tasks.

Strings can be specified by typing an apostrophe (') before and after the characters you want in the string. If the string needs an apostrophe in it, put a pair of apostrophes in instead.

Here are some examples:

'This is a string!' ← an ordinary string.

'here's another' ← a string with an apostrophe.

There are ways to test and manipulate strings in the system. You'll find more information on them in the section titled "String Functions."

## OTHER VALUES

The spreadsheet can handle many different kinds of things. While it's impractical to go into all of them, here are a few examples:

*Booleans* are values that are either true or false, and are specified by typing either the word "true" or "false." They are useful for lots of decision-making procedures, in that you can test them and decide on actions with them. This is illustrated in the section titled "If-Thens, or Doing Things Sometimes."

*Points* are x-y pairs that can be treated as vectors as well. They are mentioned in the section on "Other Interesting Functions." You specify them by typing a number, followed by the symbol "@," followed by a number. An example is "3@4," which means "x=3" and "y=4."

*Charts* are simple business graphics that you can build into cells. They need large cells to display nicely. How to build a chart is described in "Other Interesting Functions."

## RULES

Using Rules in a spreadsheet is complex, but very powerful. One of the major things that makes a spreadsheet creative is the ability to say that some cell has a value that depends on the value of another cell.

This is done by specifying a rule by which the cell can update itself whenever one of the cells it depends upon changes. The rule can be simple, such as stating that a given cell is always equal to the value of some

other cell, plus one. Or it may be much more complex. With rules, you can do all sorts of useful calculations without having to learn how to program a computer.

You enter a rule much the same way you do a value, but with the rule/value button set to "rule." However, you can accept a rule only with the accept command from the middle mouse button popup in the command bar.

You must know how to write rules. This task is described in the next few sections.

### REFERENCING OTHER CELLS

Here is a cell reference: {R1C2}. This is about the simplest reference you can make concerning a cell. What that says is "the value of the cell at row 1 and column 2." Remember that "rows" are the horizontal bands of cells, and columns are the vertical ones. They are numbered, and appear with dark borders around them across the top and left side of a sheet. The "R1" stands for "row number 1," and the "C2" stands for "column number 2." This type of reference is called an *absolute* reference, since we are absolutely pointing at row 1 column 2.

There is another kind of reference called the *relative* reference. Here's an example: {R-3C+2}. It says "the value of the cell three rows up and two cells right of this cell." For instance, if this cell were at {R8C4}, we would be talking about {R5C6} with our example. {R0C-1} points at a cell on the same row, but one column left of the cell it appears in.

There are other kinds of references as well, for talking about groups of cells and cells on other sheets, but these examples are sufficient for now.

### SIMPLE MATH

An expense form is a good example of using simple math in a spreadsheet. The rules you need to make an expense form would probably use only the four basic math operations: + - \* /. They are described below.

You can use the cell references to make up rules by telling them to do things like adding themselves. For instance, the rule "{R1C1} + 1" says "make this cell's value equal to the value of the cell at row 1 column 1, plus one."

The rule always evaluates from left to right, so things may be a little different from what you are accustomed to. "1 + 3 /{R1C1}" would be the same as saying "4/{R1C1}," *not* "1 + (3/{R1C1})." Whenever you aren't quite sure how something is going to work, put parentheses around it.

The rule can be as long as you like; you may string a set of items together, such as "{R3C4} / 3 + (2 \* {R-1C+2})." If the cell at {R3C4} has a value of 3, and the cell at {R-1C+2} has a value of 8, the rule would evaluate to 17.

The kinds of operations we have been talking about are called *binary*, because they have two elements that participate. In the expression "2 + 3," both "2" and "3" participate in the operation of addition. However, some operations are called *unary*, because only one element takes part. This is discussed in the next section.

### CELL REFERENCE BY SELECTING

There is a simple way to make references while you're building a rule. When you are making a rule, and the cell you want to reference can be seen on the screen, hold down the Shift key and click over the cell. The reference for the cell you want to reference will appear in your rule, saving you most of the typing. There is a similar way of selecting groups of cells, which will be discussed later.

## MORE COMPLEX MATH FUNCTIONS

Up until now, the rules being described involved "binary" operations. A spreadsheet can also handle "unary" operations. It's important to understand how unary operations work, and how they are different from binary operations. Like binary operations, they evaluate from left to right, but they are *always* done before any binary operations are done.

For instance, there is a unary operation named "squared." It multiplies a number by itself, thus "3 + 4 squared" evaluates to 19. If things were always evaluated left to right, it would have evaluated to 49, "(3 + 4) squared," rather than 19, "3 + (4 squared)." This can be a difficult concept, but practice will make you get used to it. Remember, if you aren't sure how something is going to work, put parentheses around it.

There's one other type of operation called the "keyword." There may be several elements that participate, or only one. The thing that makes this different is the fact that it has a colon (:) in it. "raisedTo:" is a keyword message that raises one number to the power of another. Keyword operations *always* get done after all the others

Here is an example "2 raisedTo: 1 + 1" evaluates to 4, because the keyword operation is done last. If things were always done left to right, it would evaluate to 3; that is, "(2 raisedTo: 1) + 1," instead of 4, or "2 raisedTo: (1 + 1)." Here is a more complex example: "2 + 1 negated raisedTo: 2" evaluates to ... 1.

Below is a list of some of the available functions:

| Name             | Example            | Function                   |
|------------------|--------------------|----------------------------|
| squared          | 33.2 squared       | square                     |
| sqrt             | 33.2 sqrt          | square root                |
| raisedTo:        | 3.2 raisedTo: 8    | raise to the given power   |
| ln               | 33.2 ln            | natural logarithm          |
| exp              | 33.2 exp           | exponential                |
| log:             | 10 log: 3          | log to the given base      |
| sin              | 33.2 sin           | sine in radians            |
| cos              | 33.2 cos           | cosine in radians          |
| tan              | 33.2 tan           | tangent in radians         |
| arcSin           | 12.8 arcSin        | inverse sine               |
| arcCos           | 12.8 arcCos        | inverse cosine             |
| arcTan           | 12.8 arcTan        | inverse tangent            |
| degreesToRadians | 3 degreesToRadians | convert degrees to radians |
| radiansToDegrees | 3 radiansToDegrees | convert radians to degrees |
| truncated        | 33.2 truncated     | nearest integer less than  |
| rounded          | 33.2 rounded       | nearest integer            |
| abs              | 33.2 abs           | absolute value             |

## STRING FUNCTIONS

Strings can be treated in several different ways. When you have a string, you can treat it as a bunch of characters, or as a whole string. For instance, you can ask a string what character is at a given spot, how long the string is, or whether it contains some other string or character. You can paste them together, or just take small sections of them.

Here is a list of some of the things you can do:

| Name                   | Function                |
|------------------------|-------------------------|
| ,                      | put strings together    |
| at:                    | character at a spot     |
| copyFrom:to:           | get part of a string    |
| indexOf:               | position of a character |
| findString:startingAt: | position of a string    |
| size                   | size of a string        |

and some examples:

| Name                       | Example                                | Result      |
|----------------------------|----------------------------------------|-------------|
| ,                          | 'two',' parts'                         | 'two parts' |
| at:                        | 'two' at: 2                            | \$t         |
| copyFrom:to:               | 'two' copyFrom: 2 to: 3                | 'wo'        |
| indexOf:                   | 'two' indexOf: \$o                     | 3           |
| findString:<br>startingAt: | 'two' findString:<br>'w' startingAt: 1 | 2           |
| size                       | 'two' size                             | 3           |

## IF-THENS, OR DOING THINGS SOMETIMES

There are times when you want to specify things to be done only under certain conditions. This is often called an "if-then" construct. It allows an action to be taken only if some condition is true.

In Golden Tiger, the way to specify this is with the "ifTrue:ifFalse:" construction. Here is an example:

```
{R1C1} = {R2C3} ifTrue: ['hello'] ifFalse: ['goodbye']
```

What it says is that if {R1C1} is equal to {R2C3}, then the value of this cell is "hello," otherwise it is "goodbye."

You can make all sorts of tests on things, and most are pretty self-explanatory once you see them. Below is a list:

- =
- >
- >=
- <
- <=
- ~ = (is not equal)

The `ifTrue:ifFalse:` construct can also take a boolean and decide based on that. For instance, if `{R2C3}` is the boolean true, then the following example would evaluate to "That is true." Here is the example:

`{R2C3} ifTrue:['That is true'] ifFalse:['That is not true'].`

### OTHER INTERESTING FUNCTIONS

This section is sort of a grab-bag of features for various data types. There are several types of values that can be used in cells, and each has its own particular functions. These are some of the more interesting:

**Booleans.** There are only a few interesting functions. One of the most interesting is the "not" function. `{R2C3} not` returns the opposite of `{R2C3}` if it is a boolean. Thus, a true becomes a false, and vice versa.

**Points.** The functions you can perform on points allow you to look at the x and y value, treat them as vectors, and other things. Below are some examples:

| Name  | Example                    | Result   | Function                     |
|-------|----------------------------|----------|------------------------------|
| x     | <code>(2@3) x</code>       | 2        | the x value of a point       |
| y     | <code>(2@3) y</code>       | 3        | the y value of a point       |
| r     | <code>(2@3) r</code>       | 3.60555  | distance of a point from 0@0 |
| theta | <code>(2@3) theta</code>   | 0.982836 | angle of a point from 0@0    |
| +     | <code>(2@3) + (4@5)</code> | 6 @ 8    | vector addition              |
| -     | <code>(2@3) - (4@5)</code> | -2 @ -2  | vector subtraction           |

**Charts.** Often a chart will enhance the impact of a spreadsheet. You can build a business chart into a cell using the following rules:

`BarChart new title: 'My Title' labels: {some group of cells} data: {another group}`

`LineChart new title: 'My Title' labels: {some group of cells} data: {another group}`

Here is a real example:

`BarChart title: 'Yearly Sales' labels:{R1C1:R5C1} data: {R1C2:R5C2}`

**Cell Position.** There are some special cases where you want to know what cell this is from a rule so that you can do some fancy displaying of unusual values. You can find out what row this cell is in by putting in the word "ycell" where you want the row number to appear; "xcell" will give the column number of the cell.

## REFERENCING GROUPS OF CELLS

Eventually, you may want to work on groups of cells in a spreadsheet. Many times, you will want to sum up all the elements in a group of cells, find the mean or standard deviation of the group, or work with a matrix of some sort. The Golden Tiger package allows you to specify these groups in a syntax similar to the one you've already seen.

{R1C1:R3C4} is a group reference. It says "the values of the rectangular group of cells with a top left corner at R1C1 and lower right corner at R3C4." To obtain a reference like this, do the following:

- Open a spreadsheet, set the value/rule switch to "rule," and then select some cell.
- Start at another cell and drag the mouse to yet a third cell by keeping the mouse button pressed the whole time and also holding the Shift key down.
- Now let up on all the buttons, and observe what shows up in the command bar. If everything has been done right, what appears should look somewhat like the group reference sample shown in a previous paragraph. Notice that the first part of the reference is the cell where you started dragging the mouse, and the second part is the cell where you finished dragging. This is, by the way, the most convenient way to make a group reference, and is generally similar to the way to make a cell reference by selecting.

## GROUP FUNCTIONS

Groups of cells can be treated two ways—either as simple lists, or as matrices. If you treat them as a list, then you have a set of functions for doing some statistical manipulations on them. If you treat them as a matrix, you can use some matrix manipulation functions on them. Either way, they can be very helpful in lots of different problems.

Here are some things you can do to groups:

### Groups as lists:

| Name              | Example            | Function                                   |
|-------------------|--------------------|--------------------------------------------|
| sum               | {R1C1:R3C4} sum    | the sum of all the elements                |
| mean              | {R1C1:R3C4} mean   | the mean of the elements                   |
| median            | {R1C1:R3C4} median | the median of the elements                 |
| mode              | {R1C1:R3C4} mode   | the mode of the elements                   |
| standardDeviation | {R1C1:R3C4}        | the standard deviation of all the elements |

**Groups as matrices:**

| Name        | Example                 | Function                      |
|-------------|-------------------------|-------------------------------|
| invert      | {R1C1:R3C4} invert      | the inverse of the matrix     |
| determinant | {R1C1:R3C4} determinant | the determinant of the matrix |
| *           | {R1C1:R2C2} * {R2C3}    | multiply by number or matrix  |

**REFERENCING CELLS ON OTHER SHEETS**

The last major area to understand about references is how to talk about cells in other sheets. This has a number of uses, including the ability to have a hierarchy of spreadsheets. For instance, you might have a set of regional sales sheets all linked to a national sales sheet, and the national sales sheet linked to a corporate-wide balance sheet, and so on.

To talk to a cell on another sheet, you simply have to put the name of the sheet, followed by a semicolon (;), into the beginning of the reference. Only absolute references can be used: "{eastSales;r2c3}" and "{westSales;R1C1:R6C7}" are both valid references to other sheets. It is important that inter-sheet links go in only one direction, otherwise the effects may be rather unpredictable. Thus, if nationalSales depends on some information in westSales, westSales should *not* depend on any cells in nationalSales.

**MOUSE RIGHT BUTTON MENU**

The right mouse button in any of the Spreadsheet panes brings up the standard window manipulation popup with the following functions:

**Help**

To use the window Help tool, press the right mouse button and release with help selected from the pop-up menu. A window will appear on the screen with a brief explanation of the window's function and a reference to the User Guide, and to where more information about the window may be found.

**Classification**

The classification of any data window may be changed by the user to reflect its new status. A Change Window Classification input form appears and the new classification is selected by the user. Select accept on the input form and the data window classification bars, top and bottom, will change to reflect the selection. If the data item has no classification, there are no classification bars.

**Close others**

When a display becomes very crowded with windows after an extended period of work, chances are that most are not being used. To keep the window that you are currently working in, and close all of the others, select close others from the pop-up menu and release the button. If any of the windows selected for closure have contents that require saving, a Confirmer will appear and ask if you are sure you want to close that specific window (yes or no).

**Select and close**

Permits you to select any number of the windows currently on the screen and close them. After this selection has been made, another popup menu will appear that lists the title tabs of all the open windows. Move the cursor over this list and click the middle mouse button over your choice(s), which will select a window for closing, and also cause the actual title for the window to fade in-and-out on the screen at that window's location.

More than one window may be selected with this function. Execution of this command begins when you move the cursor outside of the displayed list and click a mouse button. If any of the windows selected for closure have contents that have not been saved, a Confirmer will appear and ask if you are sure you want to close that specific window.

#### **Find**

Permits you to transfer control from the window you are in to any other window currently on the screen. The tool works very similarly to select and close above. A popup menu will appear on the screen with the titles of all the open windows. Moving the cursor over this list while pressing the middle mouse button will cause the label of the window selected for finding to be highlighted, and also cause the actual title for the window to fade in-and-out on the screen at the location of that window.

Releasing the middle mouse button while any one of the items is selected (the title in the popup menu is highlighted) will cause the selected window to become the active window.

The find command can be aborted by moving the cursor anywhere outside of the displayed list and clicking any mouse button.

#### **Move**

If you do not like where a window is on the screen, you can move it elsewhere. Place the cursor in the window to be moved and select move on the window popup menu. The action of selecting this tool will cause an outline of the window to be formed, with the cursor grabbing the nearest corner. You can then drag the window frame around by this corner to position it on the screen exactly where you want it.

To dismiss the move tool and open the window where the frame is, click the left mouse button.

#### **Frame**

Allows you to change the size of a window. When you select frame on the window popup menu, the cursor changes into the Origin cursor, which is used to mark the location of the upper left corner of the new window. You can move the Origin cursor around the screen until it is positioned where you want it. Pressing the left mouse button will cause the upper left corner of the window to become anchored, and the cursor changes to a small Corner cursor marking the lower right corner of the new window frame. Moving this cursor about will cause the frame of the window to "rubber band." Move it around, using the mouse, until the window is the rectangle of the size and proportion that you want, then release the left mouse button. The contents of the reframed window will re-format themselves, as appropriate, to fill the newly-indicated window space.

Some windows are fixed in size and cannot be framed. In this case, frame works just like move.

#### **Collapse/expand**

The selections collapse and expand appear in place of each other in the right mouse button popup menu. Collapse is available when a window is open and active. Expand is available when a window is collapsed.

Selecting collapse allows you to compress any active window down to its title tab and place that tab anywhere on the screen. When the left mouse button is released, the selected window will be collapsed to its tab alone and you can move the tab about the screen and place it where you want it. To release the tab at the desired location, click the left mouse button.

Since the tabs make up only a small fraction of the space of the window itself, and because the title in the tab is generally descriptive of the window, a number of open windows can be kept and organized on the screen without the display looking cluttered and confusing.

Selecting expand on the right mouse button pop-up menu of a collapsed window will restore the window to its precollapsed size and location.

### **Close self**

When you have finished with a window and want to remove it from the group of open windows on the screen, you can close it by selecting **close self**. The window to be closed must be the active window. When the mouse button is released, the window will be closed. Depending on the type of window and what you have been doing with its contents, a **Confirmer** may appear to ask if you want to close that particular window without saving the contents.