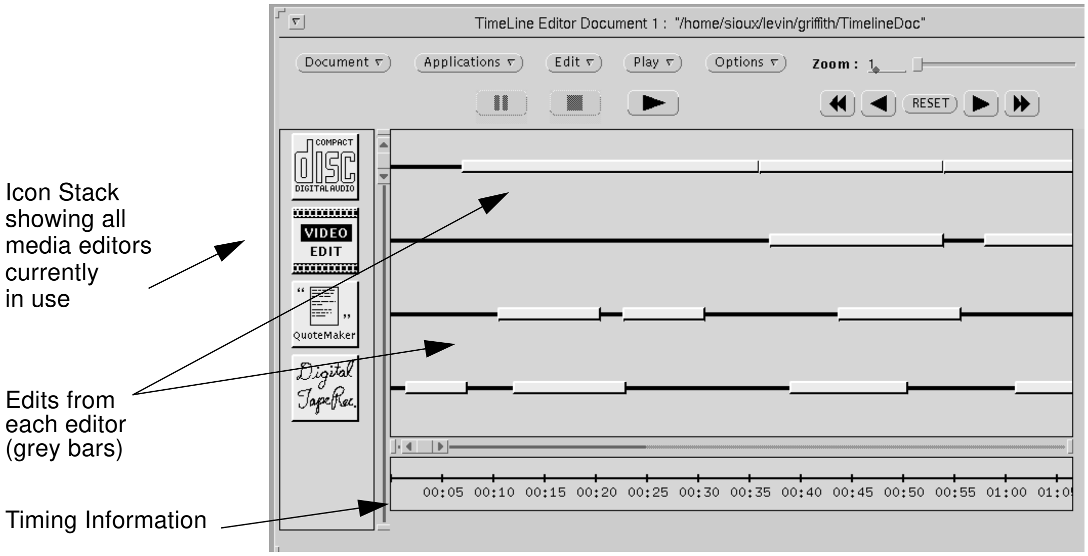


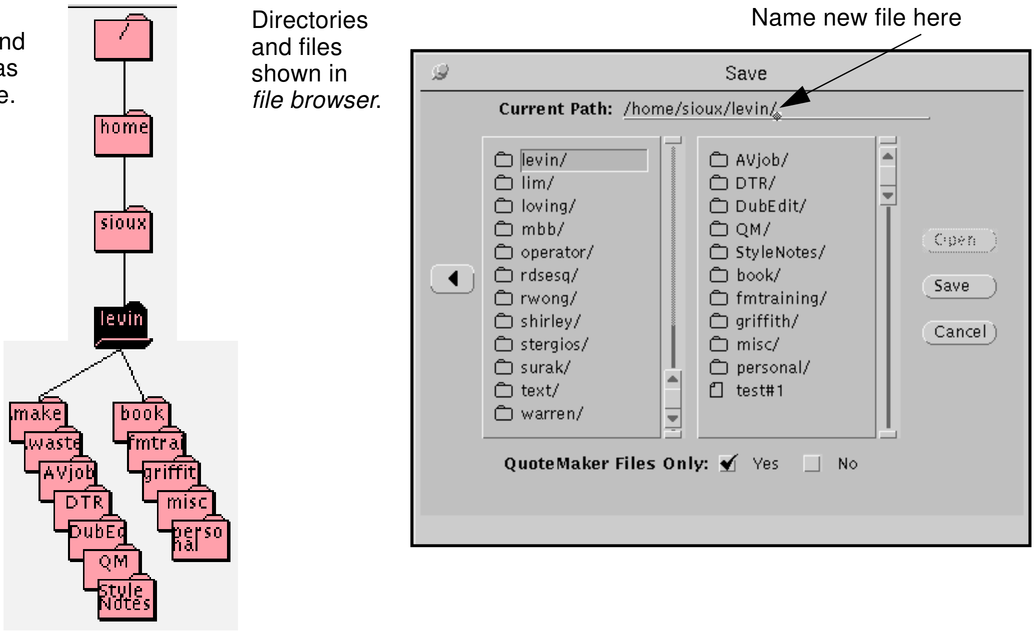
Figure 1-7 An Example Time Line

The grey bars are individual edits from the different editors. You place edits by following this general procedure:

- Open a time line
- Open the edit lists that contain material you want to use
- Highlight the edit
- Point to the place on the time line you want the edit to go, and click with the left mouse button to place it

Among the other things you can do with the time line are to play the presentation, to play selected portions of the presentation, and to fine tune the performance by adding or deleting space. More details about creating a time line appear in *Chapter 7, Building Multimedia Documents (TimeLine Editor)*.

The rest of this manual describes how to use each editor, organized by medium.



Hierarchy of directories and files shown as tree structure.

Directories and files shown in *file browser.*

Name new file here

Current Path: /home/sioux/levin/

QuoteMaker Files Only: ☑ Yes ☐ No

Figure 1-6 Using the *File Browser* to Find UNIX Files

Building a Time Line

After building the edit lists you plan to use in a presentation, you are then ready to create a presentation with the TimeLine editor. The TimeLine editor lets you extract edits from each media source and place them on a time line. The time line shows you visually where each edit will play in relationship to all others. TimeLine also shows you how long each edit is, and which media source it comes from. Figure 1-7 shows an example TimeLine presentation containing example edits.

Previewing an Edit

After selecting various edits, you may next want to preview it to see what the individual edit will look like when it performs in a time line. All the editors provide a preview function. Most have one or two buttons for this purpose. Many let you preview all or part of your selection.

Modifying an Edit

All editors allow you to modify your edits. You can modify attributes such as labels, you can change play characteristics such as duration and volume (refer to Table 1-1), and you can edit content and placement on the time line. All editors also provide an edit menu that performs functions such as cut, paste, copy, and delete. As you might expect, no change is final until you specifically update the list. Typically, there is an ***update*** button on the control panel for this function.

Using the File Browser to Find, Name, and Save Edit Lists

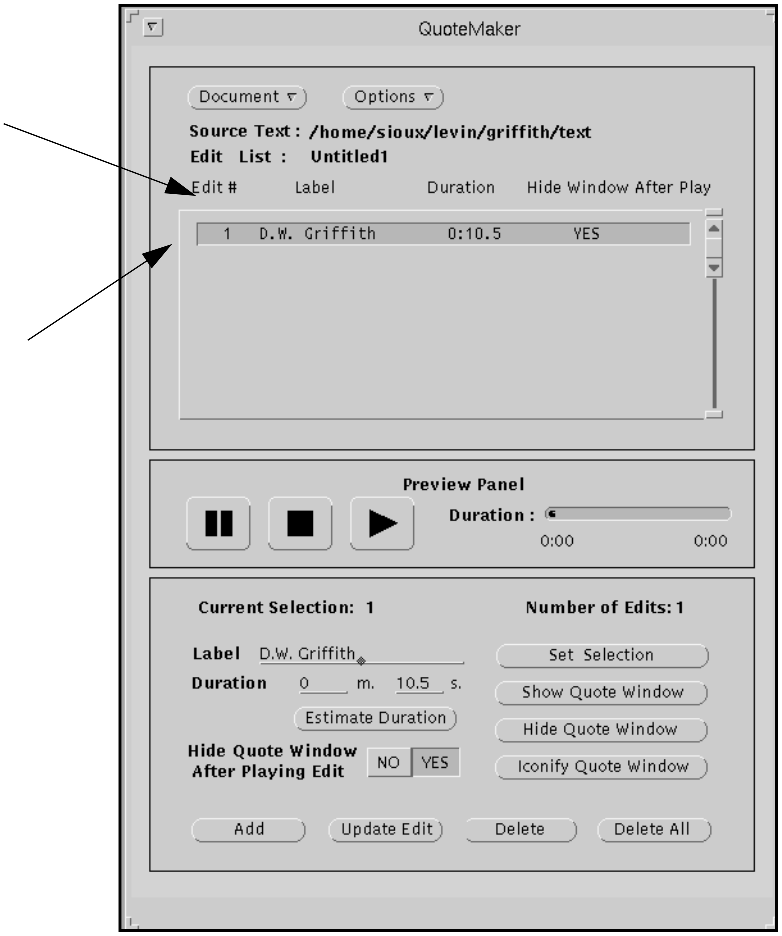
MAEstro provides a visual aide to navigating through your UNIX file structure called the *file browser*. You can access it through any editor. The *file browser* helps you locate, open, name, and save edit lists. Figure 1-6 shows an example *file browser*.

Naming and labeling with the *file browser* helps you organize edits and edit lists. You can create a number of presentations by reusing the edits in different combinations or with new material. You can create an edit list from scratch, or you can modify an existing list, saving it with a new name.

Note – Do not use a slash mark (/) in your name, since the slash indicates a UNIX directory and will confuse the *file browser*.

If you are familiar with UNIX directories, you can also place your edit list file in a different directory by changing the path name, either by writing it in or by highlighting directories with the mouse.

In addition to the name, the edit list displays information on edit attributes. These include name, duration, and display parameters. Figure 1-5 shows an edit added to a QuoteMaker edit list as an example of what this looks like.



Attributes for this edit

An edit added to start a list

Source Text : /home/sioux/levin/griffith/text
Edit List : Untitled1

Edit #	Label	Duration	Hide Window After Play
1	D.W. Griffith	0:10.5	YES

Duration : 0:00 0:00

Current Selection: 1
Number of Edits: 1

Label D.W. Griffith
Duration 0 m. 10.5 s.
Hide Quote Window After Playing Edit NO [✓ YES]

Figure 1-5 The First Edit Added to a QuoteMaker Edit List

Table 1-1 Edit Attributes for the Media Editors

QuoteMaker	**cdEdit**	**VideoEdit**	**DTR**	**ShellEdit**
Label edit	Label edit	Label edit	Label edit	Label edit
Set duration				Set duration
	Set volume		Set volume	
	Set stereo balance			
		Turn audio channels on or off, right, left, stereo, or mute)		
		Set playback speed		
Quoted text window: •Set size, shape, and location of window •Hide or show window after quote plays				
Quoted text variables: •Font family •Style •Point size				

Adding an Edit to an Edit List

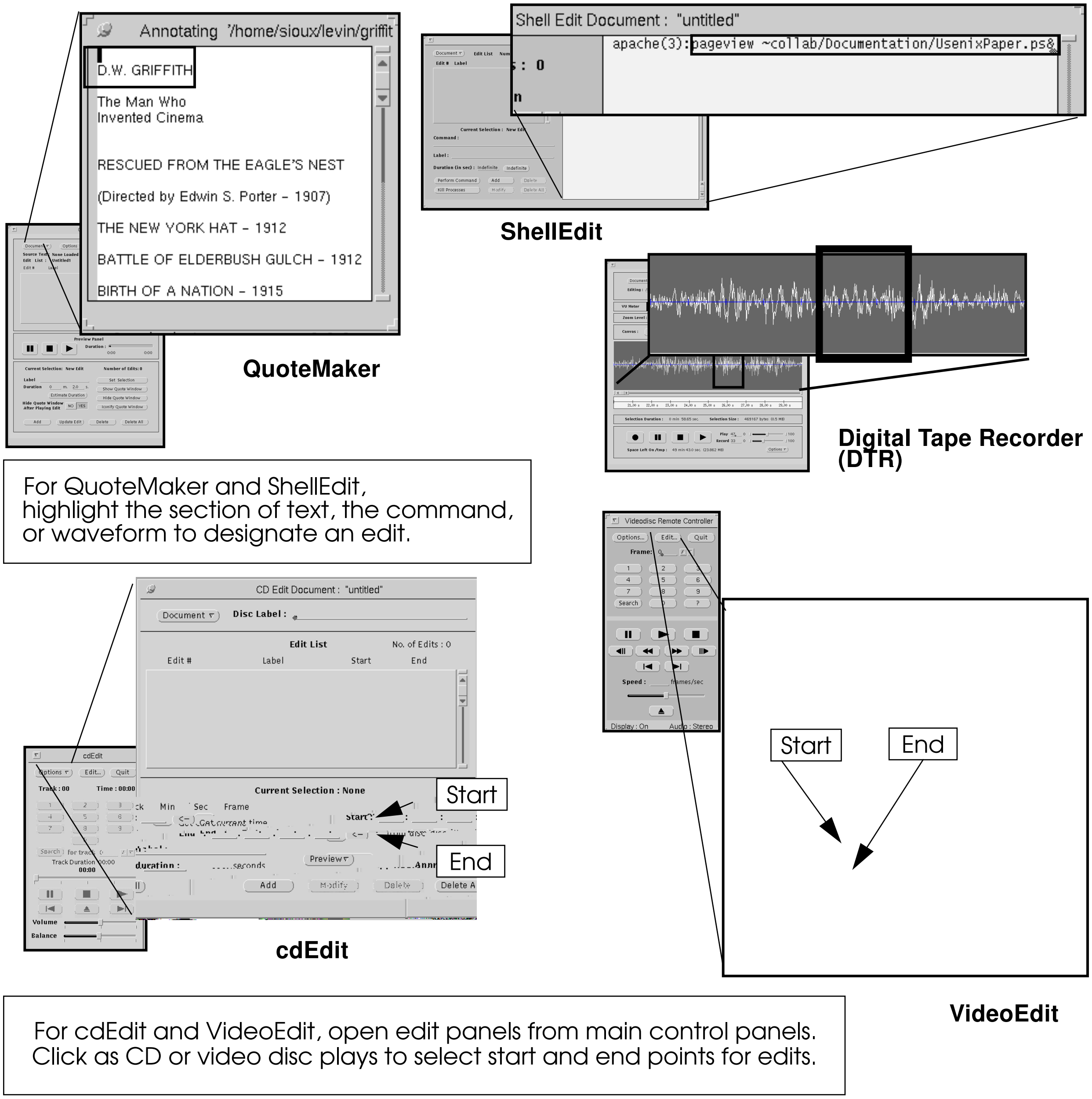
After you have assigned the edit variables, you are ready to add the edit to an edit list. This process is similar for each editor . First, select a name for your edit (or use the default name). Then, click on the button labeled ***Add*** (exception, for DTR, click on ***Load Selection*** first, and then click on ***Add*** .)

Assigning Edit Attributes

After selecting the content of an edit, you can choose other appropriate qualities, such as name, speed, volume, or duration. For example, here are some of the things you change for each editor:

QuoteMaker	Font and placement attributes
cdEdit and DTR	Volume, balance, duration
ShellEdit	Command type and duration

Table 1-1 shows the different kinds of variables that can be assigned to edits in each of the MAEstro editors.



D.W. GRIFFITH

The Man Who
Invented Cinema

RESCUED FROM THE EAGLE'S NEST

(Directed by Edwin S. Porter – 1907)

THE NEW YORK HAT – 1912

BATTLE OF ELDERBUSH GULCH – 1912

BIRTH OF A NATION – 1915

```
apache(3):pageview ~collab/Documentation/UsenixPaper.ps&
```

For QuoteMaker and ShellEdit, highlight the section of text, the command, or waveform to designate an edit.

For cdEdit and VideoEdit, open edit panels from main control panels. Click as CD or video disc plays to select start and end points for edits.

Figure 1-4 Selecting Start and End Points for Edits

Creating Edits

To create a presentation, you must first select the material you wish to use. Each editor controls a different medium, or source of information, as explained earlier. MAEstro media editors organize the material you wish to use by reading and writing files containing start and stop points and other information, called edit lists.

For example, if you wanted to use a particular scene from a movie, you would use VideoEdit to play the disc until you came to the scene you wanted. Then, you would use the editor to mark the starting and ending points. To identify this clip for later use, you would use the editor to label the clip, and then store it in a list of clips (edits) for later retrieval. After you have selected all the material you think you might want, you open the TimeLine editor and place your edits in sequence, adding voice-overs, music, or any other material you like.

Regardless of which editor is in use, they all follow the same general procedure for creating a list of edits:

- Selecting material
- Assigning edit attributes
- Adding edits to an edit list
- Previewing edits
- Modifying edits
- Naming and saving edit lists

Selecting Material

As mentioned above, when you select material for an edit, you are determining its beginning and ending point. Figure 1-4 shows how some editors do this. They use various methods to bracket edits, such as by time, by track, by frame, and by location in a file.

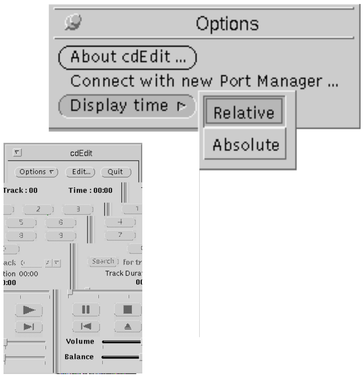


Figure 1-3 Setting Options for Various Editors

For VideoEdit, you must set the type of player and the serial port number. The other options for VideoEdit, cdEdit, and DTR can be set and changed at any time. Setting specific options is described in the chapters for these editors.

	size and shape. When you release the mouse button, the window stays in its new form.
Dragging Windows	Move the mouse cursor over one of the sides of the window and hold down the left mouse button.The cursor grabs the window and you can move it anywhere on the screen you want to.

Once the editors have been invoked, you are ready to set options for the editors with external devices.

Setting Options for External Devices

Before you can play or create presentations, you may have to set various options on some of the control panels to define what type of media you are using Figure 1-3 shows the three editors that accept options: cdEdit, VideoEdit, and DTR.

To save space on your screen, you can close any control panel to an icon by clicking on the square button in the upper right corner of the panel. To reopen your panel, click on the icon and it displays your program exactly as you left it. Icons for the editors are shown in Figure 1-2.

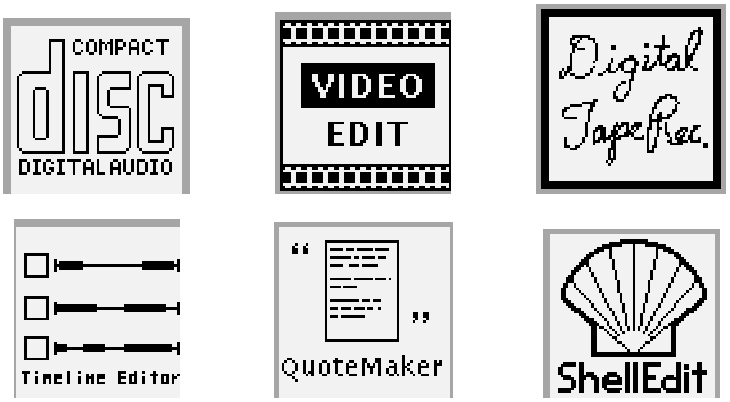
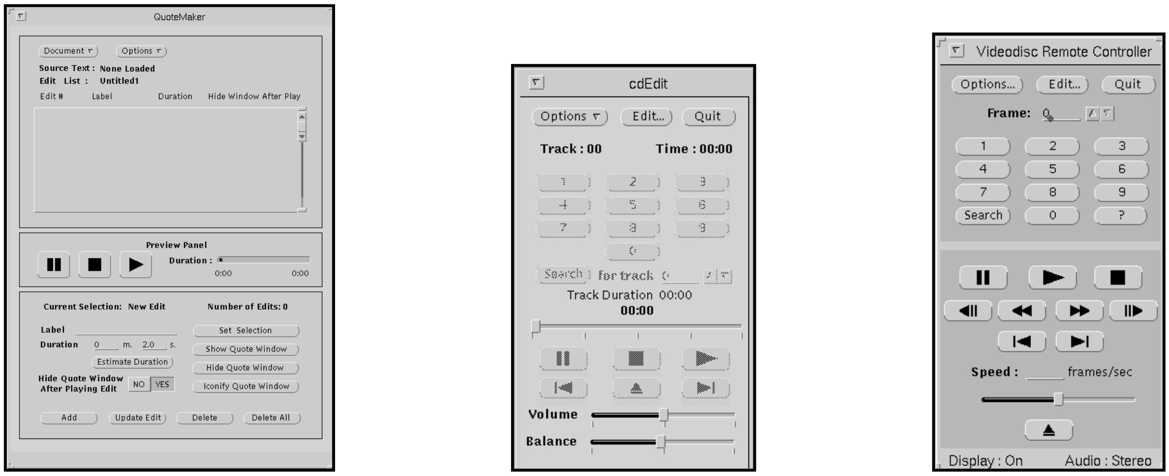


Figure 1-2 Icons for MAEstro Editors

You operate the edit panels by using the mouse. The mouse buttons work just like they do under any Sun OpenLook™ application, using the same single and double clicks. Likewise, the windows use the Sun window manager and also follow the OpenLook conventions. For example:

Refreshing Windows	To redraw the contents of your window, point to the bar across the top of that window (where the titles appear). Hold down left mouse button to display the menu, then select ***Refresh.***
Sizing Windows	Move the mouse cursor over any corner of the window. The cursor changes shape into a set of concentric circles. Hold down the left mouse button to grab the corner. As you move the mouse, the window changes

When you invoke an editor , its control panel appears on the screen as shown in Figure 1-1. These control panels are similar in appearance to help you learn their functions quickly .


QuoteMaker

Source Text : None Loaded
Edit List : Untitled1
Current Selection: New Edit
Number of Edits: 0
Duration 0 m. 2.0 s.
Hide Quote Window After Playing Edit NO [✓ YES]

cdEdit

Track : 00
Time : 00:00
Track Duration 00:00
00:00

VIdeoEdit

Frame: 0
Display : On
Audio : Stereo


Digital Tape Recorder (DTR)

Duration :
Size :
Editing :
Editing Status :
Zoom : 1.00 time(s)
Edit Mode : ON [✓ OFF]
Selection Duration :
Selection Size :
Play 33
Record 42
Space Left On /tmp : 51 min 7.0 sec. (24.537 MB)

ShellEdit

Shell Edit Document : "untitled"
Number of Edits : 0
Current Selection : New Edit
Command :
Label :
Duration (in sec) : Indefinite

```
apache(3):
```

Figure 1-1 MAEstro Editor Control Panels

Overview of the Authorship Process

Creating multimedia presentations is known as authorship. In general, there are three steps involved:

1. Invoking and setting options
2. Selecting and creating edits
3. Building a presentation

This section describes each step as it applies generally to all the media editors. Reading this section may help you more quickly grasp how to use each individual editor, because all the editors have a similar user interface.

Invoking the Editors

After installing MAEstro and connecting any required external device, such as a compact disc player, you must invoke the MAEstro editor specific to that device. All the editors are invoked in generally the same way. You can invoke as many or as few as you need at any time, though you usually work with one at a time. Before you can invoke any editor, PortManager must be running. This communications software is automatically started as part of the installation process. *Appendix A, Using the Port Manager* contains more information on PortManager.

To invoke an editor, first be sure your window system is operating. Then, open a UNIX shell window. Change directories to where you have MAEstro installed, and move to the *Applications* directory. Type the name of the editor you want, followed by an ampersand to begin the application in the background. Each chapter reminds you how to invoke the editors, but assumes you are already in the *Applications* directory. Here is the list of names you may enter:

```
cdEdit&
DTR&
QuoteMaker&
ShellEdit&
VideoEdit&
```

Overview of MAEstro Editors

The MAEstro software package lets workstation users create multimedia presentations combining text, CD music, video, digitized audio, and processes launched with UNIX shell commands. Each of these media has an associated application, called a media editor, used to operate the media player and to select material for your presentation.

Once you have selected your material, called edits, you organize them into a presentation using the TimeLine editor. This editor is the heart of the system; it allows you to visually lay down edits in relation to each other, synchronize their play, and perform other fine tuning functions. *Chapter 6, Working with UNIX Commands (ShellEdit)* explains how to use the TimeLine editor in detail.

Here is a list of the currently available media editors covered in this document:

QuoteMaker	for working with text and titles
cdEdit	for controlling and editing music on CDs
VideoEdit	for controlling and editing video discs
Digital Tape Recorder (DTR)	for recording and editing sound via the workstation's built-in digital audio capabilities
ShellEdit	for working with UNIX shell commands

The current release of MAEstro includes these additional media editors, which are not documented in this manual:

vcrEdit	an application nearly identical to VideoEdit, used to control the NEC$^{\text{tm}}$ PC-VCR, a VHS videotape player.
vcrDub	used to record video segments from one tape to another, and to re-arrange the order of those segments.
ImageEdit	for showing images as part of a multimedia presentation. ImageEdit currently supports the GIF and TIFF image formats.

Chapter 1,
Introduction to MAEstro

This chapter introduces the MAEstro multimedia authoring environment. It first explains what hardware you need, then provides an overview of the various editors and what they do. It covers the general way all the editors work, and provides an overview of their functions so that you can select which ones you want to use. This chapter explains all the common functions, such as how to use the mouse, open and close applications, and various UNIX techniques that are not repeated in the following chapters.

The rest of the manual describes the various functions provided by MAEstro, and the editors that control them. It is organized according to the various media you might want to include in your presentation, such as music and sound, or video. There is at least one editor for each medium covered in each chapter .

Hardware Requirements

The current suite of MAEstro applications runs on any model of the Sun™ SPARCstation™. To run well, it requires a minimum of 16 MB of memory . Some of the applications also require external hardware:

- cdEdit requires a Sun CD-ROM drive.
- VideoEdit requires a laserdisc player capable of external computer control.
- DTR requires an audio input/output cable, a microphone or external sound source, and optional headphones or external speakers.

This manual assumes you already have the devices attached or know how to attach them. If you do not, see the SPARCstation manual for more information.