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VAXstation 3100 Model 30

Desktop-VMS Basic System Guide

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About This Guide

Purpose of This Guide

The VAXstation 3100 Model 30 Desktop-VMS system functions as a **satellite** when it is part of a **cluster** connected to a server, either a VAXstation 3100 Model 40 or a VAXserver 3400 Model 640QS. When not clustered, it functions as a **standalone** system.

This manual contains all the information you need to install, use, and maintain a VAXstation 3100 Model 30 Desktop-VMS system.

For information about installing and managing a Desktop-VMS system, see the *Desktop-VMS Management Guide*.

Who Should Use This Guide

This guide is for anyone who will be using a VAXstation 3100 as a satellite system connected to a server. By reading this guide, you can learn how to work with files, hardware devices (tapes, diskettes, and printers), and applications (such as the Bookreader, Calculator, and the Notepad editor).

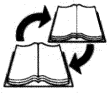
Structure of This Guide

This guide contains fourteen chapters and four appendixes.

- Chapter 1 provides an overview of the VAXstation 3100 and Desktop-VMS system. It also defines the relationship between a VAXstation 3100 Model 30 and a VAXstation 3100 Model 40 or VAXserver 3400.
- Chapter 2 describes how to set up your new VAXstation 3100 equipment, including things to consider when choosing a location for the system, and safety and security considerations.

- Chapter 3 contains a DECwindows tutorial that steps users through a sample first session.
- Chapter 4, designed as a refresher or for those users already familiar with graphics windowing systems, describes in reference format how to use the DECwindows interface.
- Chapter 5 provides a quick overview of files, directories, and devices and their place in the VMS directory structure.
- Chapter 6 describes how to use FileView to access applications and work with files.
- Chapter 7 describes how to customize FileView to accommodate your own computing environment and needs.
- Chapter 8 describes how to use applications, such as the Bookreader and Notepad editor, that are part of your Desktop-VMS system.
- Chapter 9 tells you how to use the Session Manager to create new windows, and customize your work environment to suit your own needs.
- Chapter 10 describes how to use tapes, disks, and diskettes. The chapter also shows you how to create backups of your files to prevent the accidental loss of data.
- Chapter 11 shows you how to identify and solve problems.
- Chapter 12 describes additional hardware and software options for your system. It includes an overview of VAXpc software and SCSI (Small Computer System Interface) hardware.
- Chapter 13 gives information on options for your VAXstation 3100.
- Appendix A gives general information about your keyboard.
- Appendix B lists FileView task messages and describes how to use them in verb command files to make your custom verbs appear better integrated with FileView. This appendix also contains a sample command file that shows how these task messages are used.
- Appendix C lists error and status messages that may appear when you are starting a session, working with the Session Manager and FileView, or running applications on remote systems.
- Appendix D gives hardware specifications.
- The Glossary defines technical terms used in this guide.

Guide to VAXstation 3100 Desktop-VMS Documentation



The manuals you will use to install and operate your VAXstation 3100 Desktop-VMS system are listed below. The left column lists the manuals. The right column contains the type of tasks and information given in each manual.

Manual	Task
Planning and Preparation	Planning your office
Desktop-VMS Basic System Guide	Setting up the system unit
	Connecting the keyboard and mouse
	Turning your satellite system on
	Using the mouse
	Manipulating windows
	Creating and using files
	Reading documentation online
Monitor Installation/Owner's Guide	Connecting a monitor to your system unit
	Adjusting your monitor's brightness and contrast
Desktop-VMS Management Guide	Connecting to a network
	Installing Desktop-VMS software
	Setting up networks and printers
	Registering licenses and installing layered products
VMS DECwindows Desktop Applications Guide (available online)	Using Calendar, Cardfiler, and other DECwindows applications
Layered Product User's Guides	Using layered products

Conventions

The following conventions are used in this guide:

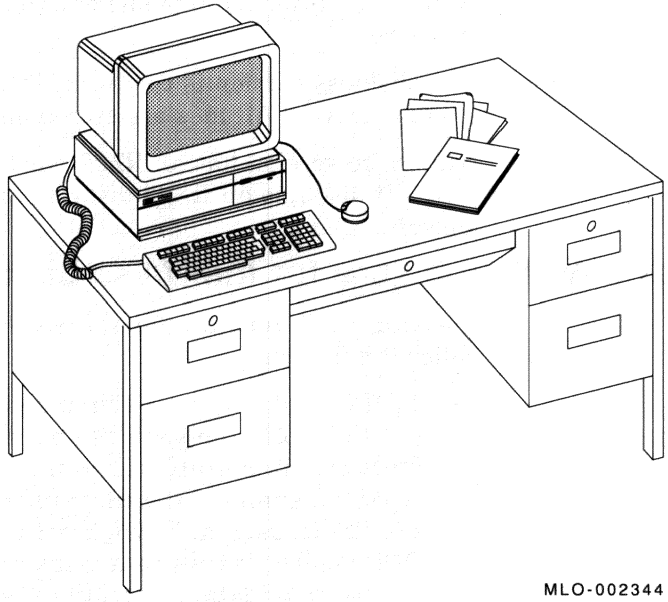
mouse	The term mouse is used to refer to any pointing device, such as a mouse, a puck, or a stylus.
MB1, MB2, MB3	MB1 indicates the left mouse button, MB2 indicates the middle mouse button, and MB3 indicates the right mouse button. (The buttons can be redefined by the user.)
Ctrl/x	A sequence such as Ctrl/x indicates that you must hold down the key labeled Ctrl while you press another key or a pointing device button.
PF1 x	A sequence such as PF1 x indicates that you must first press and release the key labeled PF1, then press and release another key or a pointing device button.
Return	A key name is shown enclosed to indicate that you press a key on the keyboard.
blue-green ink	Blue-green ink indicates information that you must enter from the keyboard or that you must click on with the mouse. In the online version of the book, this information is shown in bold type.
bold	Bold type is used to introduce new terms. New terms are defined in the Glossary.
italics	Italic type is used for information that can vary in system messages (for example, Internal error *number*.)
UPPERCASE	Uppercase letters in commands indicate that you must enter a command exactly as shown. For example, enter **$ RUN** Return **$**
lowercase	Lowercase letters in commands indicate that you must substitute a word or value. For example, enter **$ RUN program_name** Return **$**
Warning	Warnings provide information to prevent personal injury. Read these carefully.
Caution	Cautions provide information to prevent damage to equipment or software. Read these carefully.
Note	Notes provide general information about the current topic.

1

Your VAXstation 3100 Desktop-VMS System

This chapter describes some of the features of the VAXstation 3100 Desktop-VMS system (Figure 1–1).

Figure 1–1 VAXstation 3100 System



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What Is a VAXstation 3100?

The VAXstation 3100 running Desktop-VMS software is a low-cost desktop system that offers all the advantages of Digital's powerful VAX architecture. Applications include an analog/digital clock, calendar, and calculator. Online manuals, a windowing environment, and other features make the VAXstation 3100 easy to use.

The basic system includes the windowing environment and high-speed processing, but you can add diskette and tape drives, printers, and other devices to increase the usability of your system. Your VAXstation 3100 is joined with others to form a cluster, thus sharing processing power, applications, and devices. You have the ability to start small and add to the system as you need to.

These features, including picture-like icons for applications, mean enjoyable computing for you.

Configurations

Your VAXstation 3100 is one of two configurations, either diskless or turbo.

The diskless version is the basic, introductory system, containing no disk drives. All files are stored on the server.

The turbo version has an RZ22 hard disk, holding 52 megabytes of data. It also has an RX23 diskette drive, which uses 1.2 megabyte diskettes.

Desktop-VMS Software for the VAXstation 3100

Desktop-VMS Software for the VAXstation 3100 offers the following features:

- A DECwindows user environment—VMS DECwindows allows you to invoke applications and perform tasks by selecting functions from graphical menus; you do not need to rely on typed commands. You can run several different applications simultaneously and switch between them. In addition, DECwindows works in a distributed environment; it allows you to share data, applications, and system resources over a network.
- A DECwindows interface to system management—Desktop-VMS Software provides a DECwindows interface to commonly used system management functions. Through graphical

menus, you see only those functions necessary to manage your Desktop-VMS environment.

- Online documentation—Access to online documentation is provided by the DECwindows Bookreader. You can use the Bookreader to browse through documentation by paging through a selected manual or by selecting entries from the manual's index or table of contents.

In addition to the Desktop-VMS Software system, the Desktop-VMS compact disc includes pre-installed software for the following layered products:

- Distributed System Services (DSS)

  The DSS program provides users with the ability to treat remote network resources as if they were local. Current DSS products include:

  - VAX Distributed File Service (DFS)—Provides local access to remote VMS disk resources.
  - VAX Distributed Queuing Services (DQS)—Provides local access to remote VMS printers.

- VAXpc for VMS

  VAXpc for VMS software is a DECwindows application program that emulates an IBM PC AT computer, enabling VAXstation users to access PC applications.

While these products are included on the Desktop-VMS Software CD, the Desktop-VMS product does not include licenses for these products. If you purchase a license for these products, you will receive a Product Authorization Key (PAK) that allows you to access the software.

Contact your Digital sales representative for ordering information.

Benefits of Being Joined to a Cluster

Your VAXstation 3100 is a member of a cluster. Clustering closely connects several VAX processors so that they can perform and be managed as a single powerful system. Processors in a cluster share storage, applications, and other system resources in a flexible, yet centrally controlled configuration.

As a satellite member in a local area VAXcluster, or LAVc, you have a relationship that gives you many benefits, while minimizing time-consuming tasks. Management tasks, such as making backup copies of your files and installing software, are done by a system manager. One system manager can serve

several satellite users. You're connected to the system manager's processor, the server, by the Ethernet.

Let's look at your benefits in more detail.

- Central System Management

  The system manager installs software, performs file backups, tracks system security, and manages resources for all satellites.

- Distributed Processing

  The system manager establishes clusterwide batch queues and print queues that serve satellites in the cluster. This allows work to be done on the most available processor. Queues can be distributed to take advantage of conveniently placed or least used devices.

- Resource Sharing

  Right from your desktop, you have access to CPU power, disks, printers, applications, and data located on other systems throughout the cluster. Satellites can share data, allowing more than one user access to the same file.

- Increased Access

  Access to the cluster is through any satellite in the cluster. If the satellite that you are used to using is not available for any reason, you can work from another.

2

Installing System Hardware

After helping you check that you have all your equipment and the right location for your system, this chapter shows how to set up your system, including:

- Connecting the keyboard
- Connecting the mouse
- Attaching Ethernet terminators to prepare either for networking or diagnostic tests
- Connecting the monitor
- Connecting the power cords
- Starting your system

This chapter goes on to show you how to prepare your system to use software and what to do to get your system connected to a network.

Choosing the Right Location

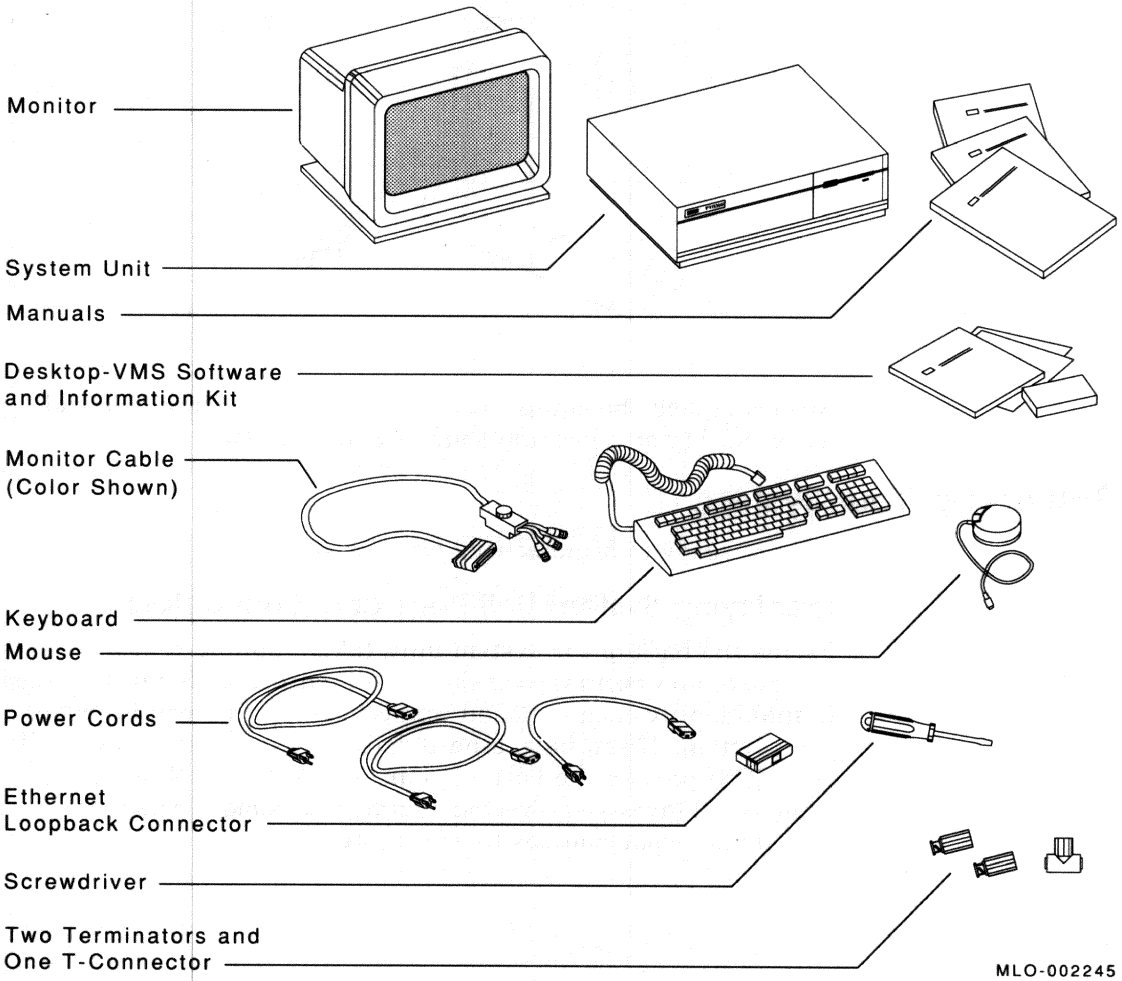
Use the following checklist to keep your VAXstation 3100 operating at its best:

- Keep the temperature between 10°C and 40°C (50°F and 104°F) and the relative humidity between 10% and 95%.
- Keep the air well circulated to prevent excess heat and dust from accumulating.
- Keep your equipment away from heaters, photocopiers, direct sunlight, and abrasive particles.
- Before you set up your system, select a surface that is large enough to hold a system unit with a monitor on top, a keyboard, and mouse. Your desk or work table is a good choice. If you need to, you can place your system unit on a shelf. To place your system on a shelf, you must order a long monitor cable.
- You will be more comfortable if you place the monitor so that the top line of the monitor display is at eye level.
- To avoid screen glare, pick a place where bright light will not reflect off the monitor.
- Keep the area clean. Do not place food or liquid on or near your equipment, and do not place your system unit directly on the floor. Dust and dirt will damage the system components.
- Keep air vents clear on each side of the system unit for proper ventilation.
- Do not place the system unit on its side. Blocking the air vents can cause the system unit to overheat.
- Be sure to always connect your computer to an isolated grounded circuit.
- If you have several pieces of equipment that need to be plugged into an electrical outlet, use a grounding power strip. Many power strips come with an on/off switch and a surge protector (which acts like a circuit breaker).
- To avoid damaging equipment that has been moved inside from a cold environment, let the equipment warm to room temperature before you turn it on.
- Finally, carefully read all installation instructions before you turn on the power.

Unpacking

Check whether your system unit box is labeled color or monochrome. Use the color or monochrome monitor cable that comes with your system unit to connect the right monitor cable to the system unit.

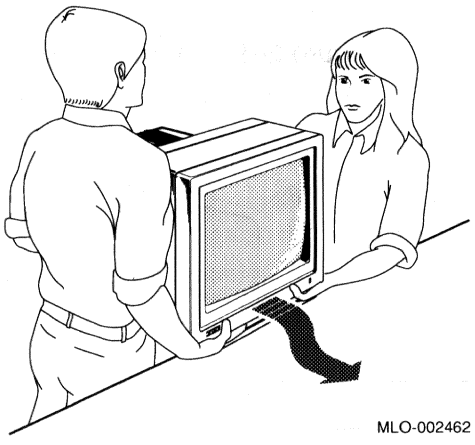
Figure 2–1 Unpacking



Unpack your system unit box and monitor box. Make sure you have all the parts shown in Figure 2–1. The contents of each of your boxes may differ from those shown in Figure 2–1 depending on what you order.

Caution *Because of the weight of the system unit and the monitor, two people should lift the equipment (Figure 2–2).*

Figure 2–2 Lifting Equipment



Always repack the equipment in its original packing material when moving or relocating your VAXstation 3100.

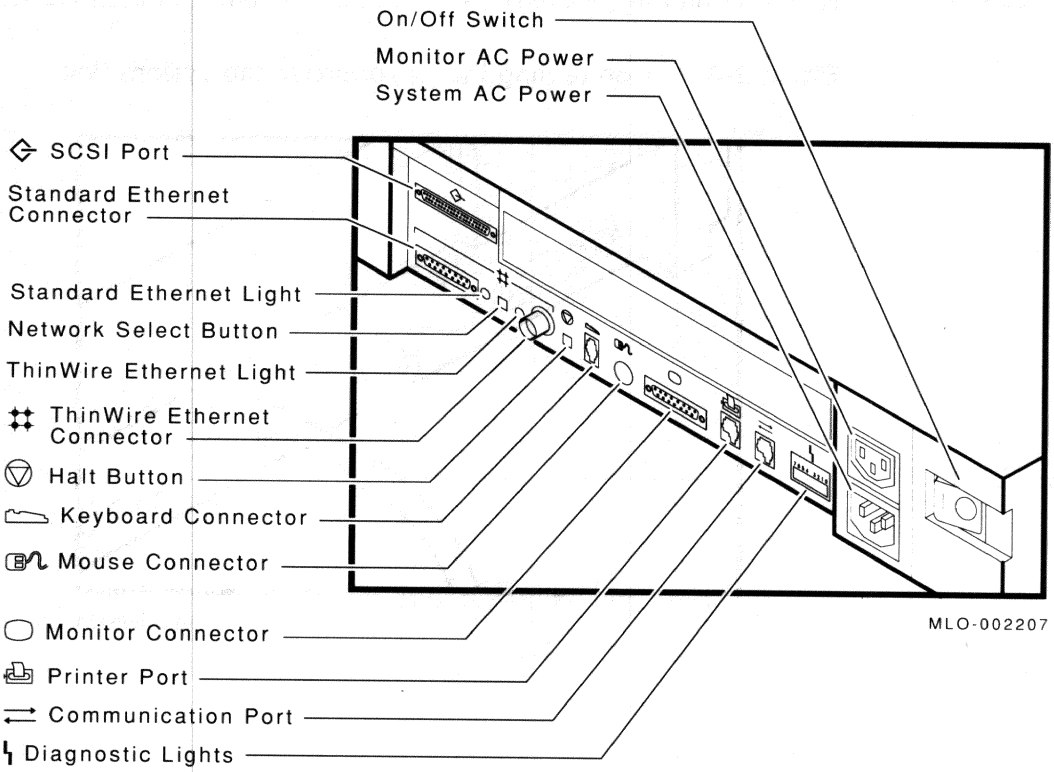
Setting Up Your System

You are ready to begin setting up your system.

Identifying System Unit Ports and Connectors

Facing the back of the system unit, take a minute to look at all the **ports** and **connectors** shown in Figure 2–3. Symbols (called **icons**) identify each port and connector you will need to install your system. If you have a hard disk in your system, there will be a SCSI port on the back of your system unit with a cover. Chapter 12 gives you directions on how to remove this cover to connect an expansion box to your system.

Figure 2–3 System Unit Ports and Connectors

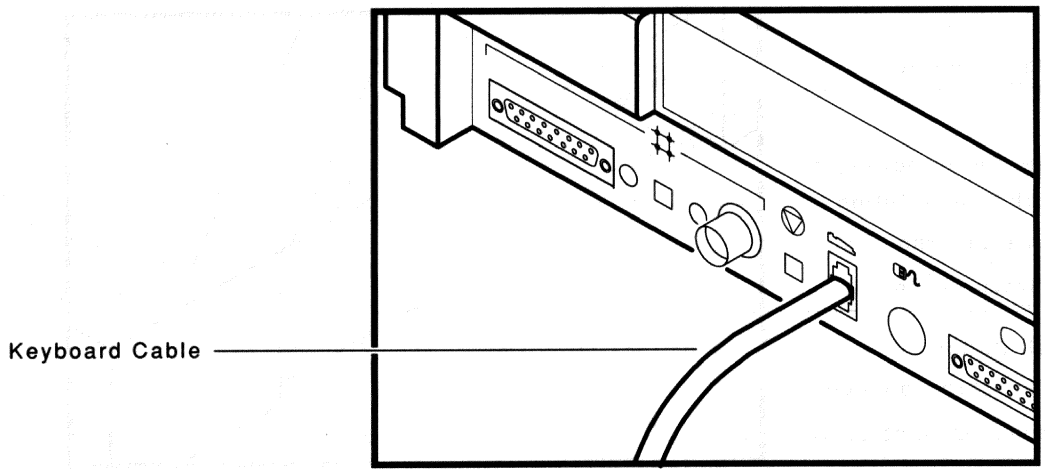


If you have a diskless system, your system will not have the SCSI port shown in Figure 2–3.

Connecting the Keyboard

Connect the free end of the keyboard cable to the keyboard connector on the back of the system unit, as shown in Figure 2–4.

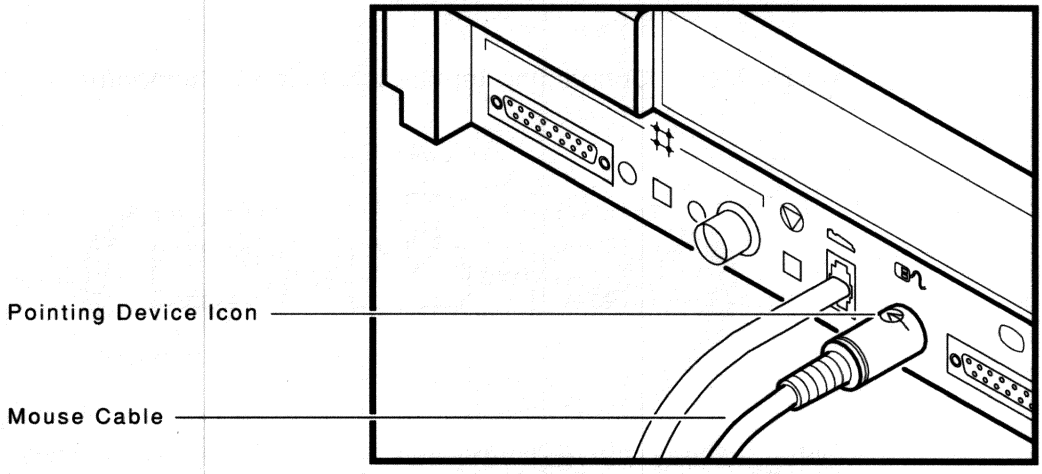
Figure 2–4 Connecting the Keyboard to the System Unit



Connecting the Mouse

Connect the free end of the mouse cable with the pointing device icon on top to the mouse connector on the back of the system unit as shown in Figure 2–5.

Figure 2–5 Connecting the Mouse to the System Unit

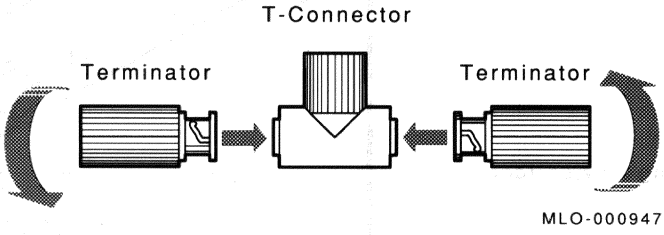


Attaching Ethernet Terminators

You will need to connect the T-connector with two terminators and the loopback connector to the system unit to complete the diagnostic test later in this chapter.

1 Push a terminator into each side of the T-connector and turn both to the right until they lock into place, as shown in Figure 2–6.

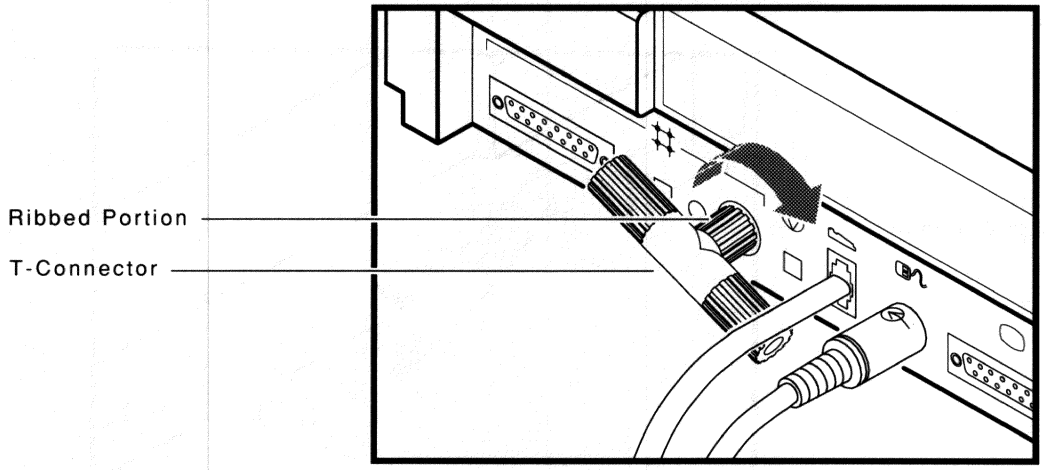
Figure 2–6 Connecting Terminators to the T-Connector



Later, if you decide to connect to a network, you will exchange ThinWire cable sections for one or both terminators, depending on your network setup.

2 Next, connect the T-connector to the ThinWire Ethernet connector on the back of the system unit and turn the ribbed portion to the right, as shown in Figure 2–7.

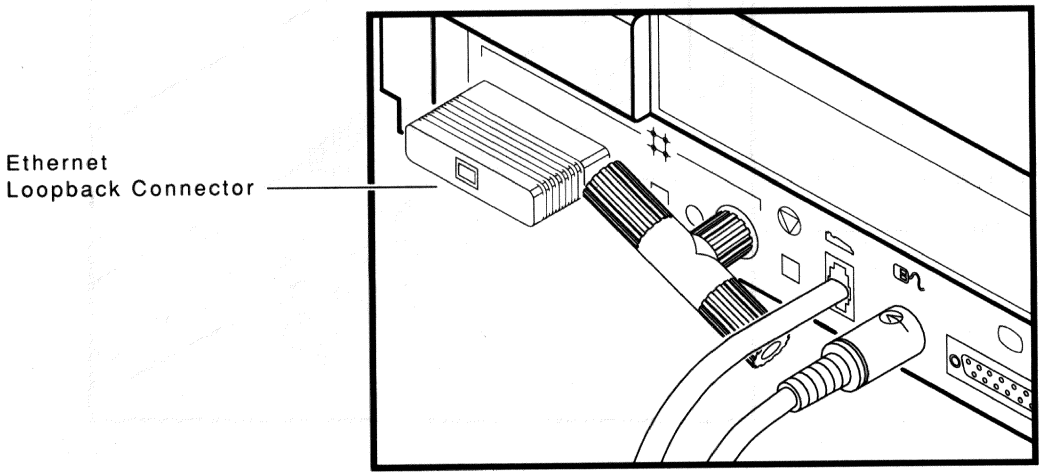
Figure 2–7 Connecting the T-Connector to the System Unit



Make sure the T-connector is set at an angle, as shown in Figure 2–7. This allows room for the loopback connector.

3 Connect the loopback connector to the standard Ethernet connector on the back of the system unit, as shown in Figure 2–8.

Figure 2–8 Connecting the Loopback Connector to the System Unit



Connecting the Monitor

You can put the monitor beside the system unit or on top of it. To place your monitor away from the system unit, you need to order a long monitor cable.



Installation is basically the same for any of the monitors available for your system. See your monitor guide for information on:

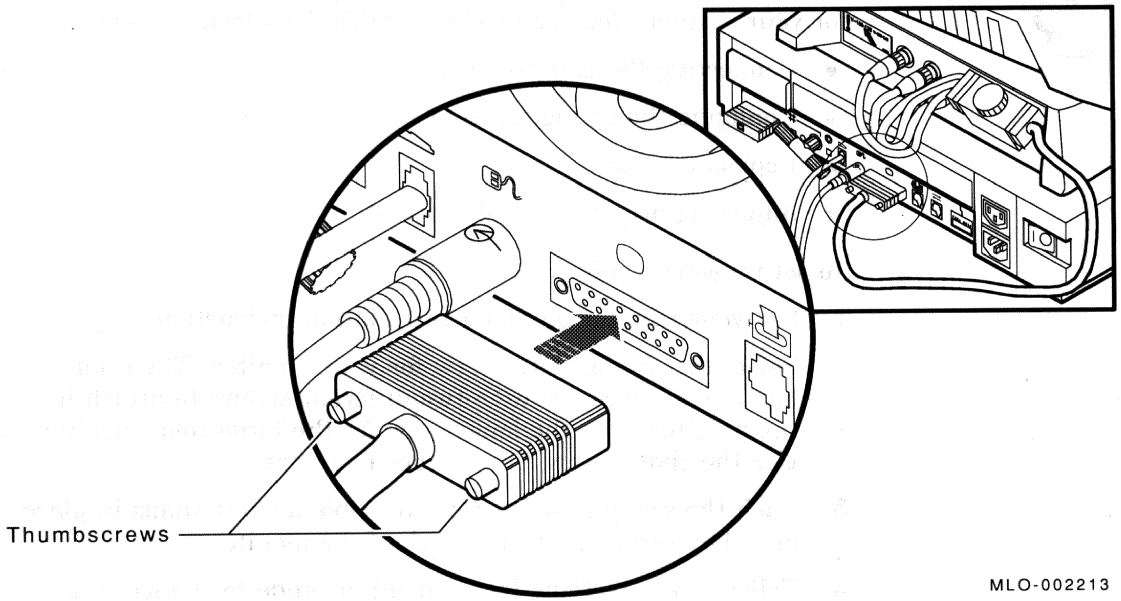
- Connecting the monitor cable
- Changing the voltage setting
- Replacing a fuse
- Adjusting brightness and contrast

To set up your monitor:

1. See your monitor guide for installation instructions.
2. Select the appropriate screw for your monitor. The color monitor cable comes with two different screws to attach it to the monitor. Use the long screw for the large color monitor. Use the short screw for all other monitors.
3. Push the screw into the monitor cable until it snaps in place and then screw it into the back of the monitor.
4. Follow the directions in the monitor guide to connect the monitor cable to the monitor. Do not connect the keyboard and mouse to the monitor cable. (You have already connected the keyboard and mouse to the system unit.)

5 Connect the free end of the monitor cable to the back of the system unit, as shown in Figure 2–9.

Figure 2–9 Connecting the Monitor Cable to the System Unit



6 Tighten the thumbscrews on the monitor connector by turning them to the right.

Connecting the Power Cords

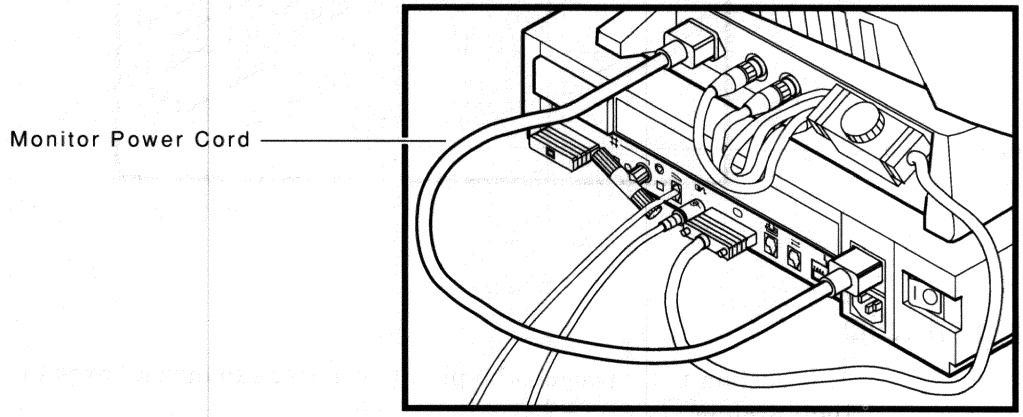
The power cord is an electrical ground for your system. To connect your system to a power source, perform the following steps:

1 Make sure that the monitor, and the system unit are off (0).

Note *The system unit automatically adjusts itself to the correct voltage.*

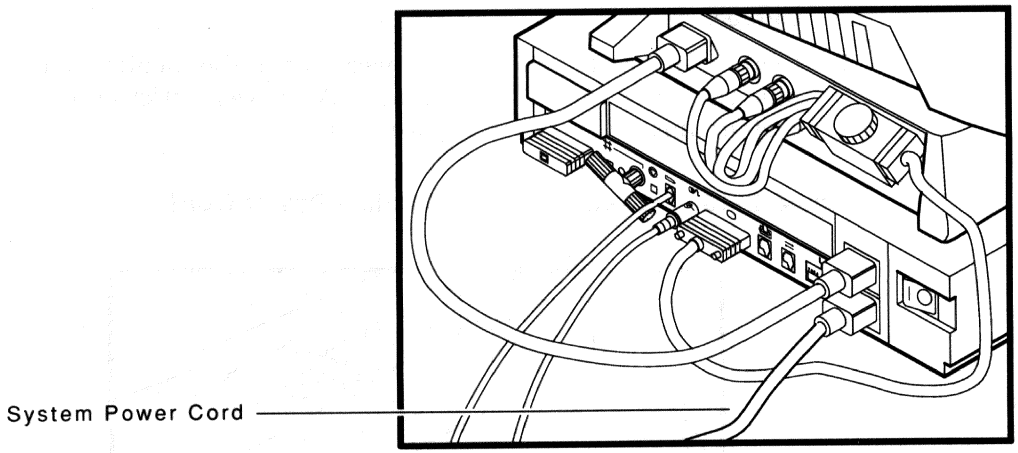
2 Connect one end of the short power cord to the monitor and plug the other end into the monitor AC power outlet on the system unit, as shown in Figure 2–10.

Figure 2–10 Connecting the Monitor Power Cord



3 Connect the long system power cord to the system unit and plug the other end into a grounded electrical wall outlet, as shown in Figure 2–11.

Figure 2–11 Connecting the System Power Cord



Inserting Media

This section is for people who plan to connect expansion boxes to their system.

Before you turn on your system, insert the following media:

- RRD40 test disc
- TK50 tape cartridge

If you have connected an RRD40 compact disc expansion box or TK50Z tape expansion box to your system, insert the test disc that comes with the compact disc into the compact disc drive or the TK50 tape cartridge that comes with the TK50Z expansion box. See Chapter 12 for instructions on connecting expansion boxes and inserting the test compact disc and a tape cartridge.

Starting Your System



To start your system, turn your equipment on (|) in the order given.

1 Turn expansion boxes on (|) in the following order:

- RZ55 hard disk expansion box
- TK50Z tape expansion box
- RRD40 compact disc expansion box

To connect expansion boxes, see Chapter 12.

2 Turn the printer and modem on (|), if you have this equipment.

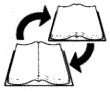
To connect a printer, see Chapter 13. To connect a modem, see Chapter 13.

3 Turn the monitor on (|).

Leave the monitor on so that the monitor turns on and off with the system unit.

4 Turn the system unit on (|).

The green light on the front of the monitor and system unit should be on now. It takes approximately one and a half minutes for the first line of the power-up display to appear.



This is a good time to adjust the brightness and contrast of your monitor. Your screen looks blank if the brightness and contrast are turned down too low. Follow the directions in your monitor guide to set the brightness and contrast.

Checking the Power-Up Display

When you turn on the system unit, a power-up display comes up on the monitor screen.

If you see a display similar to one of the following, your system has passed all power-up tests.

Power-Up Display for Diskless System If you have a diskless system, you see a display similar to the following. This display means that your system has passed all power-up tests:

```
KA42-A  V1.0

F...E...D...C...B...A...9...8...7...6...5...4...3_..2_..1..

OK

VMS/VMB    ULTRIX    ADDR     DEVTYP    NUMBYTES    RM/FX    WP    DEVNAM
-------    ------    ----     ------    --------    -----    --    ------
ESA0       SE0       08-00-2B-07-E3-83

[ESA0:] ?>>>
```

Power-Up Display for System with Hard Disk and Diskette Drive If you have a system with a hard disk and diskette drive, you see a display similar to the following. This display means that your system has passed all power-up tests:

```
KA42-A  V1.0

F...E...D...C...B...A...9...8...7...6...5...4...3_..2_..1..

OK

?  E  0040  0000.0005
?  D  0050  0000.0005

VMS/VMB    ULTRIX    ADDR       DEVTYP    NUMBYTES    RM/FX    WP    DEVNAM
-------    ------    ----       ------    --------    -----    --    ------
ESA0       SE0       08-00-2B-07-E3-83

DUA2       RX2                  DISK                  RM             RX23
...HostID....         A/6       INITR

DKA300     RZ3       A/3/0/00   DISK       55 MB      FX             RZ22
...HostID....         A/6       INITR

[ESA0] ?>>>
```

Press Ctrl/c to continue. That is, hold down the Ctrl key while you press the c key.

Remove all media from integral devices or expansion boxes after you have checked the power-up display. See Chapter 12 for instructions on removing the test compact disc from the RRD40

expansion box and for instructions on removing a tape from the TK50Z tape expansion box.

If You Have Problems

If you do not see one of the power-up displays, turn off your system unit and review each installation step. Repeat the power-up procedure.

If you still have problems, see the *Desktop-VMS Management Guide* or ask your system manager for an explanation of power-up error messages.

If You Need to Set the Keyboard Language

If the following display appears after you press Ctrl/C, you need to set your keyboard language. If this display does not appear, your keyboard language has been set.

```
0) Dansk                          8) Français (Suisse Romande)
1) Deutsch                        9) Italiano
2) Deutsch (Schweiz)              10) Nederlands
3) English                        11) Norsk
4) English (British/Irish)        12) Português
5) Español                        13) Suomi
6) Français                       14) Svenska
7) Français (Canadien)            15) Vlaams

3? >>>
```

To set the keyboard language:

1. Select a language from the keyboard language menu to match the type of keyboard you have.
2. If you want to select the default (English, or option 3), press the Return key. Otherwise, enter the number of the language that matches the language of your keyboard, and press the Return key.

A different keyboard is supplied for each language. If you do not know the language variation of the keyboard you received, check the packing list.

The language you choose or that has already been set for you is saved in memory. If you need to change the keyboard language later, Chapter 11 shows you how.

What to Do Next

If you plan to add an expansion box to your system or other equipment, you need to do this before getting ready to use software. The following table shows you where to find this information.

Task	Location
Adding expansion boxes	Chapter 12
Connecting a printer	Chapter 13
Connecting a modem	Chapter 13
Connecting a tablet	Chapter 13

Getting Ready to Use Software

Since your VAXstation 3100 will be accessing Desktop-VMS software from a server; you need to set up your system to do this across the network.

To set up your system to access software on a server:

- Determine your Ethernet hardware address and write it down for your server manager.
- Verify that your Ethernet subsystem is working.

To determine the Ethernet hardware address:



1 Check to be sure the system is in console mode. If the console prompt (>>>) does not appear on the screen, press the halt button on the rear of the system unit. Use a pen or other pointed object to press the halt button.

2 At the console prompt, enter SHOW ETHERNET and press Return.

The Ethernet hardware address appears in the following format:

```
ID XX-XX-XX-XX-XX-XX
```

For example:

```
ID 08-00-2B-07-A7-80
```

3 Write your Ethernet hardware address here:

Ethernet hardware address _____

Note *The letters ID are not part of the address.*

Your server manager will use your Ethernet hardware address to set up a network connecting your system to the server.

To verify the Ethernet subsystem:

1 Enter TEST 50 at the console prompt and press Return.

If the last line of information in the display is NI 0000.0001, then the Ethernet subsystem is working. If the last line of information is not NI 0000.0001, then tell your server manager.

Turning Your System Off

Note *After your system manager installs software, do not turn your system off without talking to your system manager.*



Now that your equipment is installed, you need to turn your system off (0) so that your system manager can install Desktop-VMS software. Turn your equipment off in the following order:

1 Expansion boxes

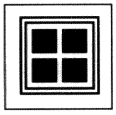
2 Printer, modem, or other equipment

3 System unit and monitor

Tell your system manager that your VAXstation 3100 is now ready to connect to the server.

3

Getting Started with DECwindows



Desktop-VMS software includes DECwindows, a software interface that takes advantage of your VAXstation 3100 workstation's graphic capabilities. DECwindows lets you divide your workstation screen into windows and design a working environment to suit your needs. You execute commands and perform tasks by selecting text and objects on your screen with the mouse instead of typing long command lines.

DECwindows displays application programs in windows. You can use these windows to run applications simultaneously on a single screen and switch between them. You can run a program in one window, read a mail message in a second window, and compose a memo in a third. And because DECwindows provides an environment in which all applications look and respond in a similar fashion, you can use the same handful of techniques to interact with each application.

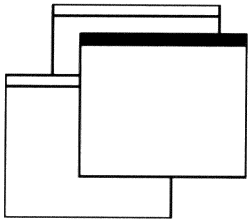
Although you can use DECwindows successfully on a standalone VAXstation 3100, DECwindows opens the door to additional computing opportunities if your VAXstation 3100 is linked to others in a network. With DECwindows, you can run applications on remote processors for display in windows on your VAXstation 3100 monitor. This means that you can run an application that demands a large amount of computing power on a processor best suited for that task and display it in one window while you display a file located on your local VAXstation 3100 disk and edit it in another window. Although your session might have multiple applications running on multiple processors, DECwindows cleanly integrates these application windows on your VAXstation 3100 monitor, and you can continue to move freely between them.

The exercises in this chapter will give you hands-on experience using DECwindows. You will learn how to:

- Start a DECwindows session
- Run and use applications
- Manage windows, including moving windows, shrinking a window to an icon, expanding an icon to a window, and changing the size of a window
- Put a session on hold
- End a session

When you complete the exercises, you will be familiar with most of the techniques you need to use DECwindows successfully.

What Are Windows?



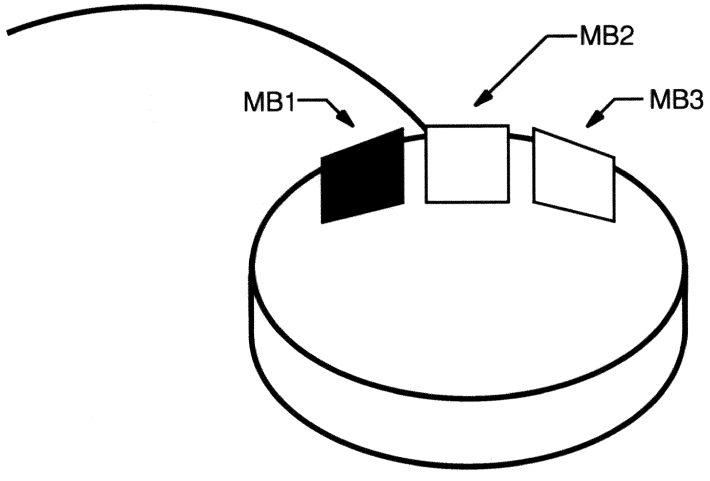
You can think of your workstation screen as a desktop with sheets of paper lying on it. You can move the sheets of paper around and you can arrange sheets of paper above or below other sheets.

With DECwindows, these sheets of paper where you do your work are called **windows**. A window is an area on your workstation screen that represents all or part of an application. For example, one window you can open represents the Notepad editor. In this window, you can create new files or edit existing ones. Other applications include Mail, which allows you to send and receive electronic mail, and DECterm, which looks and functions like a VT340 terminal.

Working with the Mouse

Traditional computing requires you to interact with your screen by typing text and pressing keyboard keys. The mouse—the hand-held pointing device attached to your workstation—makes using DECwindows as easy as pointing to an object on your screen and clicking a button. You use the mouse to choose commands from a menu, to expand and shrink windows, and to rearrange windows on your screen.

The mouse has three buttons. Unless you specify otherwise, MB1 (for "mouse button 1") is on the left, MB2 is in the middle, and MB3 is on the right. Most often, you use MB1 to interact with applications. This button arrangement naturally suits right-handed users; if you are left-handed, you can easily rearrange this configuration. See Chapter 9 for information about customizing the mouse buttons.



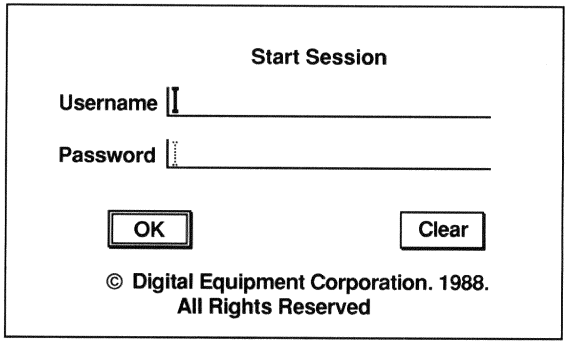
ZK-0250A-GE

When you work with the mouse, make sure that the cable connecting it to the workstation is pointing away from you. Place the mouse on a smooth surface. As you move the mouse, watch your screen to see how moving the mouse moves the **pointer** on the screen in exactly the same way. If you are using the mouse and run out of room on your desk, just lift the mouse and put it down where you have more room. The pointer does not move when you lift the mouse.

Usually the pointer is shaped like an arrow, but it can take on a different shape to reflect the state of an application. For example, it becomes a resize cursor shaped like a box when you change the size of a window and a wristwatch when your system is performing a task that needs a little more time to complete.

Starting a Session

If the system startup procedure has been successful, your screen looks like this:



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The Start Session **dialog box** is the gate through which you become authorized to use your workstation. DECwindows displays a dialog box whenever it needs information from you.

Note *Most workstations provide a screen timeout feature. After a period of inactivity, the screen goes blank. Any activity, such as moving the mouse or pressing a key, restores the screen image.*

The Start Session dialog box prompts you for your user name and password. Your system manager created an account for you, which you can now use to start a session. Your account consists of a user name (usually, your last name) and a password. Your **user name** is unique and identifies you to the system. In many cases, a user name is your first or last name. Your password is for your protection. Keep it secret so that other users cannot access your account. If you do not know the user name and password for your account, ask your system manager.

Type your user name and password in the **text entry fields**. A **text insertion cursor** is visible in each field. The text cursor in the Username field blinks to indicate this field has **input focus**. When a text field or window has input focus, you see your keystrokes echoed there. The text cursor in the Password field is dimmed, indicating that this field is currently disabled and that you cannot enter text in it.

To start a session:

1 Enter your user name.

2 **Select** the Password field by **pointing** to the Password field and **clicking** MB1.

You point to an object by placing the pointer on the object. You click on an object by pressing and quickly releasing MB1.

You can also move to the Password field by simply pressing Tab or Return. The text cursor in the Password field blinks to indicate this field now has input focus.

3 Enter your password.

To preserve the secrecy of your password, the letters you type are not displayed on the screen.

4 Click on the OK **button** or press Return.

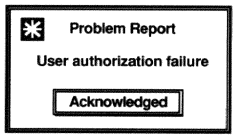
Clicking on buttons in dialog boxes lets you tell DECwindows what to do with the information you supplied. In the Start Session dialog box, clicking on the OK button sends your user name and password to the system.

The double outline around the OK button in the Start Session dialog box indicates it is the default option. Default options are those you will choose most frequently. DECwindows provides a shortcut to choose default options: whenever you see a button with a double outline, pressing the Return key achieves the same results as clicking on that button.

If you make a typing mistake in the Username field before you click on the OK button, press the delete key (<X) to erase the character to the left of the text cursor. To insert a character in the middle of text you already typed, point where you want the text inserted and click MB1. Or use the right and left arrow keys to move the text cursor right or left. The new characters you type push existing ones to the right.

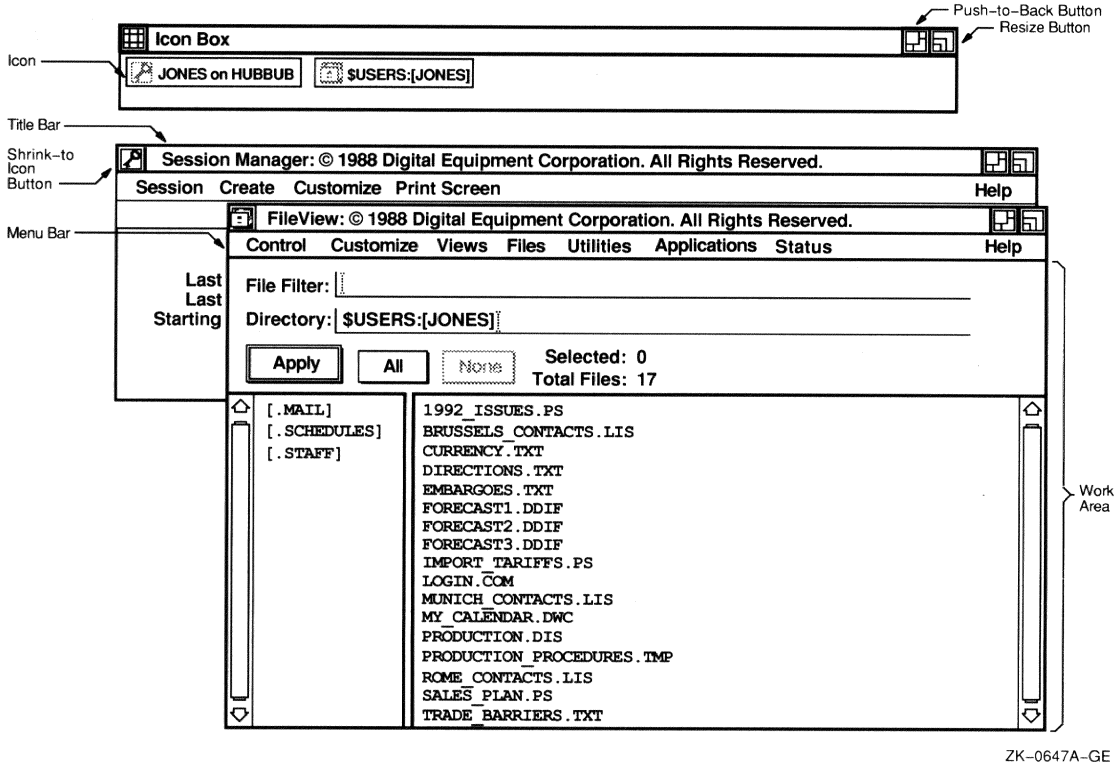
If you make a typing mistake in the Password field before you click on the OK button, click on the Clear button. This erases all text in both the Username and Password fields so you can retype your information correctly.

If you provide incorrect information or make a typing mistake and do not correct it, DECwindows does not let you start a session. Instead, it displays a Problem Report dialog box as a warning that you made a mistake.



Click on the Acknowledged button in the Problem Report dialog box or press the Return key to try again.

If your user information is correct, your session begins. Your screen looks like this:



ZK-0647A-GE

- The **title bar** tells you the name of the application and contains window management buttons you can use to rearrange your screen display. Most windows have a title bar.
- The **menu bar** contains the names of menus you can choose from to work with the application. Most windows have a menu bar.
- The **work area** is the area in a window where you interact with the application.
- **Icons**, which represent currently running applications or objects, appear in the Icon Box. If you want to keep an application readily available but do not have room for it on the screen, you can shrink that application to an icon. Once you start an application, its icon appears in the Icon Box. When the application is running in a window, the icon is dimmed.

The icon appears bold when the application is stored in the Icon Box.

- The **shrink-to-icon button** lets you shrink a window to an icon and store it in the Icon Box.
- The **push-to-back button** lets you move a window to the bottom of a stack of overlapping windows, or move a window to the opposite location in the stack. See Chapter 4 for more information about using the push-to-back button.
- The **resize button** lets you change the size of a window.
- The **Session Manager** helps control the look and feel of your DECwindows session and is available until you end your session. Use it to adjust your workstation settings, such as keyboard features and pointer shape. The Session Manager also displays system messages, including error messages and status messages.
- **FileView** is a graphic interface to the VMS operating system. FileView provides commands for you to work with your files and directories and to manage your system. You can also use FileView to run DECwindows applications and to access the VMS operating system through the Digital Command Language (DCL).

Running Applications

To use a DECwindows application, you must start it from the FileView window. In the following exercises, you will use the Mail application to learn how to:

- Choose an item from a menu
- Move a window
- Shrink a window to an icon
- Copy text from one location to another
- Change the size of a window
- Scroll through text
- Exit from an application

Choosing from a Menu

To run Mail, you first pull down a **menu** in the FileView window. You tell your system what you want to do or what you want to work with by choosing items from menus.

First, just look at FileView's menus:

1 Point to FileView's Applications menu name.

2 Press and hold MB1.

This highlights the menu name and pulls down a menu.

3 Point to the other menus on FileView's menu bar and press and hold MB1.

The other pull-down menus are displayed.

4 Release MB1.

You display every menu on a menu bar in exactly this way.

Now choose a menu item:

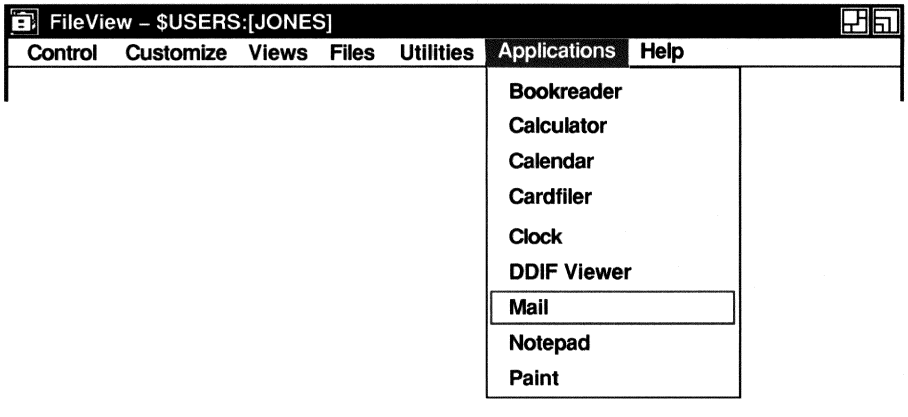
1 Point to FileView's Applications menu.

2 Press and hold MB1.

3 While holding MB1, move the pointer down through the menu.

This technique is called **dragging**. A box surrounds each menu item in turn as you drag through the menu. As long as you hold MB1, you can move up and down through the menu. If you move the pointer outside the menu and release MB1, the menu disappears and nothing happens.

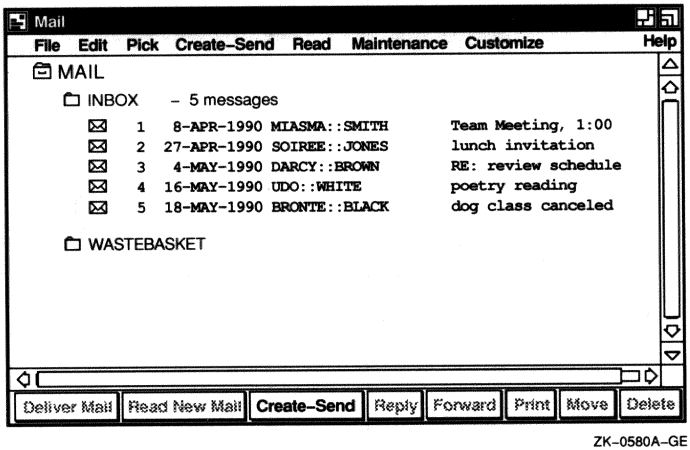
4 Drag the pointer to the Mail menu item.



ZK–0790A–GE

5 Release MB1.

FileView displays a Work in Progress dialog box to let you know that Mail is starting. This dialog box lists the applications currently running and the commands currently executing. The Work in Progress dialog box closes and Mail's main window soon opens.



ZK-0580A-GE

Mail's main window lists your mail drawers, folders, and messages in a hierarchical fashion. Drawers hold folders and folders store messages. You probably have a drawer called MAIL, two folders called INBOX and WASTEBASKET, and some messages.

Moving a Window

You can rearrange the windows on your screen in any way you want. If one window completely obscures another, you might want to arrange them so that a portion of each window is visible. For example, you can move the Mail window so that some of the FileView window is visible. You move a window by its title bar.



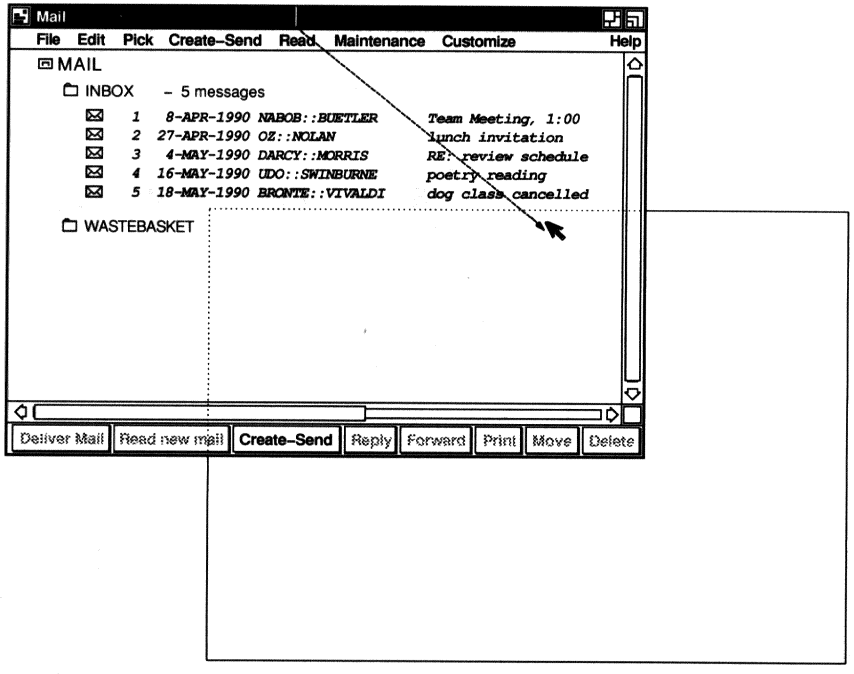
ZK-0579A-GE

1 Point to the Mail window's title bar (anywhere but on a button).

2 Press and hold MB1.

An outline of the window appears. Move the mouse around and watch how the outline moves accordingly.

3 Drag the outline a couple of inches to the right and then down.



ZK–0505A–GE

4 Release MB1.

The Mail window is moved to its new location. Notice also that the Mail window's title bar is highlighted to indicate that this window has input focus.

Depending on how far down you dragged the main Mail window, the FileView window is now partially or fully exposed.

Shrinking a Window to an Icon

You are finished with FileView for now, but you do not have to close the application to remove it from your screen. By shrinking FileView to an icon, you free up space on your screen. As an icon, FileView continues to run in memory if you want to use it again.

To shrink FileView to an icon, click MB1 on its shrink-to-icon button.

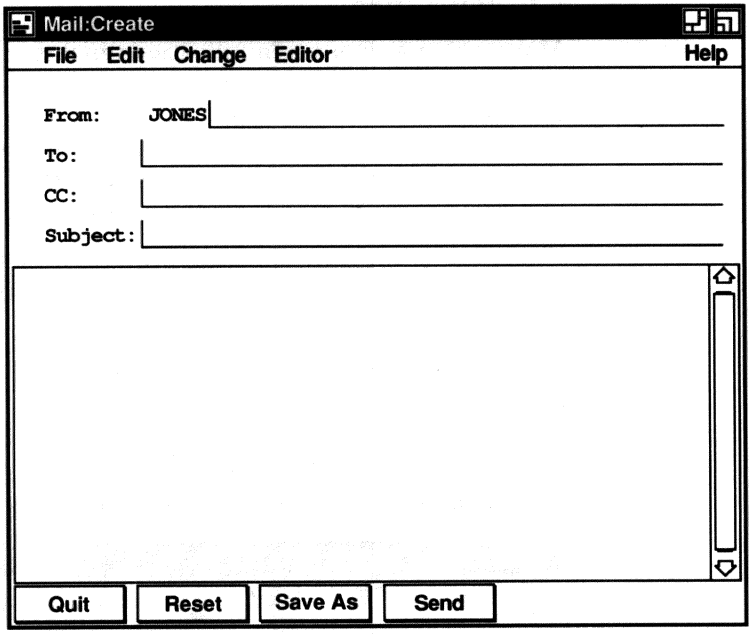


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The FileView window closes and its icon in the Icon Box appears bold.

Entering Text

Try creating a mail message. Point to the Create-Send button along the bottom of Mail's main window and click MB1. Mail opens the Create-Send window, where you compose your message.



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You entered text in text fields when you typed your user name and password at the start of your session. In the Create-Send window's text fields, you enter the name of the user receiving the message and some optional information.

While you can always move between text fields by pointing and clicking with the mouse, there's a shortcut available. In dialog boxes and applications, it's faster to press the Tab key to move to the next text field and the Shift and Tab keys simultaneously to move to the previous text fields.

Try sending a message to yourself. To create your message:

1 Enter your user name in the To text field.

2 Press Tab twice to move to the Subject field and type A FRIENDLY REMINDER.

3 Press Tab to move to the message area underneath the Subject field and type your message.

Make your message a grocery list that contains at least six of your favorite foods. Type one item on each line; press Return at the end of each line, including the last line. (You will see why later.) To delete any mistakes, use the delete key (<X).

Copying Text

Mail, like many of the applications included with your Desktop-VMS software, lets you copy text from one location to another. This saves you from retyping a large piece of text or a long file name. You can copy text in the same window, between windows of the same application (for example, between Mail's main window and the Create-Send window), or between applications.

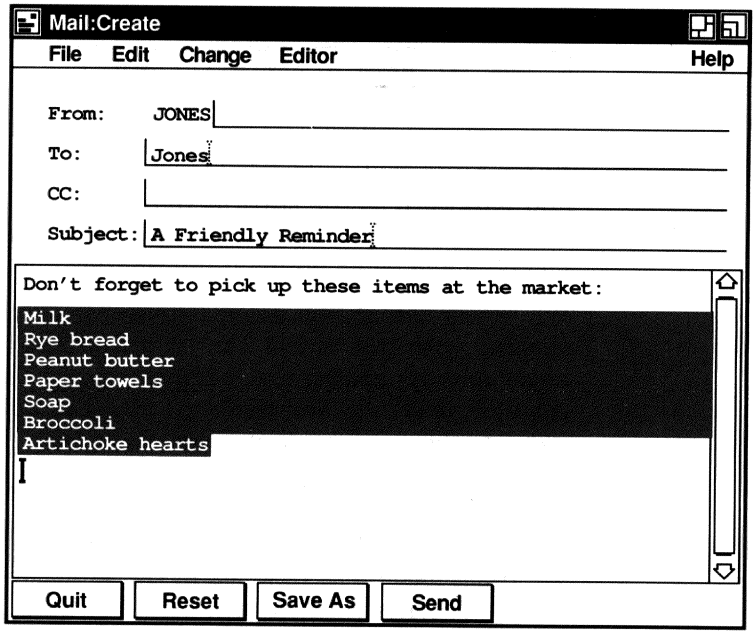
First, you must let your system know which text you want to copy by selecting it. Try selecting the text in your list in the Create-Send window:

1 Point to the first character in your list.

2 Press and hold MB1.

3 Drag the pointer through the list.

As you drag the pointer, the selected text is highlighted.



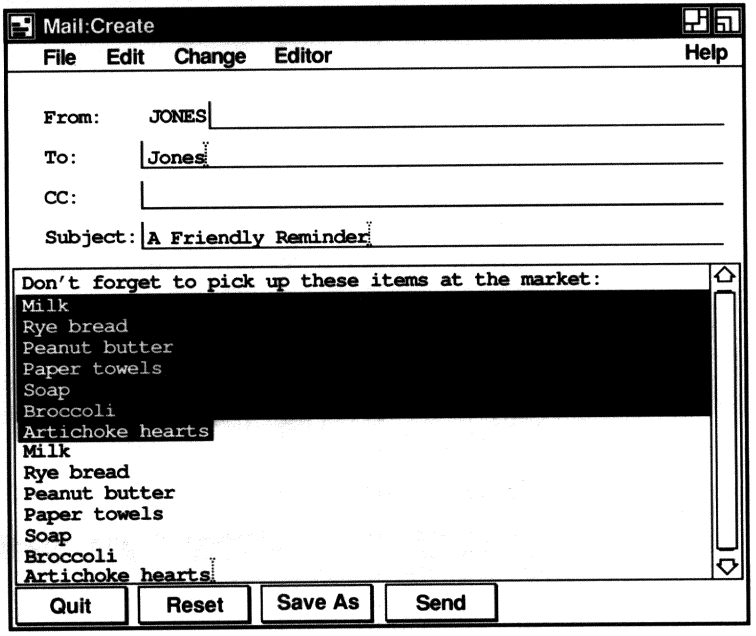
ZK-0235A-GE

4 Release MB1.

Now make the grocery list twice its original length by adding the selected text to the bottom of the list:

1 Point to the bottom of the list and click MB3.

The text is copied to the bottom of the list. The original text remains selected so you can copy it elsewhere.



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2 Cancel the original selection by pointing to the selected text and clicking MB1.

When you are ready to send the message, click on the Send button in the Create-Send window. Mail displays a Send in Progress dialog box to notify you that your message is being sent. Once the message is sent, click on the OK button to dismiss the Send in Progress dialog box.

Now you can close the Create-Send window. Click on the Quit button in the Create-Send window.

Click on the Read New Mail button in Mail's main window. Mail displays your new message in a Read window.

Changing the Size of a Window

Sometimes you want to make the window you are working in very large. Other times, you might want several small windows, such as when several applications are running simultaneously. You change the size of windows by using the resize button.



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Try making Mail's Read window smaller so you can see more of the other windows on your screen:

1 Point to the Read window's resize button.

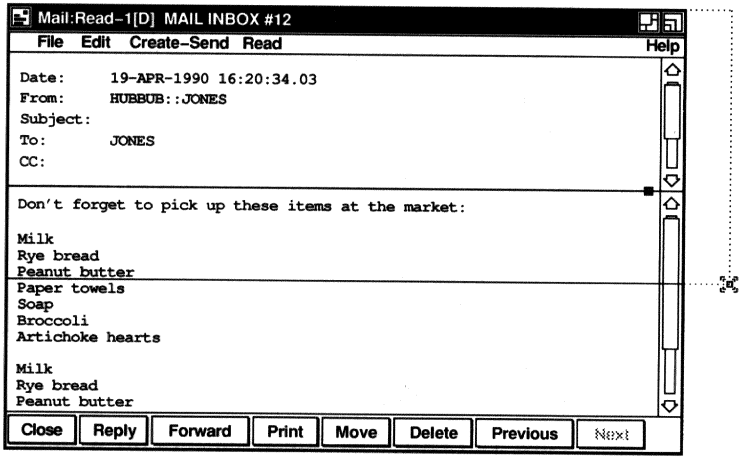
2 Press and hold MB1.

The pointer changes into a **resize cursor**.

3 Drag the resize cursor outside the bottom window border and then back toward the top border.

The outline stretches and shrinks depending on where you move the cursor and stops shrinking when the window is as small as it can get.

4 Drag the cursor until the window is half its original height.



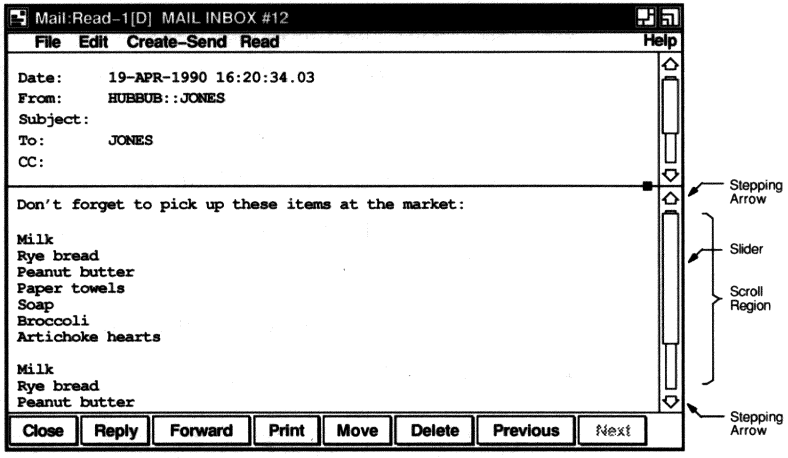
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5 Release MB1.

The Read window is redrawn in the new size.

Scrolling Through Text

If a document or message is too long to fit in one screen, **scroll bars** allow you to see text or graphics that cannot fit. If you made the Read window small enough, a scroll bar is visible on the right side of the Read window. Use this scroll bar to scroll through your mail message.



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To scroll the text in the Read window up one line at a time:

1 Point to the down **stepping arrow** at the bottom of the scroll bar in the Read window's message area.

2 Click MB1.

3 Continue clicking MB1 to scroll the text up one line at a time.

Similarly, click MB1 on the up stepping arrow to scroll the text down one line at a time. To scroll continuously, press and hold MB1 on the stepping arrow.

The position of the **slider**—the thicker box that obscures some of the long, thin **scroll region**—indicates your position in the message. If the slider is at the top of the scroll region, you are at the beginning of the message. If the slider is at the bottom of the scroll region, you are at the end of the message.

You can tell how much more text remains to be displayed by looking at the size of the slider. For example, a small slider indicates that much of your message remains undisplayed. A large slider that completely fills the scroll bar indicates the entire message is currently displayed.

Try dragging the slider to the top and bottom on the scroll region to display different parts of your message:

1 Point to the slider in the Read window's message area.

2 Press and hold MB1.

3 Drag the slider to the top or bottom of the scroll region.

4 Release MB1.

Exiting from an Application

When you exit from or quit an application, you remove it from memory. To work with it again, you need to choose the application from FileView's Applications menu.

When you are ready to exit from the Mail application:

1 Point to the File menu on the Mail window's menu bar.

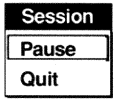
2 Press and hold MB1.

3 Drag the pointer to the Exit menu item.

4 Release MB1.

The Mail window closes and the Mail icon is removed from the Icon Box. To start Mail again, choose the Mail menu item from FileView's Applications menu.

Putting a Session on Hold



At any time, you can put your current session on hold indefinitely and lock your workstation without ending your session. When you put your session on hold, your screen is cleared but your applications continue to run. To continue your session, you must enter your password in the text field provided. Your session is maintained exactly as it was. This means you can resume working without having to recreate your screen environment.

To put your current session on hold:

1 If the Session Manager is stored as an icon, click on its icon.

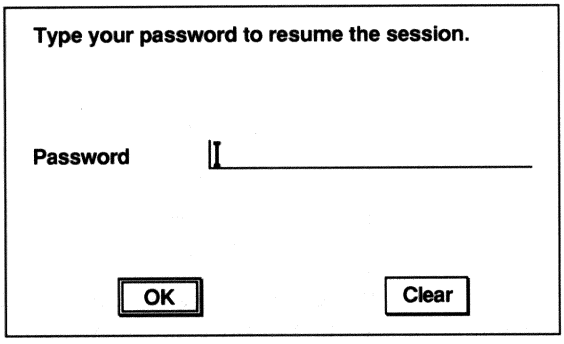
2 Point to the Session menu on the Session Manager's menu bar.

3 Press and hold MB1.

4 Drag the pointer to the Pause menu item.

5 Release MB1.

Your screen is cleared and the Continue Session dialog box is displayed.



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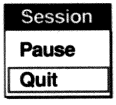
To continue your session:

1 Enter your password.

2 Click on the OK button or press Return.

Once the system verifies your password, your session resumes. If the Continue Session dialog box remains on your screen, you probably made a typing mistake. Click on the Clear button and type your password again.

Ending a Session



You can end a session at any time. When you end a session, your system stops all applications and clears the screen.

To end your session:

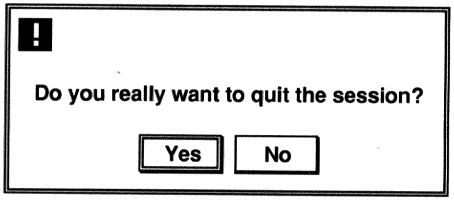
1 Point to the Session menu on the Session Manager's menu bar.

2 Press and hold MB1.

3 Drag the pointer to the Quit menu item.

4 Release MB1.

Even though you chose the Quit menu item, you can still return to your session. The Session Manager displays a dialog box asking you to confirm that you indeed want to end your session.



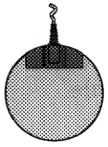
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To return to your session, click on the No button. To end your session, click on the Yes button. All windows are closed. Your system displays the Digital logo and Start Session dialog box, ready to begin another session.

You have learned most of the techniques you need to use DECwindows successfully. If you want to review any of the techniques you learned here, see Chapter 4.

4

Using Desktop-VMS Software



As described in Chapter 3, Desktop-VMS software includes a graphic interface that allows you to divide your screen into windows and select objects on the screen with a mouse. The windowing software that provides this interface is called DECwindows. By using DECwindows, Desktop-VMS software creates an environment in which all applications look and respond in a similar fashion.

You work with most Desktop-VMS applications by using the same handful of techniques. Whether you are already familiar with other windowing software or just want a refresher on how to use a specific feature, use this chapter to learn new skills or brush up on old ones.

Using the Mouse

You can do all your work with Desktop-VMS software by mastering the following mouse techniques:

- To **point**: Using the mouse, move the pointer to where you want the next action to occur.
- To **click**: Quickly press and release MB1. You should hear and feel a faint click.
- To **press**: Point to the menu name, scroll bar stepping arrow, or wherever you want the action to occur. Without moving the mouse, press and hold MB1 or MB2. If you are pointing at a menu name, pressing MB1 pulls down a menu and keeps it down until you release MB1.

- To **drag**: Press and hold MB1, move the pointer, and release MB1. For example, you drag a window outline to move it to another place on your screen. To cancel a drag in progress, click MB3 before releasing MB1. If you are displaying a pull-down menu, cancel the drag operation by moving the pointer outside the menu.
- To **double click**: Point to the object and click MB1 twice in quick succession.
- To **shift click**: Point to the object. Press and hold the Shift key and click MB1. Release the Shift key.

Even if you cannot use your mouse temporarily, you can still use your Desktop-VMS software. By simultaneously pressing Ctrl/F3, you enable the keyboard method that uses certain keys to replace mouse input. When you press the Ctrl/F3 keys, the Wait light along the top of your keyboard lights. This is your cue that keyboard mode is in effect. When you no longer need to use the system from your keyboard, press Ctrl/F3 again to disable keyboard mode.

When keyboard mode is in effect, you can use the keys described in the following table to move the pointer and select objects.

To perform this mouse action	Press
Move the pointer	The arrow keys. Pressing the arrow keys moves the pointer left, right, up, or down. Press and hold an arrow key to make the pointer move continuously. The longer you hold an arrow key, the faster the pointer moves.
Press and hold MB1	Find key. For example, pressing the Find key displays a menu or submenu or marks text for selection. To perform the equivalent of releasing MB1, for example, to dismiss a pull-down menu, press the Find key again.
Press and hold MB2	Insert Here key. For example, pressing the Insert Here key displays a pop-up menu if one is associated with a particular object on the screen.
Press and hold MB3	Remove key.
Click MB1	Select key. For example, pressing the Select key allows you to "click on" a push button or select a tool in Paint.

To perform this mouse action	Press
Click MB2	Prev Screen key. For example, pressing the Prev Screen key allows you to cancel a window dragging operation in progress.
Click MB3	Next Screen key. Pressing the Next Screen key pastes selected text in a new location.

For example, to display a pull-down menu without using the mouse:

1 Press Ctrl/F3.

Make sure the Wait light is on.

2 Use the arrow keys to move the pointer to the menu you want to display.

3 Press Find to pull down the menu.

4 Press the down arrow key to drag the pointer through the menu.

Release the down arrow key when a box surrounds the menu item you want to choose.

5 Press Find to dismiss the menu.

Desktop-VMS software performs the task associated with the menu item you chose.

Selecting Windows

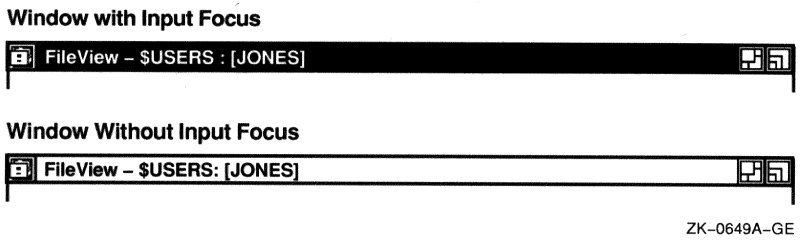
When you have several windows open at once, you give one window input focus by selecting it. When a window has input focus, your typing and mouse activity are directed to that window.

To select a window:

1 Point to a location in the window or title bar, anywhere except on a button. (In the FileView window, point to the title bar.)

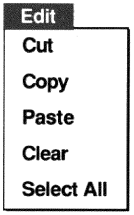
2 Click MB1.

The window's title bar becomes highlighted to indicate it has input focus. Any keystrokes you type will appear in this window. The title bar is no longer highlighted when another window has input focus.



Occasionally, a dialog box lacks a window management button, usually the resize or shrink-to-icon button. The window will not take input focus if you click MB1 in the space that these buttons usually occupy. To select a window missing one of these window management buttons, point to another location in the window and click MB1 again.

Choosing Items from Pull-Down Menus



Some pull-down menus contain commands. Others contain the names of items you can work with. You tell your system what you want to do or what you want to work with by choosing commands or items from pull-down menus. Any menu item followed by three periods (. . .) is your cue that a dialog box will be displayed if you choose that menu item.

To choose an item from a pull-down menu:

1 On the menu bar, point to the name of the menu you want to display.

2 Press and hold MB1.

This highlights the menu name and pulls down a menu.

3 While holding MB1, drag the pointer to the menu item you want.

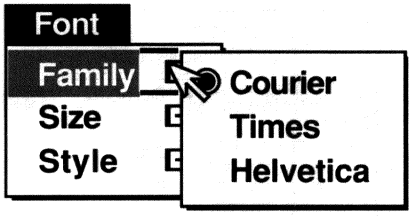
4 Release MB1.

If you change your mind while looking at a pull-down menu, drag the pointer outside the menu and release MB1. The menu disappears and no action is taken.

Some applications, for example, Mail, use push buttons to duplicate frequently used commands that are also available as menu items. To execute these commands quickly, click MB1 on the push button.

Choosing Items from Submenus

A menu item with a submenu icon—an arrow pointing to the right—indicates that a corresponding submenu is available. If you choose that menu item, you need to refine your choice by displaying its submenu and choosing a menu item from that submenu.



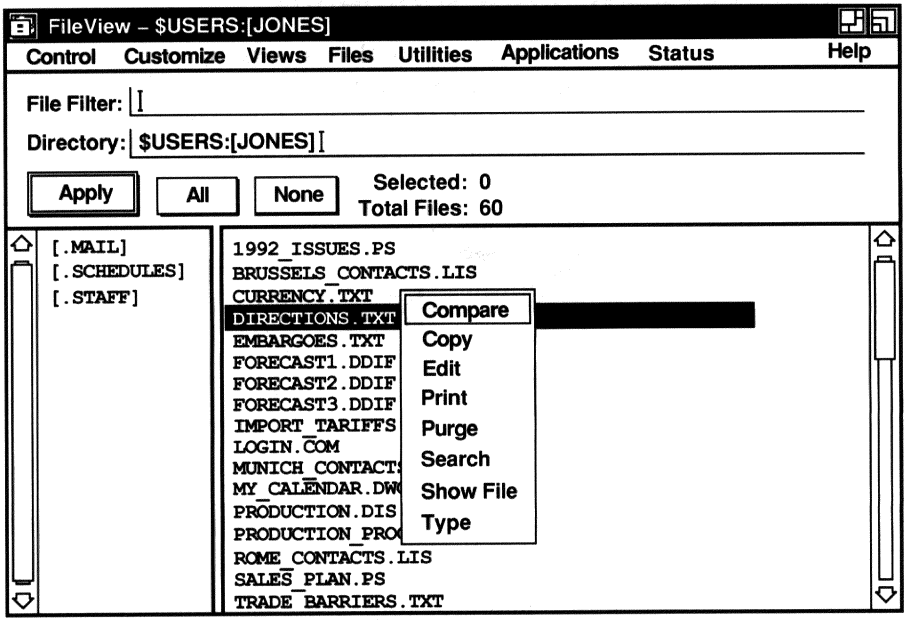
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To display a submenu and choose a menu item from it:

1. Pull down the primary menu by pressing and holding MB1 and dragging to the menu item you want.
2. Drag the pointer onto the submenu icon.
   A submenu is displayed to the right of the menu.
3. Drag the pointer to the item you want to choose from the submenu.
4. Release MB1.

Choosing Items from Pop-Up Menus

Desktop-VMS software provides pop-up menus to make it easier for you to work with files and applications. Pop-up menus give you quick and direct access to functions within applications by reducing your use of the mouse.



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To display a pop-up menu:

1 Press and hold MB2 on the work area—directly beneath the menu bar—where you interact with the application.

   In the FileView window, press and hold MB2 on the file type whose corresponding pop-up menu you want to display.

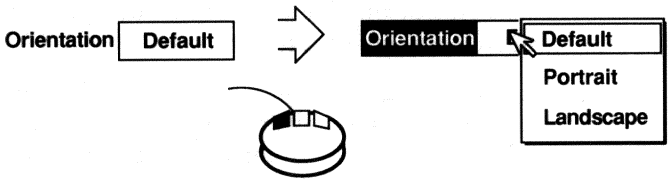
2 Drag the pointer to the menu item you want.

3 Release MB2.

If you change your mind while looking at a pop-up menu, drag the pointer outside the menu and release MB2. The menu disappears and no action is taken.

Choosing Items from Option Menus

An **option menu** is a pop-up menu that appears in a dialog box. An option menu allows you to choose one option from a list of options displayed in a pop-up menu. For example, the Print dialog box available in many applications allows you to specify the page orientation. The current option—here labeled Default—is displayed. To see the other print options from which you can choose, you display the option menu.



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To display an option menu:

1 Press and hold MB1 on the current option.

2 Drag the pointer to the menu item you want.

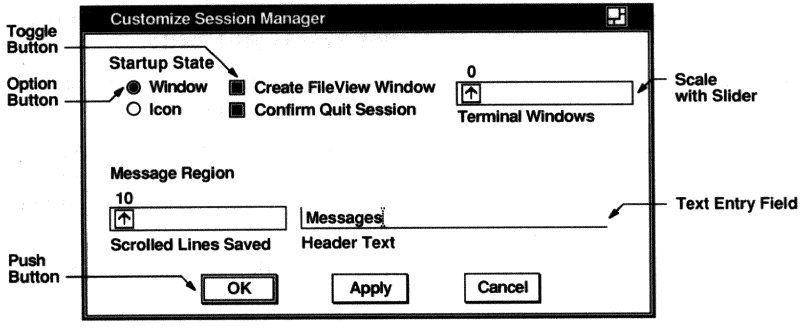
3 Release MB1.

The option menu disappears. The option you chose is now the current option.

If you decide not to change the original option, drag the pointer outside the menu and release MB1. The menu disappears and no changes occur.

Supplying Information in Dialog Boxes

Desktop-VMS software displays a dialog box whenever it needs additional information from you to carry out a task. Sometimes you need to type text; other times, you need only click MB1 on a button to change a setting. Some dialog boxes display settings you chose earlier.



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Dialog boxes contain various ways for you to supply information to an application:

- By typing text in a **text entry field**. The blinking text cursor shows you where the text you type will appear. What you type appears to the left of the text cursor. Use the delete key (<X) to correct typing mistakes.

- By clicking on **option buttons** or square **toggle buttons**. Option buttons let you select one option from a group. Toggle buttons let you turn a setting on or off.
- By dragging the slider in a **scale**. Dialog boxes often contain a scale and slider when you need to supply a numeric value. The arrow in the slider points to the current value.
- By selecting choices, for example, file names, from a **list box**. The list box may contain scroll bars if the available choices do not fit in the list box.
- By clicking on rectangular **push buttons**. Push buttons, such as OK, Cancel, or Filter, let you tell your system what to do with the information you supplied in the dialog box.

  A double outline around a push button indicates it is the default option. **Default options** are those you will choose most frequently. Usually, the OK button is the default option in a dialog box. Whenever you see a button with a bold border, pressing the Return key achieves the same result as clicking on that button.

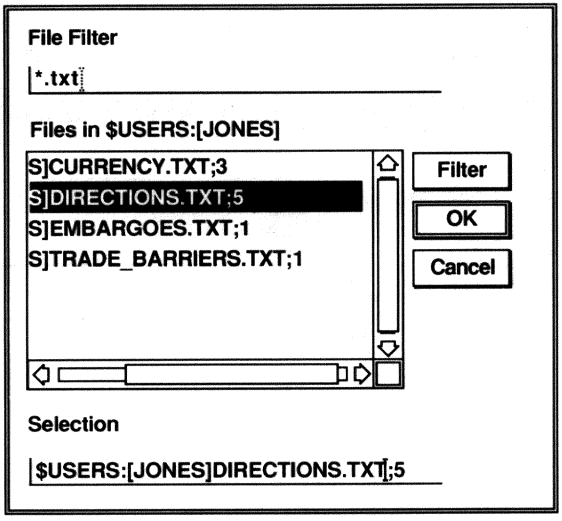
Moving in a Dialog Box

How you move in a dialog box depends on the object you want to work with. The following table describes the ways in which you can move in a dialog box:

To	Do this
Move forward between text fields	Press the Tab key, or point to the field to which you want to move and click MB1.
Move backward between text fields	Press the Shift/Tab keys, or point to the field to which you want to move and click MB1.
Move the text cursor within a text field	Point where you want the text inserted and click MB1, or use the right and left arrow keys to move the text cursor right or left. New characters push existing ones to the right.
Change the numeric value on a scale	Drag the slider on the scale right or left, or point to another location on the scale and click MB1.
Change an option or toggle button setting	Point to the option or toggle button and click MB1.

Making Selections from List Boxes

List boxes appear in dialog boxes and contain many kinds of items from which you can choose. Many applications display a list box when you open or save a file. To select an item from a list box, point to the item and click MB1. The item you selected is highlighted. If the list box contains files, the file name is highlighted to indicate it is selected. Click on OK to see the file.



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In list boxes that contain file names, Desktop-VMS software provides a shortcut for you to open files. Double clicking on a file name in a list box produces the same results as selecting that file name and clicking on OK.

Running Applications

The applications described in the *VMS DECwindows Desktop Applications Guide* are menu items on FileView's Applications menu. To run these applications, choose them as you would any other menu item. You can also run these applications from a DECterm window.

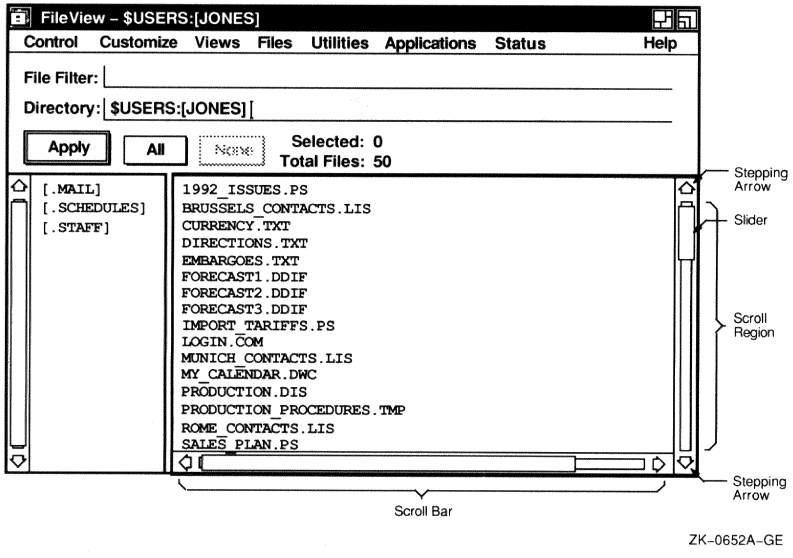
See *VMS DECwindows Desktop Applications Guide*, which is available online, for more information about running applications from a DECterm window. To learn how to read books online, see Chapter 8.

Scrolling



Some application windows display scroll bars, which you use to view the text that does not fit in the window. Some windows have both horizontal and vertical scroll bars.

A scroll bar consists of **stepping arrows** at either end of the long, thin box called the **scroll region**. If the **slider**—the thicker box that obscures some of the scroll region—is at the top of the scroll region, the beginning of the file or list is visible. If the slider is at the bottom of the scroll region, the end of the file or list is visible.



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In addition, the size of the slider is relative to the total amount of text in the document and indicates how much more text remains to be displayed. For example, a small slider indicates that much text remains to be displayed. A large slider that completely fills the scroll bar indicates that all the text is currently displayed.

The following table describes how to use scroll bars.

To scroll	Do this
One line at a time	Click MB1 on the stepping arrows at either end of the scroll bar.
Forward one window of text at a time	Point to the scroll region beneath the slider and click MB1.

To scroll	Do this
Back one window of text at a time	Point to the scroll region above the slider and click MB1.
Continuously through the list or file one line at a time	Press and hold MB1 on the stepping arrows at either end of the scroll bar.
Continuously through the list or file one window of text at a time	Press and hold MB1 in the scroll region.
To another location in the list or file	Drag the slider to a position in the scroll region that corresponds to the general location you want to see. If the slider is at the top of the scroll region, you are viewing the beginning of the list or file. If the slider is in the middle of the scroll region, you are viewing the middle of the list or file. Cancel the drag operation by clicking another mouse button before releasing MB1.

Moving Windows

You use the title bar to move the windows on your screen. If one window partially obscures another, you might want to arrange them so that each is completely visible.



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To move a window:

1. Point to the window's title bar (anywhere but on a button).
2. Press and hold MB1.

   An outline of the window appears.
3. Drag the pointer to the new location.
4. Release MB1.

   If the window was partially obscured by other windows, it pops to the top of the stack of windows and is given input focus.

To cancel a window moving operation in progress, click another mouse button before releasing MB1. The outline disappears, and the window is not moved.

Occasionally, a title bar (usually in a dialog box) is missing a window management button, usually the resize or shrink-to-icon button. If you point to the space that these buttons usually occupy and try to drag the window, the window does not move. To drag a window missing one of these window management buttons, point to another location in the title bar and try again.

Changing the Size of Windows



Sometimes you want to make the window you are working in very large. Other times, you might want several small windows, especially if you have several applications running simultaneously. You can change the size of your windows to suit your needs by using the resize button.



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To change the size of a window:

1. Point to the window's resize button.
2. Press and hold MB1.

   The pointer changes into a small resize cursor.
3. Drag the resize cursor to the size you want.

   To make the window larger, drag the resize cursor beyond the window border. To make the window smaller, drag the resize cursor beyond the window border and then back in.
4. Release MB1.

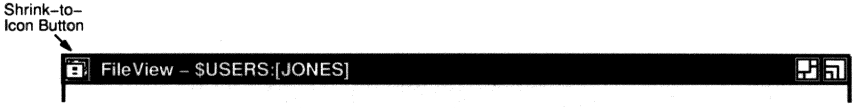
You can change the size of a window in one dimension (height or width) or in both dimensions simultaneously. To change the size in one dimension, drag the resize cursor across one border of the window. As long as you cross only one border, the outline that follows the resize cursor changes in only one dimension. If after crossing one border you cross an adjacent border, you see an outline that can change in both dimensions.

If you drag the resize cursor through one border and then through the *opposite* border, the first border you crossed reverts to its original location, and the other border becomes an outline that follows the resize cursor.

To cancel a window resizing operation in progress, click another mouse button before releasing MB1. The outline disappears, and the window retains its original size.

Shrinking Windows

When you start an application, its icon appears in the Icon Box. You shrink a window to an icon if you want to free up space on your screen to run other applications, but do not want to exit from the application. The application continues to run in memory and remains easily accessible but does not take up any room on your screen. Processes continue to execute while the application is stored as an icon.



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To shrink a window to an icon:

1 Point to the window's shrink-to-icon button.

2 Click MB1.

The window closes and its icon in the Icon Box appears bold.

You cannot shrink the Icon Box to an icon.

When the application is running in a window, its icon is dimmed. The icon appears bold when the application is stored in the Icon Box. You can make the icons large or small. See Chapter 9 for more information about changing the size of your icons.

If the Icon Box contains more icons than can be displayed at once, scroll bars appear. Use the scroll bars to display the contents of the Icon Box.

As you stop and start many applications, your Icon Box develops gaps where icons used to be. You can rearrange the icons in the Icon Box in two ways:

- By moving the icons. To move an icon, point to it, press and hold MB1, and drag it to a new location.
- By clicking on the Icon Box's shrink-to-icon button. In all applications, clicking on this button shrinks the window to an icon. Clicking on this button in the Icon Box, however, eliminates the gaps where icons for applications no longer running used to be.

Expanding Icons to Windows

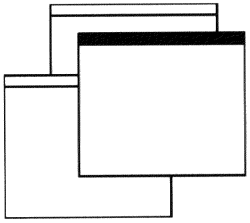
When you expand an application's icon, you open a window for that application. If you have more than one window open and expand an icon to a window, that new window is placed on top of the stack of overlapping windows. If the window has input focus, it accepts text entry.

To expand an icon to a window:

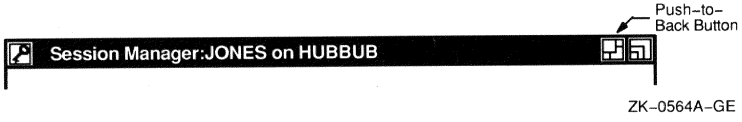
1 Point to the icon in the Icon Box.

2 Click MB1.

Stacking Overlapping Windows



You do not have to move a window in order to see its entire contents. When windows are overlapping, clicking on a window's push-to-back button pushes that window to the bottom of the stack. The next window is then fully visible.



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To push the top window to the bottom of a stack of overlapping windows:

1 Point to the top window's push-to-back button.

2 Click MB1.

If you try this repeatedly with three or more windows, you see that the windows cycle through the stacking order, moving up one position in the stack each time a window is moved to the bottom of the stack.

Making Stacked Windows Stick in Place

When you are working with stacked windows and select a window, it moves to the top of the stack and is given input focus. You can, however, prevent a partially obscured window from popping to the top of the stack of windows when you select it. This means that you can arrange the windows on your screen to display only what you need to see and then secure them in place.

For example, you might have DECterm, Notepad, Mail, and FileView windows open. If you arrange the windows so that the portion of each window you need to work with is visible, you do not want the window to pop to the top of the stack whenever you select it. For example, you probably need to see just the last few lines in the DECterm window so you can enter commands.

To lock overlapping windows in the stacking order:

1 Point to a window's push-to-back button.

2 Shift click on the button.

That window is pushed to the bottom of the stack.



The lower right-hand corner of the push-to-back button is filled to indicate that the window is stuck in the stacking order. Although the window will be given input focus when you select it, it will not pop to the top of the stack.

You can still, however, push a window that you've fixed in the stacking order to the bottom or bring it to the top of the stack to see it unobscured. Clicking on a window's filled push-to-back button moves that window to the opposite position in the stack, but does not give it input focus. Clicking on a filled push-to-back button pushes an unobscured window to the bottom of the stack. Clicking on a filled push-to-back button pops a partially or mostly obscured window to the top of the stack.

Releasing Windows Locked in the Stacking Order

To release a window locked in the stacking order, shift click again on its push-to-back button. If the window was on the bottom of the stack, it pops to the top; if the window was on top, it is pushed to the bottom. The window's push-to-back button is no longer filled.

Editing Text

Desktop-VMS software provides many ways to edit text that save you from retyping long file names or large blocks of text. Most applications, including Calendar, Cardfiler, EVE, FileView, Mail, and Notepad, allow you to move or copy text:

- From one place in a window to another.
- From one window to another window. In Mail, for example, you can copy text from one Create-Send window to another.

- From one application to another application. For example, you can move a picture from Paint into a Cardfiler card.

In addition, most applications provide an Edit menu that allows you to cut, copy, and paste text and graphics. See the *VMS DECwindows Desktop Applications Guide* (available online) for more information about using the Edit menu in specific applications.

Finally, most applications define specific keys to let you perform basic text editing operations. These keys let you move the cursor and delete small amounts of text efficiently.

Selecting Text

Before you can copy or move text to other locations in a window or between windows, you must select the text. You can copy text in any increment, including a word, a line, or a paragraph at a time. Text selection is progressive, meaning that the amount of text selected increases with successive clicks of MB1. The following table describes how to select text:

To	Do this
Position the cursor where you want the selection to start	Point to the location and click MB1.
Select a word	Point to the word and double click MB1.
Select a line	Point to the line and triple click MB1.
Select continuous text, from the original selection point to the point where the button is released	Press and hold MB1 and drag the pointer through the text.
Extend the current selection	Simultaneously press and hold the Shift key and MB1 and drag the pointer through the additional text.
Extend the current selection to where the pointer is positioned	Press and hold the Shift key and click MB1.

In addition, some applications provide a way for you to select larger blocks of text at a time. For example, you can select a paragraph of text in EVE by pointing to the paragraph and clicking MB1 four times. You can select an entire Mail message or the contents of a Notepad file by pointing to the text and clicking MB1 five times.

Only one piece of text can be selected at a time. By selecting text in one application, you cancel any other text selection you may have established in the same window or in another application.

Copying Text

If you can type text in a window, you can select and copy text from one place to another in the same window, between windows of the same application (between Mail's main window and the Create-Send window, for example), or between different applications.

You can also copy text from a FileView window—including FileView's file list—into an application that supports text entry.

To copy text within a window, between windows in the same application, or between applications:

1. Select the text you want to copy using the text selection techniques described in the previous section.
2. Position the cursor where you want the text copied by pointing and clicking MB1.
3. Click MB3.

   The text is copied to the new location.

EVE uses other methods for copying text. See the *VMS DECwindows Desktop Applications Guide* for more information about copying text in EVE.

The window from which you selected the text takes input focus. Sometimes, however, you want to copy text from another window to your current window without losing input focus in your current window. QuickCopy solves this dilemma.

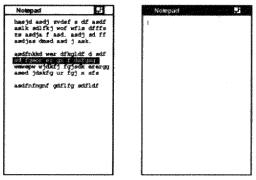
To use QuickCopy:

1. In the current window, position the cursor where you want the text copied by pointing and clicking MB1.
2. In the other window, point to the text you want to copy.
3. Press and hold MB3.
4. Drag the pointer across the text you want to copy.

   The text is underlined as you drag across it.
5. Release MB3.

   The text is copied to the new location in your current window.

Moving Text Between Windows



Desktop-VMS software also lets you work in one window, select text from another, and move that text to the current window without losing input focus in your current window. The text is deleted from its original location.

To move text from one window to another:

1. In the current window, position the cursor where you want the text pasted by pointing and clicking MB1.

   Make sure the window has input focus.

2. In the other window, point to the text you want to move.

3. Press and hold both the Ctrl key and MB3.

4. Drag the pointer across the text you want to move.

   The text is underlined as you drag across it.

5. Release the Ctrl key and MB3.

   The text is moved to the new location and deleted from the old.

EVE uses other methods for moving text. See the *VMS DECwindows Desktop Applications Guide* for more information about moving text in EVE.

Deleting Text with Pending Delete

When you mark text for **pending delete**, you can delete large blocks of text with one keystroke instead of pressing the delete key repeatedly. You mark text for pending delete by selecting it as described in Selecting Text. The selected text is deleted when you press any key. You can then type new text.

To cancel a pending delete selection (once you select the text but before you press a key), point to the selected text and click MB1.

Text Editing Key Definitions

You can use the text editing techniques described in the following table to move the cursor or delete text in any Desktop-VMS application.

To	Press
Move the text cursor one character to the right	Right arrow key. In a text field with only one line, the text cursor does not move beyond the end of the line. In a text field with multiple lines, the text cursor moves to the first position in the next line.
Move the text cursor one character to the left	Left arrow key. In a field with only one line, the text cursor does not move beyond the beginning of the line. In a field with multiple lines, the text cursor moves to the last position in the previous line.
Move the cursor to the next word	Shift/right arrow keys.
Move the cursor to the previous word	Shift/left arrow keys.
Move the cursor up one line in a text field with multiple lines	Up arrow key.
Move the cursor down one line in a text field with multiple lines	Down arrow key.
Move the cursor to the beginning of the line	F12 key or Ctrl/H keys.
Move the cursor to the end of the line	Shift/F12 keys or Ctrl/E keys.
Move the cursor forward between text fields	Tab key.
Move the cursor backward between text fields	Shift/Tab keys.
Delete the characters to the left of the cursor up to and including the beginning of the word	F13 key or Ctrl/J keys. (In EVE, Ctrl/J deletes the characters to the right of the cursor up to and including the end of the word.)
Delete the characters to the right of the cursor up to and including the end of the word	Shift/F13 keys. Not enabled in EVE.
Delete the character to the left of the cursor and move all text to the right of the deleted character one space to the left	Delete key (<X).
Delete the character after the cursor and move all text to the right of the deleted character one space to the left	Shift/delete keys. In overstrike mode, Shift/Delete deletes the character under the block cursor. Not enabled in EVE.
Delete all characters to the start of the line	Ctrl/U keys.
Refresh the window	Ctrl/R keys.

Composing Special Characters

With Desktop-VMS software, you can use **compose sequences** to create special characters. A compose sequence is a series of keystrokes that creates characters that do not exist as standard keys on your keyboard. See the list of multinational character and ISO Latin 1 compose sequences in the *VMS DECwindows Desktop Applications Guide*, which is available online.

Depending on the keyboard type, you compose characters in either of the following ways:

- Using three-stroke sequences on a VT200- or VT300-series keyboard.
- Using two-stroke sequences on any VT200-series keyboard except North American.

To compose a character using the list of compose sequences in Appendix A in the *VMS DECwindows Desktop Applications Guide*:

1 Find the character you want to create in column 1.

2 To compose a three-stroke sequence, press and hold the Compose key while you press the space bar, and then type the two characters in column 2.

To compose a two-stroke sequence, type the two characters in column 3. The desired character is displayed.

To cancel a compose sequence, press and hold the Compose key while you press the space bar, or press the delete key (<X), Tab key, Return key, or Enter key.

See the *VMS DECwindows Desktop Applications Guide*, which is available online, for information about composing characters in DECterm.

Getting Help



You can get help in any Desktop-VMS application by using the Help menu. Help provides brief information about screen objects, concepts, or tasks you can perform in applications. Some applications also let you get help on specific screen objects, for example, scroll bars and menu items, by using the Help key and MB1.

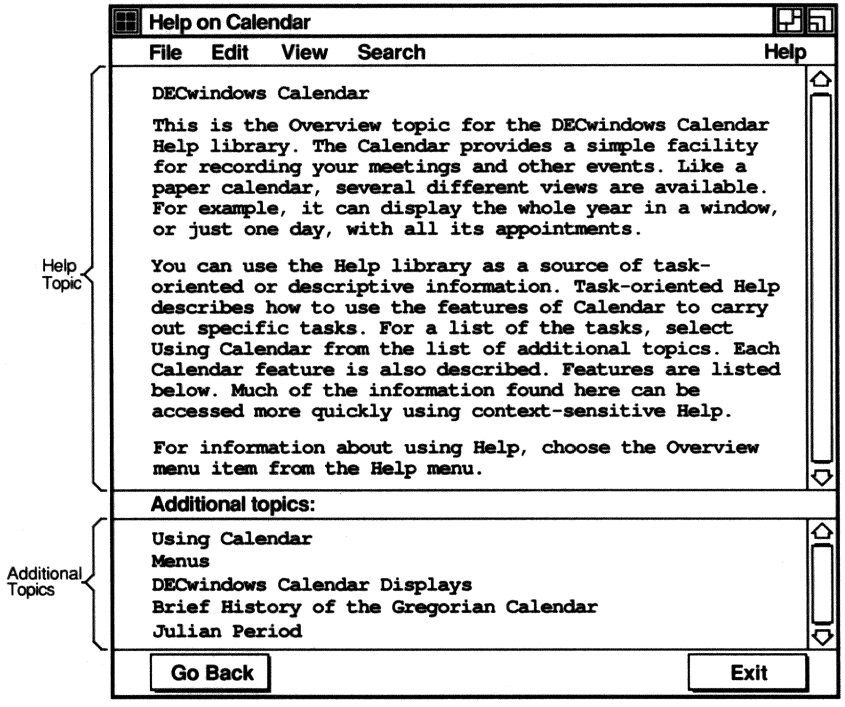
Help is designed to let you request general information on an application and quickly narrow the focus of your inquiry. In Help, you can

- Navigate quickly through help topics. Help keeps track of the path you used to get to a particular topic, which makes it easy for you to retrace your steps and follow a different path.
- Search Help for a keyword or topic supplied by the application.
- Save the help text in a file for printing.

Invoking Help

To get help on **tasks** in any Desktop-VMS application, choose the Overview menu item from the application's Help menu.

A help window opens with the Overview topic displayed. The Overview topic includes a list of additional topics that explain how to do common tasks.



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- The **help topic** describes the task or object about which you requested help. Scroll bars are displayed if the text cannot fit in one frame.
- The **Additional topics list** contains related topics that you can select to display more information. You select these topics by pointing to them and double clicking MB1.

- The **help buttons**, Go Back and Exit, let you display the previous help frame or exit from Help.

To get help on **objects** such as menu names, scroll bars, and dialog boxes in Bookreader, Calendar, Help, and Mail, point to the screen object, and press and hold the Help key on your keyboard while you click MB1.

To get help on a menu item, press the Help key while you press and hold MB1 on the menu item, then release MB1.

A help window opens, displaying information on the object you specified.

You can display product information about your application, such as the software version number, by choosing the About menu item from the application's Help menu. In some applications, the Help menu also contains a Glossary menu item, which you can use to look up terms specific to your application. For more information about using Help, choose the Help menu item from the Help menu in each application's help window.

Navigating in Help

When you select a topic from the additional topics list in the Overview window, you start down a path that is limited only by your own curiosity. You can follow a path of topics by continuing to select additional topics, retrace your steps and branch off to a different topic, or return to the Overview frame and start down another path.

To select an additional topic:

1 Point to the item and click MB1.

The topic is highlighted to indicate it is selected.

2 Choose the Go To menu item from the View menu.

Faster still, just double click on the topic you want. Double clicking on a topic is a shortcut for selecting the topic and choosing the Go To menu item.

Help displays the selected topic. You can continue to select other topics from the Additional topics list or redisplay the topic you last saw by clicking on the Go Back button.

If you want to display the current topic and a new topic simultaneously:

1 Select another topic from the Additional topics list.

2 Choose the Visit menu item from the View menu.

Instead of replacing the current help topic with the new topic, another help window opens displaying information about the new topic. You can then explore other topics from the new help window and keep the current topic open for reference.

To see the path you followed to get to your current topic:

1 Choose the History... menu item from the Search menu.

Help displays a dialog box that lists the topics you have already seen.

2 Double click on a topic to replace the current topic or select a topic and click on the Visit button to open another help window without replacing the current topic.

When you finish looking at a topic and want to close the help window, click on the Exit button. To return to the Overview frame, choose the Go To Overview menu item from the View menu in any help window.

Searching Help for Titles and Keywords

You can search Help for words or phrases to see whether they appear in topic titles or in help text. For example, you might want to see whether a Mail help topic title contains the word "Sending," or the topic in which the keyword "message" appears.

To search for a word or phrase contained in a topic title:

1 Choose the Title... menu item from the Search menu.

Help displays a dialog box.

2 In the Title text field, enter the word or phrase for which you want to search.

Leave this field empty if you want Help to display a list of every topic title.

3 Click on Apply.

Help displays the topics whose titles contain the word or phrase you specified.

To display the topic whose title contains the word or phrase you searched for, double click on the topic or select it and click on the Visit button. Help displays the topic in another window. The Search Topic Titles dialog box remains open for you to continue your topic search.

Help for each application has predefined keywords that you can search for. To search for a keyword used in a topic:

1 Choose the Keyword... menu item from the Search menu.

   Help displays a dialog box that lists the keywords defined for that application.

2 Double click on the keyword for which you want to search.

   Help lists the topics in which the keyword is used.

To display the topic in which the keyword is used, double click on the topic or select it and click on the Visit button. Help displays the topic in another window. The Search Topic Keywords dialog box remains open for you to continue your keyword search.

Saving Help Text in a File

You can select text from a help topic and save it in a file. This lets you print the file for later reference or mail the file to another user.

To select text from a topic and save it in a file:

1 Choose the Select All menu item from the Edit menu, or use the techniques described in Selecting Text to select smaller amounts of text.

2 Choose the Save As... menu item from the File menu.

   Help displays a dialog box.

3 Delete the text in the Selection text field if you want to name the file something other than HELP_TOPIC.TXT, which is already entered for you.

   Give the file name a TXT file type to identify that it contains text. For example, if you selected Help text from Cardfiler, you might want to call your file CARDFILER_HELP.TXT.

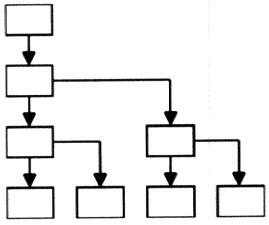
4 Click on OK.

Exiting from Help

To exit from Help, click on the Exit button. If you have multiple help windows open, you must close each one separately.

5

Understanding Files, Directories, and Devices



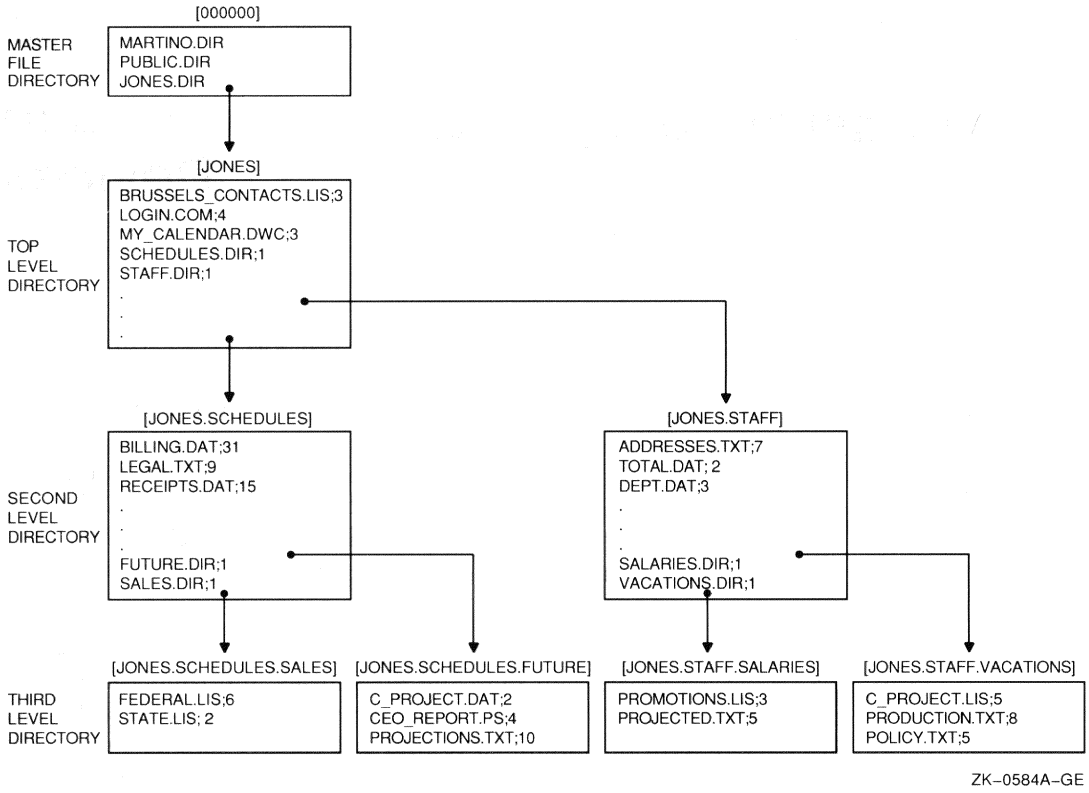
Your Desktop-VMS software includes a full VMS operating system and DECwindows workstation software. Although DECwindows is an interface to the VMS operating system, you do not need to know a great deal about the VMS directory structure to use your Desktop-VMS system. You can, for example, use your system successfully without ever leaving your own directory. But the more you understand about the VMS directory structure and the relationship between its parts, the more sophisticated your daily computing tasks can become.

This chapter is designed for new users of VMS as well as those who need a refresher on files and directories and their place in the VMS directory structure. If you are already familiar with this discussion, skip to Chapter 6 to find out exactly how to work with files and directories under FileView, the graphic interface to VMS.

Understanding the VMS Directory Structure

In the VMS operating system, information is stored hierarchically. At the top of this hierarchy is the **master file directory**. Your **user file directory** and those belonging to other users on your system are listed in this master file directory. Your user file directory—usually called username.DIR—is a file that points to your top level directory. This top level directory contains the files and subdirectories that you have created or that have been created for you. It is from your top level directory that you perform most of your daily online tasks.

Your directory structure resembles a family tree. Your top level directory branches off to files and to **subdirectories**, which branch still further. Subdirectories let you organize files into meaningful groups. By ascending and descending the directory structure, you can list the contents of your directory and subdirectories, and work with the files they contain.



The top level directory, subdirectories, and files that make up your directory structure are stored on a physical device called a **disk**. The access path to a **file** is through the **node** and device, through a top level directory, through any subdirectories, and then to the file. If your computer system is part of a network, you can access other directory structures on other nodes.

About Files

A file can be a document, a program written in a language such as C or Pascal, or a list of street addresses. Among other things, you can view, edit, print, and delete these files. In DECwindows, you use FileView to perform tasks with files.

Every file has a file name or file type to identify it. When you create a file, you give it a file name. This name should be meaningful to you. A file name can be up to 39 characters chosen from the letters A through Z (uppercase or lowercase), the numbers 0 through 9, an underscore (_), a hyphen (-), or a dollar sign ($).

A file type identifies the nature of a file. For example, a file that contains text may have the file type TXT. A program that you can run—or **execute**—often has the file type EXE.

A file also has a version number. You can have many versions of a file. When you modify that file, the system saves the original file and produces a modified output file. This output file has the same name and type as the original, but the version number is increased by 1. Unless you specify a version number, FileView uses the highest existing version number of that file when it executes a command.

You express this file information in the following format:

```
filename.type;version
```

About Directories and Devices

Files are cataloged in directories. The file name, type, and version of the files in a directory are recorded in a special kind of file called a directory file. When you list the contents of a directory, the system reads the directory file to obtain the names of the files in that directory.

A directory file has the following format:

```
directory.DIR;1
```

Because you cannot edit a directory file, all directory files have a version number of 1.

When you started your first DECwindows session, you were placed in your top level directory. Your top level directory, which contains all your files and subdirectories, is stored on a **device**. By default, the name of the device containing your directory and files is $USERS. The device, directory, and file information combine

to form a **file specification**. You use this file specification to identify the path to a file.

The following file specification tells a user that the file RABBIT.TXT is located in the directory [MCGREGOR] on the device $USERS. (If you want to access a file that is located on your device, you can omit the device name from the file specification.) The colon and brackets are required elements in the file specification.

```
$USERS:[MCGREGOR]RABBIT.TXT
```

A subdirectory name always appears after the directory name, separated from it by a period. You can append up to seven subdirectory names—each separated from the other by a period—after the directory name. The following file specification tells a user that the file RABBIT.TXT is located in the subdirectory [MCGREGOR.GARDEN] on the device $USERS:

```
$USERS:[MCGREGOR.GARDEN]RABBIT.TXT
```

If you want to access a file on another node, you must include the node name in the file specification. (You specify a node only if your computer system is part of a network.) The following file specification tells a user that the file COTTONTAIL.TXT is located in the directory [PETER] on device $PUBLIC on node FLOPSY:

```
FLOPSY::$PUBLIC:[PETER]COTTONTAIL.TXT
```

Using Wildcards in File Specifications

FileView provides commands that let you work with files. The asterisk (*) and percent sign (%) wildcards allow you to apply commands to multiple files rather than to one file at a time. When you use wildcards in a file specification, the command applies to all files whose fields match those of the file specification you enter. (Fields are the individual elements, such as the file name and file type, of a file specification.)

If you choose a command that accepts wildcards, the asterisk (*) and percent sign (%) wildcards can be used in the directory name, file name, and file type fields of a file specification. See Chapter 6 for more information about using FileView commands.

Using the Asterisk (*) Wildcard

You can use the asterisk wildcard to represent all or part of a directory name, file name, and file type. You can also use an asterisk to match the entire version number, but not a portion of it.

The following example shows how to use an asterisk to replace fields of a file specification. By choosing FileView's Type command and entering the following file specification in Type's dialog box, all versions and all file types of all files that begin with the word STAFF in the directory [JONES] are displayed. This includes STAFF_VACATIONS.TXT, STAFF.DIS;1, and STAFF.DIS;2.

```
Files: STAFF*.*;*
```

When you select the file you want the command to act on, you provide FileView with an **input file specification**. You must also provide the name of the **output file specification** created as a result of the command. Use the asterisk in the file name, type, and version number fields in the output file specification when you want the output file specification to match the corresponding fields in the input file specification.

In the following example, choosing FileView's Copy command and entering the following file specification in Copy's dialog box copies the latest version of all TXT files in [JONES] to new files in [JONES] with the same name but with a file type of SAV:

```
From: *.TXT
To: $USERS:[JONES]*.SAV
```

Using the Percent (%) Wildcard

The percent sign wildcard can be used as a substitute for any single character in the directory, file name, and file type fields. You cannot, however, use the percent sign wildcard in the version number field.

In the following example, choosing FileView's Type command and entering the file specification in Type's dialog box as shown displays the latest versions of all TXT files whose names begin with DISTRICT:

```
Files: DISTRICT%.TXT
```

The files DISTRICT1.TXT, DISTRICT2.TXT, and DISTRICT3.TXT would be displayed. The file DISTRICT33.TXT would not be displayed (because it has more than one character after DISTRICT), nor would the file DISTRICT.TXT. The percent sign

replaces one character position, but there must be a character to replace.

Using Wildcards in Directory Specifications

You can also use two other wildcards, the ellipsis (. . .) and hyphen (-), to refer to another directory or subdirectory in a directory structure. The ellipsis wildcard allows you to search down the directory hierarchy. The hyphen wildcard permits you to move up the directory structure one level at a time. See Chapter 6 for more information about using the ellipsis and hyphen wildcards.

6

Using FileView



FileView is a graphic representation of the VMS operating system that appears on your screen at the start of every DECwindows session. You can think of FileView as an application. As with other DECwindows applications, FileView allows you to execute commands and perform tasks by selecting text and objects on your screen with a mouse.

However, unlike other applications—which provide commands for using the *application*—FileView gives you access to the applications and commands you need to use your *system*. From FileView, you can:

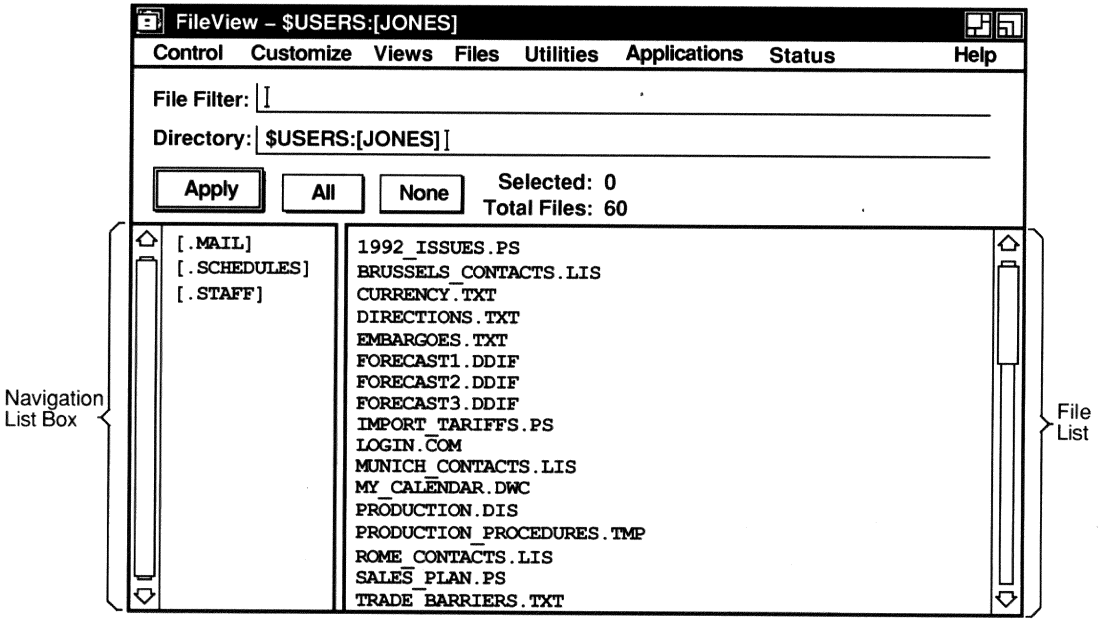
- Run DECwindows applications, such as Calendar and Cardfiler.
- Execute commands for using tapes, diskettes, and printers.
- Edit, copy, delete, print, or search a file.
- Create directories to organize your files.

FileView also provides a window to the VMS operating system through the Digital Command Language (DCL). You can execute a DCL command directly from FileView (see Executing a DCL Command). Thus, the power of DCL is only a window away.

In this chapter, you will learn how to run applications, how to use commands to perform file tasks, how to get helpful information about files, and how to navigate the directory structure to gain quick access to files.

Understanding the FileView Window

FileView appears on your screen at the start of every session. The main window looks like this:



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- The title bar displays the name of the application and the name of the current directory. Notice also that the FileView icon in the Icon Box displays the current device and directory.
- The menu bar displays the names of menus available from FileView.
- The File Filter text field lets you list a subset of files, for example, all TXT files, in the current file list. By entering a directory specification here, you can also list the contents of a directory or directory structure without changing your current directory. (That is, where files produced by any commands are placed.) You can work with files on other nodes by including the remote node in the File Filter field.
- The Directory text field displays the name of the current, or default, device and directory. Unless you specify otherwise, you are placed in your top level directory whenever you start FileView.

- The navigation list box displays your subdirectories. Using the navigation list box, you can ascend and descend a directory structure in the current or a new FileView window.
- The Apply button lets you create a new file list based on the contents of the File Filter and Directory field. These contents can include a wildcard in the File Filter, or another directory specification in the Directory field. If you make any changes to the files in your current directory, such as renaming a file, the Apply button changes to an Update button to remind you to update your file list.
- The All button selects all the files in the file list.
- The None button cancels the current file selection.
- The Selected field tallies the number of files selected.
- The Total Files field tallies the number of files in the file list.
- The file list can contain different kinds of information, such as the creation date or size, about the files in the current directory or in the directory specified in the File Filter field. The first time you start FileView, the file list contains only the names of the files in your top level directory.

Running Applications

You run applications from FileView. When you choose the application you want to run from FileView's Applications menu, that application is displayed in a window and its icon is placed in the Icon Box. FileView remains available for you to run additional applications or perform other tasks.

Selecting File Names

Before you execute a task, you select the file you want to work with. FileView highlights a selected file. The next command you choose will affect that file.

To select a file from your file list:

1 Point to the file you want to select.

2 Click MB1.

The file name is highlighted.

FileView keeps track of the number of files currently selected. Selecting one file at a time cancels the previous file selection.

To select a block of adjacent files from the file list:

1 Point to the first file in the range.

2 Drag the pointer through the files you want to select.

The block of files is highlighted. FileView reports the number of files selected.

To select files scattered throughout the file list:

1 Point to the first file you want to select and click MB1.

2 Press and hold Shift and click MB1 on the other files you want to select.

Select all the files in the current directory by clicking on the All button. You can then remove individual files from the selection by pointing to them, pressing and holding the Shift key, and clicking MB1. You can remove multiple files from the selection by pointing to them, pressing and holding the Shift key and MB1, and dragging the pointer through them. Cancel your file selection by clicking on the None button.

You can also select file names that appear in other windows by dragging the pointer through the file name or double clicking on it. See Chapter 4 for more information about making selections.

If you do not select a file name before choosing a FileView command, FileView displays a dialog box, asking you to enter the name of the file or files on which you want the command performed.

Scrolling Through the File List

FileView displays horizontal or vertical scroll bars if the files in your current directory cannot fit in the file list. (If at least two full columns fit in the file list, FileView displays the files in multiple columns.) Use the scroll bars to see the rest of the information.

See Chapter 4 for more information about using scroll bars.

Updating the File List

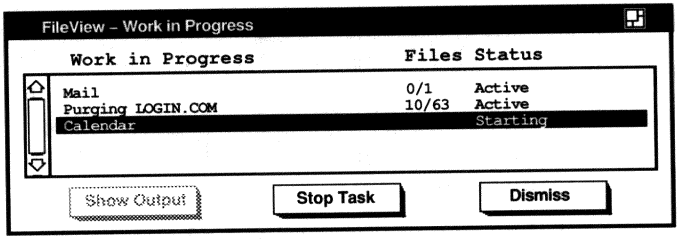
Apply

You use the Apply button to create a new file list based on the contents of the File Filter and Directory field. For example, to list only the TXT files in your current directory, type *.TXT in the File Filter text field and click on the Apply button. The file list displays the files you requested.

The Apply button changes to an Update button when you make changes to the contents of the current directory. If that change affects your file list, clicking on the Update button displays the altered version of the file list. For example, if you rename or delete a file in the file list, the Apply button changes to an Update button to remind you to update the file list. You can continue to work with other files and perform other tasks, updating the file list at your convenience.

Keeping Track of Work in Progress

FileView maintains a Work in Progress dialog box that lists the applications currently running and the commands currently executing. FileView automatically displays this dialog box when you start applications or perform most file tasks.



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If a command is executing on multiple selected files, the Work in Progress dialog box displays a status message as each file is affected. For example, if you select three files from the file list for deletion, the Work in Progress dialog box displays a status message as each file is deleted.

The Files column tells you how many files are selected and the file on which the command is currently executing. For example, if you selected five files for copying, the files column displays 1/5 as it copies the first file, 2/5 as it copies the second file, and so on.

The Status column tells you the task's status. This status can be any of the following:

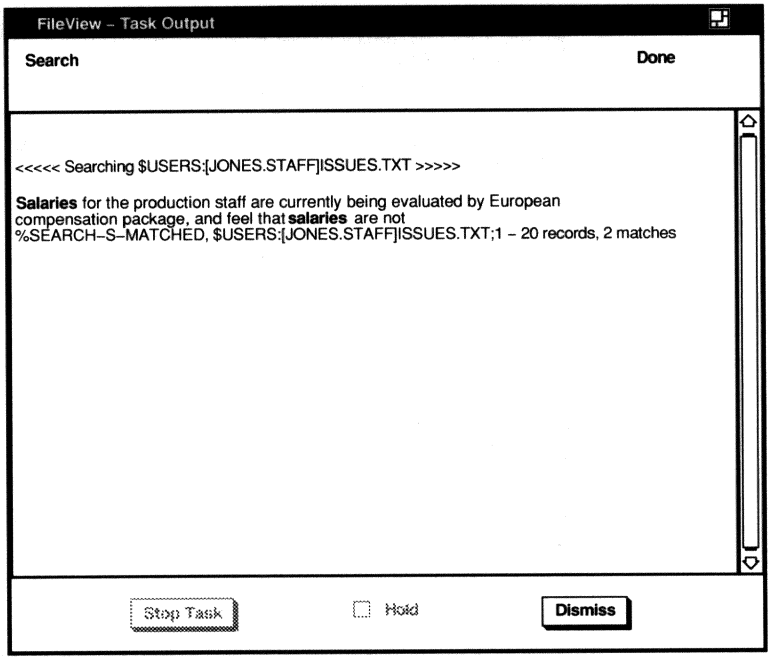
This status	Means
Starting	The application is starting but is not yet displayed.
Active	The task is currently executing.

This status	Means
Pending	The task cannot execute because you have exceeded the number of tasks—called subprocesses—you are allowed to execute. If several other tasks are executing, this status changes to "Active" when those tasks are completed.
Done	The task is complete.

If you want to cancel a task—either a command or an application—while it is executing, select it in the Work in Progress dialog box and click on the Stop Task button. If the task produced a Task Output window, you can also cancel a command by clicking on the Stop Task button in that window.

If the command successfully completes and produces no output files, such as when you copy or rename a file, FileView places the word "Done" in the Status column and removes the task status message from the Work in Progress dialog box. FileView closes the Work in Progress dialog box unless you since started another task that opens it.

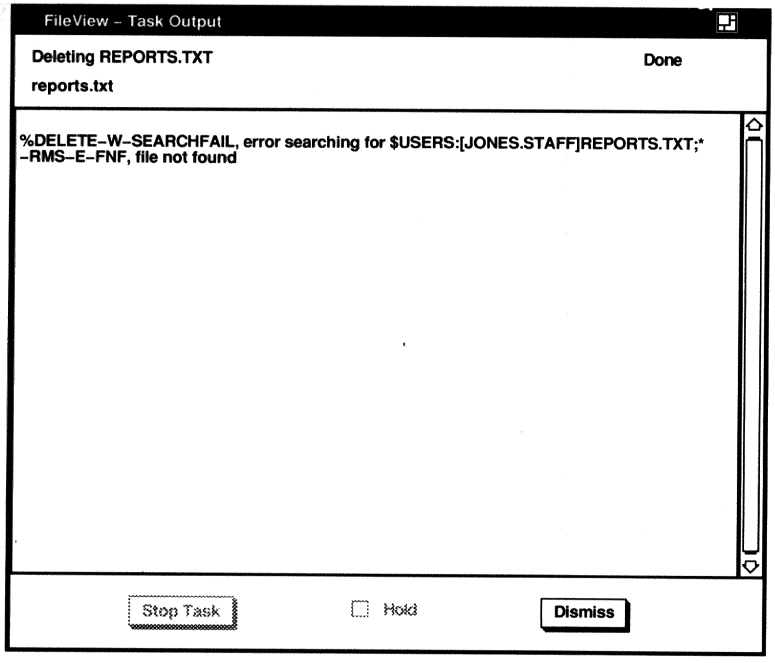
If the command normally produces output files that you need to see to continue working, FileView opens a Task Output window. For example, when you search a file for a text string, you want to see the results of that search operation, that is, a listing of every line in the selected file on which the text string you specified appears. In the following example, FileView displays the results of a search for the text string "salaries":



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If the output is more than one screen of text, the text scrolls off the screen. Toggle on the Hold button to stop and resume scrolling. Use the scroll bars to redisplay the last 100 lines of text that scrolled off the screen. When you are done viewing the output, or if you want to view it at a later time, click on the Dismiss button.

If FileView cannot execute the task successfully, it displays the word "Error" next to the Status column in the Work in Progress dialog box. Click on the Show Output button in the Work in Progress dialog box to display the error message. For example, if a delete operation failed, the Task Output window displays the following error message:

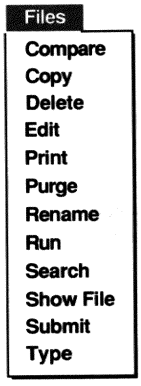


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If the task produces output files (for example, files that have been copied) and the Task Output window is not currently displayed, the words "New Output" are displayed next to the Status column in the Work in Progress dialog box. Click on the Show Output button to display the output.

You can keep track of your FileView tasks by keeping the Work in Progress dialog box open. To open the Work in Progress dialog box, choose the Work in Progress... menu item from the Control menu. If you open the Work in Progress dialog box in this way, it remains open until you dismiss it.

Working with Files



FileView provides commands that let you do the following tasks:

- Display the contents of files
- Create and modify files
- Copy files
- Search files for text strings
- Rename files
- Compare the contents of files
- Display information about files
- Purge files from directories
- Delete files
- Print files
- Run programs

Hiding Command Dialog Boxes

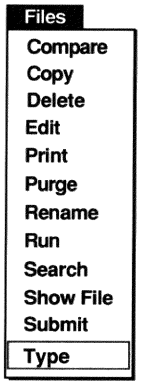
When you choose a command from FileView's Files menu, FileView displays a dialog box in which you can choose options to tailor the file operation. For example, you can request that the Copy command display a confirmation message each time it copies a file.

If you want a command performed in the same way every time you choose it, you can prevent FileView from displaying a command dialog box. By clicking on the Hide This Dialog option button in a command dialog box, you prevent FileView from displaying that command dialog box the next time you execute the command. Even though the command's dialog box is hidden, FileView continues to use the options you chose to tailor your file operation.

But what if you have hidden a command dialog box and need to see it? To display a hidden command dialog box, pull down the Files menu, drag the pointer to the command you want, press and hold the Shift key, and release MB1.

A hidden command dialog box also appears if the command you choose requires a file name, but none is selected.

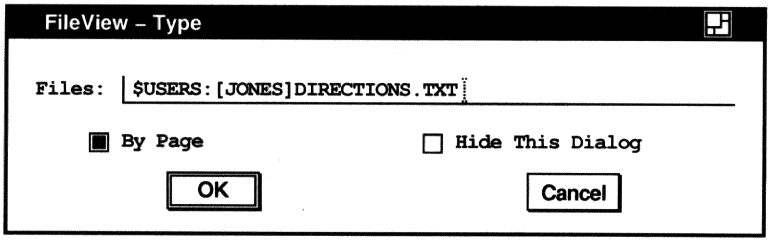
Viewing the Contents of Files



To view the contents of one or more files without making any changes, use the Type command:

1 Select the files you want to view.

2 Choose the Type command from the Files menu.
FileView displays a dialog box.



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3 To display a file, click on OK.
To alter the way a file is displayed, choose any of the following options and click on OK:

Enable this option	To
By Page	Display the file one page at a time.
Hide This Dialog	Prevent FileView from displaying the Type dialog box the next time you choose the Type command.

4 Click on OK to display the selected file.

If the Work in Progress dialog box is displayed, it reports that the file is being typed. The Task Output window opens, and the file you specified is displayed one page at a time. Press the Return key to display the next page. If you selected more than one file for display, press Ctrl/Z to cancel the display of the current file and continue with the next file.

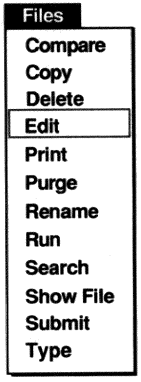
If you disabled the By Page setting and the file contains more than one screen of text, the text scrolls off the screen. Toggle on the Hold button to stop and resume scrolling.

When the entire file has been displayed, the word "Done" appears in the upper right-hand corner of the Task Output window. Use the scroll bars to redisplay the last 100 lines of text that scrolled off the screen. Click on the Dismiss button to close the Task Output window.

To use wildcards in the file specifications of the files you want to view, choose the Type command without first selecting any files. In the following example, choosing the Type command and entering the file specifications as shown displays the highest version of those files in the current directory with a file type of LIS:

```
Files: *.LIS
```

Creating and Modifying Files



Using the Edit command, you can create and edit new or existing files. You can add text to a file and modify or format that text.

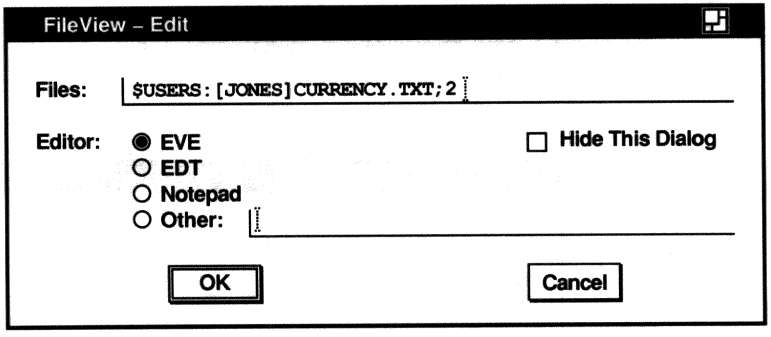
FileView gives you several text editors from which to choose:

- EVE
- EDT
- Notepad

To edit a file:

1 Select the file you want to edit.

2 Choose the Edit command from the Files menu.
FileView displays a dialog box.



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3 Click on the editor you want to use.
To use an editor other than those listed, enter the appropriate DCL command for invoking the editor in the text field provided. FileView appends the file name of each selected file to this Edit command.

4 Click on OK.

If the Work in Progress dialog box is displayed, it reports that the editor is starting.

If you clicked on EVE, FileView displays another dialog box in which you can specify EVE settings. If you clicked on EDT, FileView opens a Task Output window where you can edit your file using EDT. If you clicked on Notepad, a Notepad window opens. Click on the Hide This Dialog button to prevent FileView from displaying the Edit dialog box the next time you choose the Edit command.

See the *VMS DECwindows Desktop Applications Guide*, which is available online, for more information about using EVE and Notepad.

Copying Files

Files
Compare
Copy
Delete
Edit
Print
Purge
Rename
Run
Search
Show File
Submit
Type

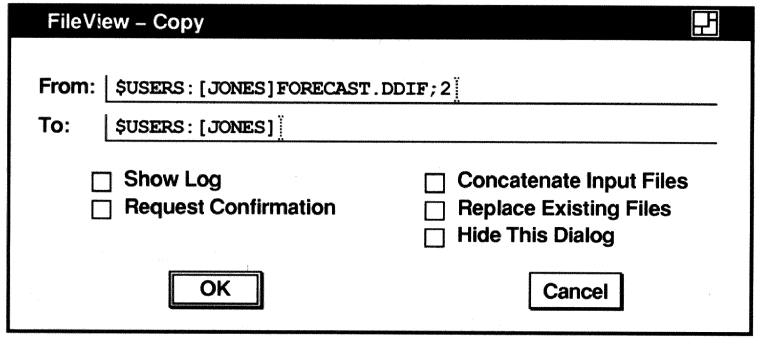
You can copy a file to a new file name, concatenate two or more files into a single file, or copy a group of files to a group of new files. You can also enhance a copy operation by choosing several options from the Copy dialog box.

When you copy a file to another file name, the original file remains unchanged.

Copying One File to Another To copy a file to a new name or to a different subdirectory:

1 Select the file you want to copy.

2 Choose the Copy command from the Files menu.
FileView displays a dialog box.



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3 Enter the new file name, or the device and directory to which you want the file copied.

4 To perform a simple copy operation, click on OK.

To alter the way a copy operation is performed, choose any of the following options and click on OK:

Enable this option	To
Show Log	Display the file specification of each copied file. If a file is not copied, an error message is reported. This toggle button is especially helpful for verifying whether multiple input files were copied to multiple output files as you intended.
Request Confirmation	Display a prompt asking whether the file should be copied.
Concatenate Input Files	Create one output file from multiple input files if wildcard characters are not used in the output file specification.
Replace	Delete the file that already exists with the output file specification you entered. The copied file is given that file specification because two files cannot have exactly the same file specification; that is, at least the version number must be different.
Hide This Dialog	Prevent FileView from displaying the Copy dialog box the next time you choose the Copy command.

If the Work in Progress dialog box is displayed, it reports that the file is being copied. Once it is copied, this status message disappears.

If FileView cannot copy the file, it displays the word "Error" in the Work in Progress dialog box. To open the Task Output window and see the error message, click on the Show Output button. Click on the OK button in the Task Output window when you finish viewing the message.

If you choose the Copy command without first selecting a file, enter the name of the file you want to copy in the Copy dialog box.

Copying Groups of Files You can concatenate two or more files into a single file, or copy multiple input files to multiple output files. To copy a group of files at the same time, you select the files and then copy them in one operation. You can tailor this copy operation as well by choosing options from the Copy dialog box.

To copy a group of files in one operation:

1 Select the files you want to copy.

2 Choose the Copy command from the Files menu.
FileView displays a dialog box.

3 Enter the new file name or names, or the device and directory you want the files copied to.

4 Click on OK.

If the Work in Progress dialog box is displayed, it reports that the files are being copied. Once they are copied, this status message disappears.

If you specify multiple input files in the Copy dialog box, separate them with a comma. To create multiple output files, specify multiple input files and include at least one of the following:

- An asterisk wildcard in the output directory, file name, file type, or version number field
- Only a directory specification as the output file specification

When multiple output files are created, the corresponding field from each input file specification is used in the output file specification. If you do not specify a version number for the input and output files, the Copy command assigns a version number to the output files that is either of the following:

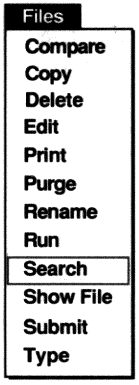
- The version number of the input file
- A version number one greater than the highest version number of an existing file with the same file name and file type

If you specify a version number in the output file specification, the Copy command uses that number for the output file specification. If a higher version of the output file already exists, a warning message is issued in the Task Output window, but the file is still copied. If an equal version of the output file already exists, a message is issued and the file is not copied. (Toggle on the Replace button in the Copy dialog box to overwrite the existing file.)

The following example copies the files DIRECTIONS.TXT;1 and PROVISIONS.LIS;1 to produce two output files, HOLIDAY.TXT;1 and HOLIDAY.LIS;1:

```
From: $USERS:[JONES]DIRECTIONS.TXT;1,$USERS:[JONES]PROVISIONS.LIS;1
To: $USERS:[JONES]HOLIDAY.*;*
```

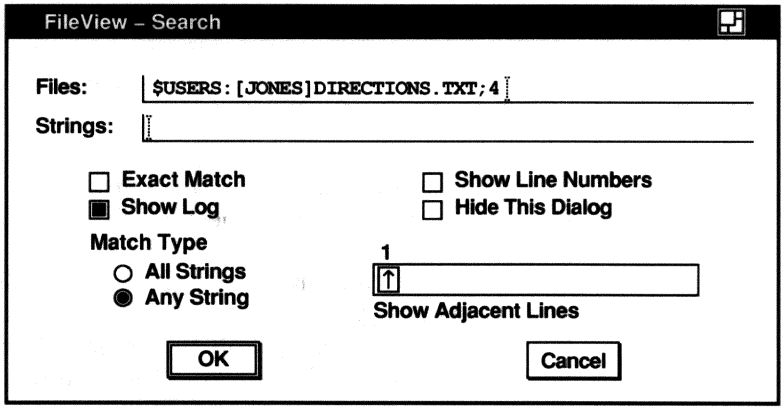
Searching Files for Text Strings



To search one or more files for one or more text strings, use the Search command.

1 Select the files you want to search.

2 Choose the Search command from the Files menu.
FileView displays a dialog box.



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3 Enter the text string you want to search for.

4 To perform a simple search operation, click on OK.
To alter the way a search operation is performed, choose any of the following options and click on OK:

Enable this option	To
Exact Match	Find only those strings that exactly match the string you specified. Unless you specify this toggle button, the Search command does not differentiate between uppercase and lowercase letters.
Show Log	Display the file specification of each file as it is searched.
Match Type	Produce output only if the line contains all the strings when you specify multiple search strings. Click on the Any String button to produce output if the line contains any of the strings.

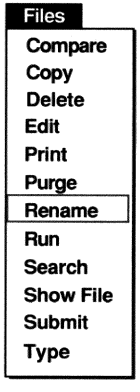
Enable this option	To
Show Line Numbers	Display the line number on which the text string is located in the file being searched.
Show Adjacent Lines	Specify the number of lines to be displayed with the search string. By default, only the line containing the search string is displayed.
Hide This Dialog	Prevent FileView from displaying the Search dialog box the next time you choose the Search command.

If the Work in Progress dialog box is displayed, it reports that the files are being searched. A Task Output window opens, displaying the lines in the files you specified that contain the text string you entered. If the output is more than one screen of text, the text scrolls off the screen. Toggle on the Hold button to stop and resume scrolling. Use the scroll bars to redisplay the last 100 lines of text that scrolled off the screen. Click on the Dismiss button when you finish viewing the results.

To use wildcards in the file specifications of the files you want to search, choose the Search command without first selecting any files. In the following example, choosing the Search command and entering the file specification as shown searches all versions of all files in the current directory with the file type COM for the text string WRITE.

```
Files: *.COM
Strings: WRITE
```

Changing the Name of a File



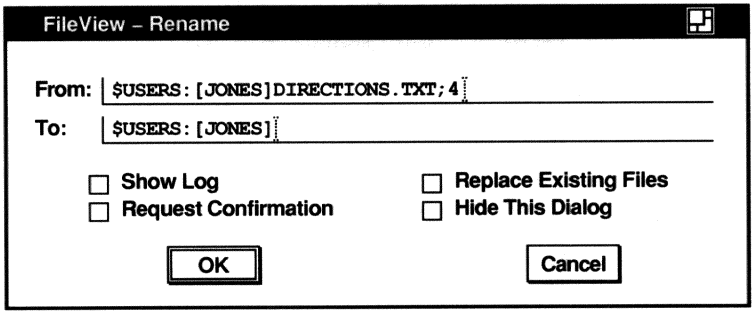
You can change all or part of a file specification of one or more existing files by using the Rename command. You can also rename a group of files in one operation. You can change just the name of the file or keep the same file name and change the directory in which the file is located. You cannot, however, use the Rename command to change the device on which a file is located.

When you rename a file, a copy of that file no longer exists under its original name.

Renaming a File To change all or part of a file specification of an existing file:

1 Select the file you want to rename.

2 Choose the Rename command from the Files menu.
FileView displays a dialog box.



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3 Enter the new file name.

4 To perform a simple rename operation, click on OK.
To alter the way a rename operation is performed, choose any of the following options and click on OK:

Enable this option	To
Show Log	Display the file specification of each file as it is renamed. This toggle button is especially helpful for verifying whether multiple input files were renamed to multiple output files as you intended.
Request Confirmation	Display a prompt asking whether the file should be renamed.
Replace Existing Files	Delete the file that already exists with the output file specification you entered. The renamed file is given that file specification because two files cannot have exactly the same file specification.
Hide This Dialog	Prevent FileView from displaying the Rename dialog box the next time you choose the Rename command.

If the Work in Progress dialog box is displayed, it reports that the file is being renamed. Once it is renamed, the status message disappears.

If you choose the Rename command without first selecting a file, enter the name of the file you want to rename in the Rename dialog box.

If FileView cannot rename the file, it displays the word "Error" in the Work in Progress dialog box. To open the Task Output window to see the error message, click on the Show Output button. Click on the OK button in the Task Output window when you finish viewing the message.

In the following example, choosing the Rename command and entering the file specifications in the Rename dialog box as shown changes the directory specification of DIRECTIONS.TXT from your top level directory to the SCHEDULES subdirectory. (DIRECTIONS.TXT is moved to the SCHEDULES subdirectory.)

```
From: DIRECTIONS.TXT
To: [.SCHEDULES]
```

Renaming Groups of Files You can rename multiple files in one operation. The simplest way to rename multiple files is by selecting them in your file list and renaming them as you would one file.

You can also rename multiple input files to multiple output files by specifying wildcard characters in corresponding fields of the input and output file specifications. Just as when you renamed one file, you can tailor this operation by choosing options from the Rename dialog box.

If fields in the output file specification are omitted or replaced by wildcard characters, the Rename command uses the device, directory, file name, and file type of the input file specification in naming the corresponding fields in the output file specification. The version number is determined in the following ways:

- If you specify an explicit version number in the output file specification, that version number is used.
- If you specify a wildcard as the version number in the output file specification, the version number of the input file is used.
- If you specify a wildcard as the version number in the input file specification, the version number of each input file is used to name a corresponding output file.
- If no file exists with the same file name and type as the output file, a version number of 1 is used.

- If a file already exists with the same file name and type as the output file, the next higher version number is used.

To rename multiple files in one operation using wildcards:

1 Choose the Rename command from the Files menu.
FileView displays a dialog box.

2 Enter the file specifications of the files you want to rename.
Separate them with commas.

3 Enter the file specification you want the files renamed to.

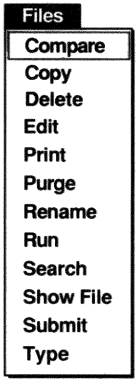
4 Click on OK.

If the Work in Progress dialog box is displayed, it reports that the files are being renamed. Once they are renamed, the status message disappears.

In the following example, choosing the Rename command and entering the file specification in the Rename dialog box as shown renames all versions of all files in $USERS:[JONES] with the file type TXT to the file type OLD. The file names and version numbers are not changed.

```
From: *.TXT;*
To: $USERS:[JONES]*.OLD;*
```

Comparing the Contents of Files

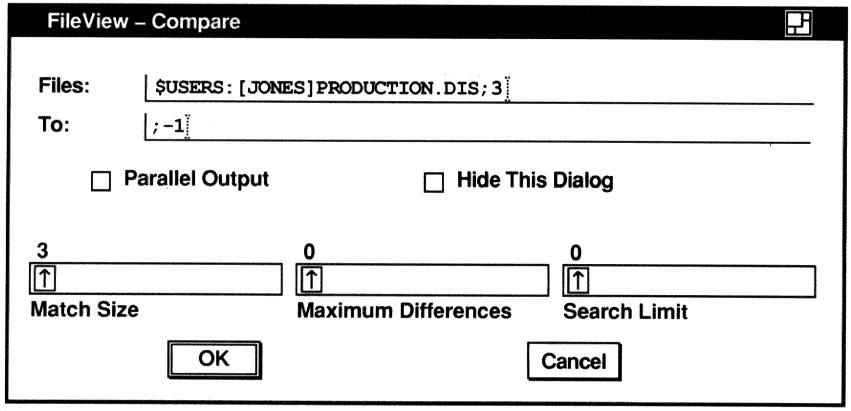


You can compare the contents of two files and view a listing of the lines that do not match by using the Compare command. Use the Compare command to find out whether two files are identical and, if not, how they differ.

To compare the contents of two files:

1 Select the first file you want to compare.

2 Choose the Compare command from the Files menu.
FileView displays a dialog box.



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The To: text field contains the text ;-1. This means that the selected file will be compared to its previous version. To compare the selected file to a file other than its previous version, double click on this text and enter another file specification.

3 To perform a simple compare operation, click on OK.

To alter the way each compare operation matches lines, choose any of the following options and click on OK:

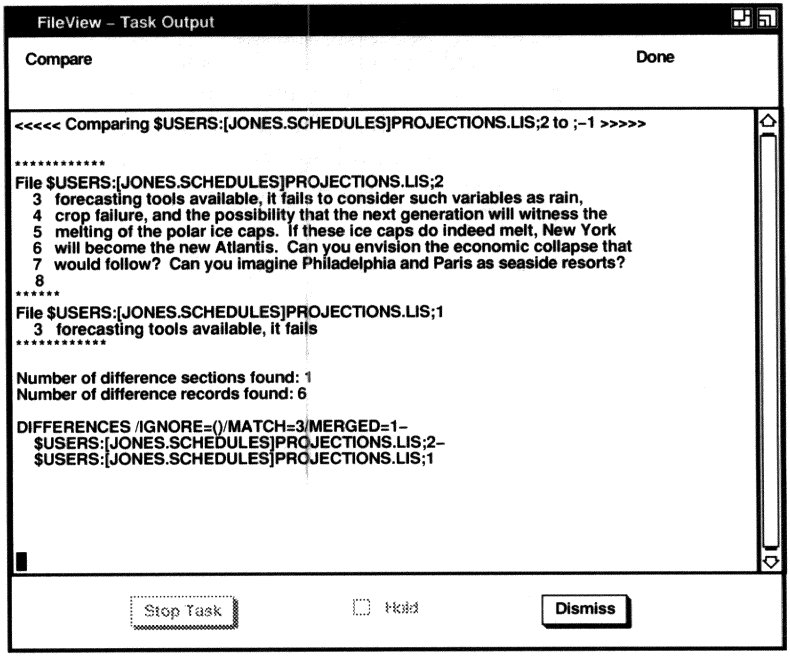
Enable this option	To
Parallel Output	List the lines with differences side by side.
Hide This Dialog	Prevent FileView from displaying the Compare dialog box the next time you choose the Compare command.
Match Size	Specify the number of lines that should again indicate matching data after differences are found. Once the Compare command finds unmatched lines, it considers the files matching once again after it finds three sequential lines that match. Use the Match slider to override the match size of 3.
Maximum Differences	Terminate the compare operation after the specified number of differences is found. This number can be from 0 to 100. If you specify 0, all differences found between the files are reported.

Enable this option	To
Search Limit	Specify how many lines should be searched before a line is considered unmatched. This number can be from 0 to 100. If you specify 0, the Compare command searches to the ends of both files being compared before it lists a line as unmatched.

If the Work in Progress dialog box is displayed, it reports that the files are being compared. A Task Output window opens, displaying all lines in the files you specified that do not match. If the output contains more than one screen of text, the text scrolls off the screen. Toggle on the Hold button to stop and resume scrolling. Use the scroll bars to redisplay the last 100 lines of text that scrolled off the screen. Click on the Dismiss button when you finish viewing the results.

If you choose the Compare command without first selecting a file, enter the name of the file you want compared to its previous version.

The following example shows the results produced when the files PROJECTIONS.LIS;2 and PROJECTIONS.LIS;1 are compared:

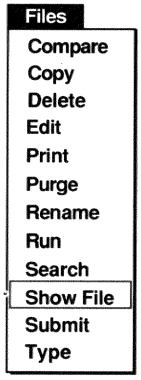


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In the following example, choosing the Compare command and entering the file specification in the Compare dialog box as shown compares the contents of the TRADE_BARRIERS.TXT with EMBARGOES.TXT:

```
Files: TRADE_BARRIERS.TXT
To: EMBARGOES.TXT
```

Displaying Information About Files



You can obtain information about a file or group of files by using the Show File command. This information can include the file's size, creation date, protection settings, and last backup date.

To obtain information about a file:

1 Select the file you want information about.

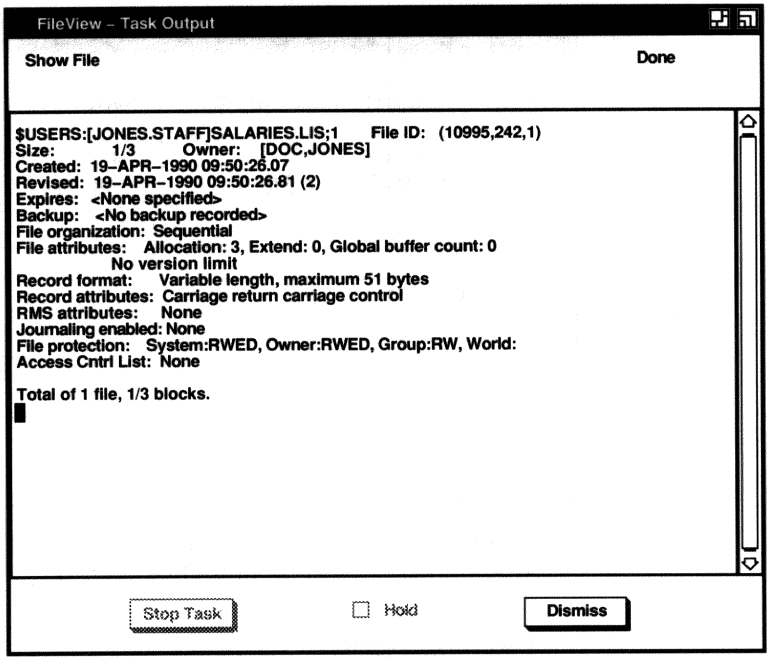
2 Choose the Show File command from the Files menu.

If the Work in Progress dialog box is displayed, it reports that information about the files you selected is being displayed. A Task Output window opens, displaying information about each file. If the output is more than one screen of text, the text scrolls off the screen. Toggle on the Hold button to stop and resume scrolling. Use the scroll bars to redisplay the last 100 lines of text that scrolled off the screen. Click on the Dismiss button when you finish viewing the results.

To use wildcards in the file specifications of the files you want information about, choose the Show File command without first selecting any files. In the following example, choosing the Show File command and entering the file specification as shown displays information about all files in the $USERS:[JONES] with the file type PS:

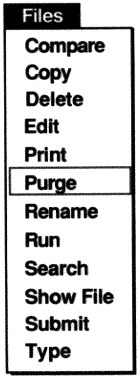
```
Show File: $USERS:[JONES]*.PS
```

Output from the Show File command looks something like this:



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Purging Files



You acquire another version of a file each time you modify it. These versions take up a great deal of space on your disk. If you find yourself with multiple versions of a file, you can delete all older versions by using the Purge command. Purging your directory makes room on your disk for other files.

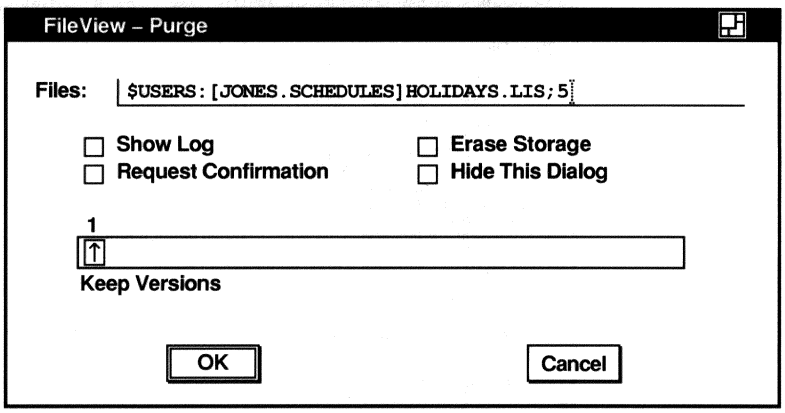
By default, the file list displays only the highest version of each file. If you have not changed this setting, you can purge your entire directory in one operation by selecting all the files. If your file list displays all versions of your files, you must select only the highest versions of each file for purging.

To purge one or more files:

1 Select the files you want to purge.

2 Choose the Purge command from the Files menu.

FileView displays a dialog box.



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3 To perform a simple purge operation, click on OK.

To alter the way a purge operation is performed, choose any of the following options and click on OK:

Enable this option	To
Show Log	Display the file specifications of each file as it is deleted.
Request Confirmation	Display a prompt asking whether the file should be purged.
Erase Storage	Erase the selected files from your disk so that the purged data no longer physically exists.
Hide This Dialog	Prevent FileView from displaying the Purge dialog box the next time you choose the Purge command.
Keep Versions	Retain the specified number of versions (starting with the highest) of each file. Unless you specify otherwise, all but the latest versions of the specified files are deleted. Use the Keep Versions slider to keep more than the highest version of each file.

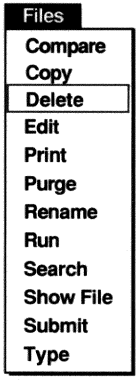
If the Work in Progress dialog box is displayed, it reports that the files are being purged. Once the files are purged, the status message disappears.

If you choose the Purge command without first selecting the file, you are prompted to enter the name of the file you want to purge.

To use wildcards in the file specifications of the files you want purged, choose the Purge command without first selecting any files. In the following example, choosing the Purge command and entering the file specification as shown purges all files with the letter *L* in their file name and a file type of COM.

```
Files: *L*.COM
```

Deleting Files



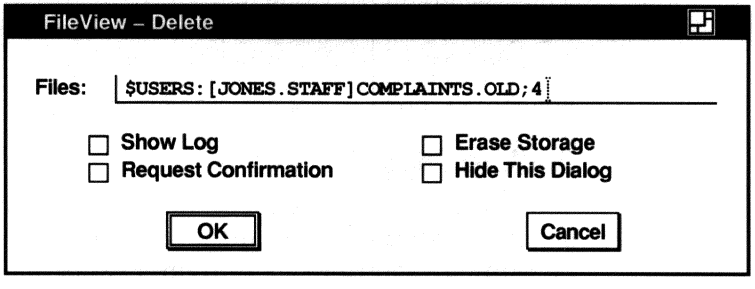
By deleting the files you no longer need, you make room on your disk for other files. You delete files by using the Delete command from the Files menu.

You can also delete a subdirectory if it contains no files. See Deleting a Subdirectory for more information.

To delete one or more files:

1 Select the files you want to delete.

2 Choose the Delete command from the Files menu.
FileView displays a dialog box.



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3 To perform a simple delete operation, click on OK.
To alter the way a delete operation is performed, choose any of the following options and click on OK:

Enable this option	To
Show Log	Display the file specification of each file as it is deleted.
Request Confirmation	Display a prompt asking whether the file should be deleted.

Enable this option	To
Erase Storage	Erase the selected files from your disk so that the deleted data no longer physically exists.
Hide This Dialog	Prevent FileView from displaying the Delete dialog box the next time you choose the Delete command.

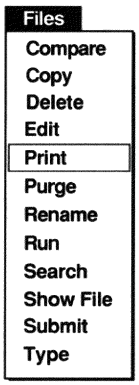
If the Work in Progress dialog box is displayed, it reports that the files are being deleted. Once they are deleted, this status message disappears.

If your file list does not include version numbers and you select a file for deletion, FileView deletes all versions of the file.

To use wildcards in the file specifications of the files you want deleted, choose the Delete command without first selecting any files. In the following example, choosing the Delete command and entering the file specifications as shown deletes all versions of the files FORECAST1.DDIF, FORECAST2.DDIF, FORECAST3.DDIF. The second and third file specifications use the file type of the first input file. Note, however, that some form of version number (here specified as wildcards) must be included in each file specification.

```
FORECAST1.DDIF;*,FORECAST2;*,FORECAST3;*
```

Printing Files

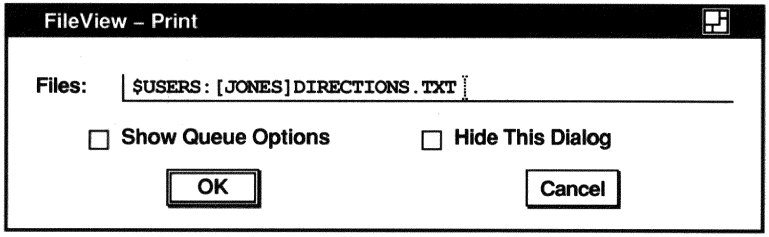


You can print a file by using the Print command. FileView sends the file to a **print queue**, where it is entered as a job to be printed. You can choose from a set of options to tailor your printing task.

To send one or more files to a printer:

1 Select the files you want to print.

2 Choose the Print command from the Files menu.
FileView displays a dialog box.



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3 To print the selected file on SYS$PRINT, your default system printer, click on OK.

   To alter the way a print operation is performed, choose the Show Queue Options button and click on OK. FileView displays another print dialog box in which you can provide additional information about how you want your file printed. This information might include the print queue to which you want your file sent and how many copies you want printed. See Chapter 8 for a detailed description of these additional print options.

To prevent FileView from displaying the Print dialog box the next time you choose the Print command, click on the Hide This Dialog button.

If the Work in Progress dialog box is open, FileView reports that your print job has been sent to the printer. The Session Manager displays a message when your job is printed.

To use wildcards in the file specifications of the files you want to print, choose the Print command without first selecting any files. In the following example, choosing the Print command and entering the file specifications as shown submits the files DIRECTIONS.TXT, CURRENCY.TXT and the highest versions of all files with file type COM as a single print job.

```
Files: DIRECTIONS.TXT,CURRENCY,*.COM
```

See Chapter 8 for more information about printing with your Desktop-VMS software.

Submitting a Batch Job

Your system has one or more batch job queues. The Submit command lets you submit a DCL command file to a batch queue instead of executing the procedure interactively. The batch queue executes the procedure automatically, leaving your terminal window free for other work.

DCL command procedures are programs with the COM file type. (Note that this is different from programs that have the EXE file type, which you execute by choosing the Run command.)

Batch queues are similar to print queues. When you submit a job to your system for batch processing, you are requesting a portion of your system's computing resources. If the batch queue is not processing other jobs, your job begins executing right away; but, if there are other jobs ahead of yours, your job must wait its turn in the queue.

To submit a command procedure:

1 Choose the Submit command from the FileView Files menu.
The Submitting file dialog box appears.

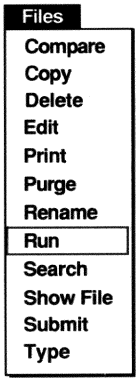
2 In the File to submit text entry field, enter the name of the DCL command file.

3 Click on the OK button.

A Work in Progress dialog box appears. It indicates when the job has been submitted to a batch job queue.

To check on the progress of your job after you have submitted it, use the FileView Status menu. Monitoring Print and Batch Queues explains how to monitor your batch job.

Running Programs

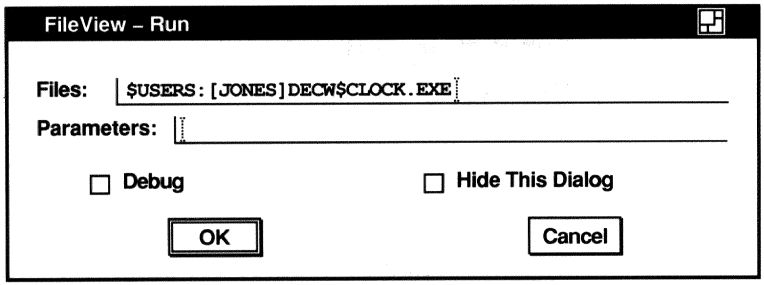


You execute a program by using the Run command. When you run a program, you execute the machine instructions in the program image. A program usually has an EXE file type. You can also use the Run command to invoke a DCL command file, which has a COM file type.

To run a program:

1 Select the file you want to run.

2 Choose the Run command from the Files menu.
FileView displays a dialog box.



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3 To run a file, click on OK.
If you want to add a parameter to the Run command, enter the parameter in the text field provided. If the file you want to run is a DCL command file, these parameters will be passed to it.

To alter the way a file is run, choose any of the following options and click on OK:

Enable this option	To
Debug	Run the program under the control of the VAX Debugger. To run an image without the debugger that has been linked with DEBUG, be sure this button is disabled.
Hide This Dialog	Prevent FileView from displaying the Run dialog box the next time you choose the Run command.

4 Click on OK.

If the Work in Progress dialog box is displayed, it reports that the file is being run.

In the following example, choosing the Run command and entering the file specification as shown executes the program MORTGAGE.EXE.

```
Files: [.SCHEDULES]MORTGAGE.EXE
```

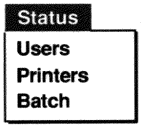
Monitoring Print and Batch Queues

Earlier, this chapter described two kinds of queues—print queues and batch queues—and how to submit jobs to them. This section describes how to monitor the status of print queues by using the PrinterView window, and the status of batch queues by using the BatchView window.

Monitoring a print or batch queue can be useful. For example, you can look at a queue to see whether it is available and operating normally before you submit your job. If it is not, you can delay submitting your job or submit the job to a different queue, if one is available.

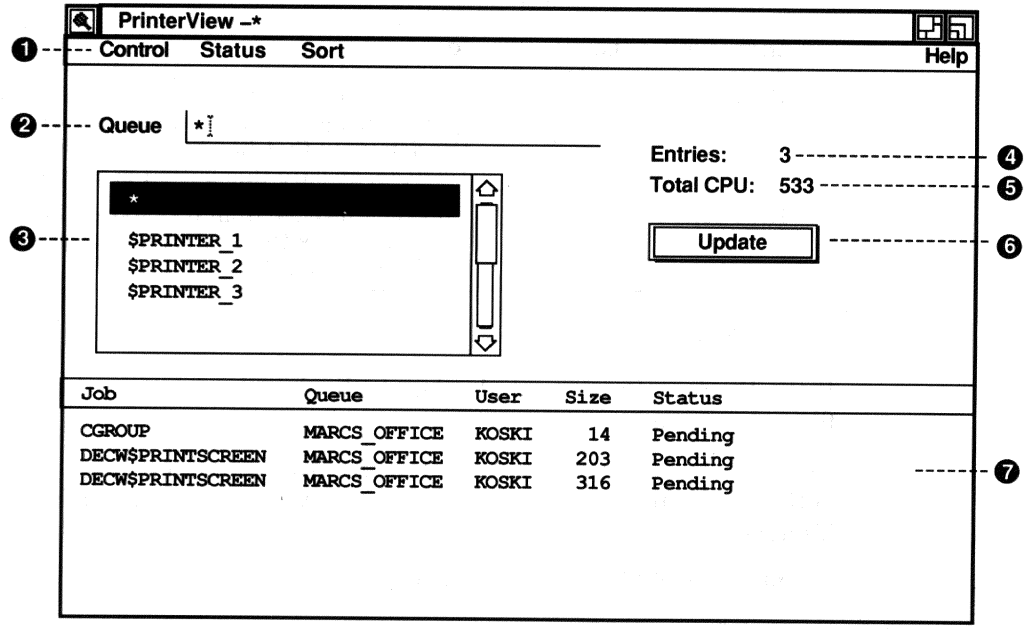
You can also check on the progress of your job after you submit it to see if it appears to be executing normally.

Invoking the Status Windows

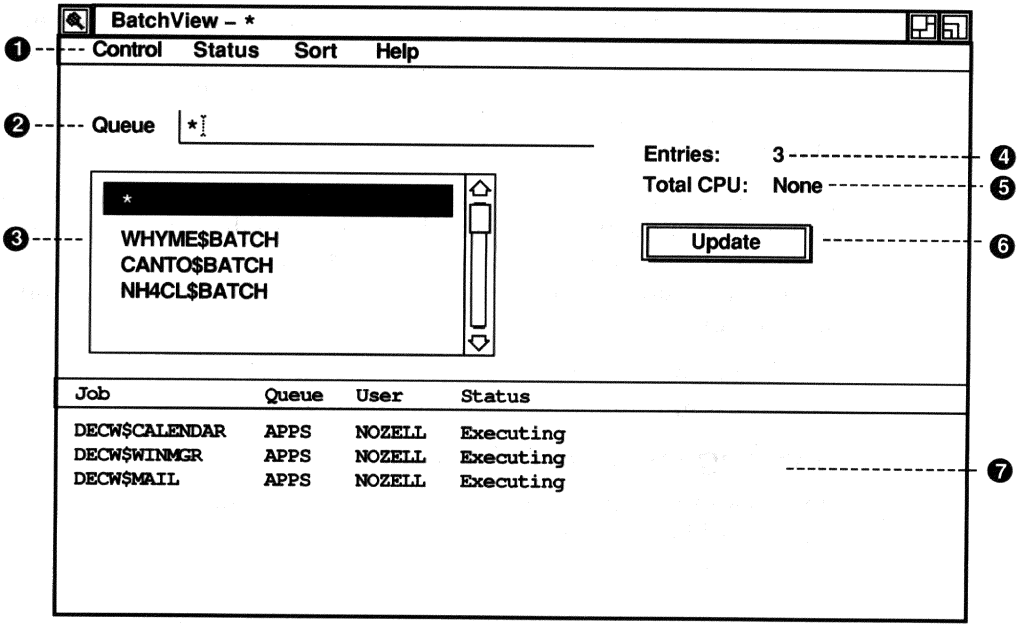


To invoke the PrinterView or BatchView window, choose either one from FileView's menu bar.

The PrinterView and BatchView windows look like this:



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The PrinterView and BatchView windows contain the following fields:

❶ Menu bar—Lets you change the display, stop (halt) jobs, and exit from the window.

❷ Queue text entry field—Lets you select a queue by entering its name here. The window displays jobs in the selected queue.

❸ Queue list box—Lists the queues in your cluster and lets you select one or more queues. The window displays jobs in the selected queues.

❹ Update button—Replaces the existing display with a new, current list of the jobs you are monitoring. When you change a selection, the display is not modified until you click on the Update button.

❺ Entries—Shows the total number of jobs displayed.

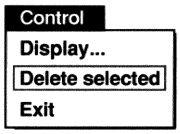
❻ Total size—Shows the number of file blocks (512 byte units) of the print jobs displayed.

Total CPU—Shows the maximum CPU time (processing time) that the selected batch queue can spend processing all of its current jobs. This is determined by the CPU limit set on each batch job when it is submitted. If no limits have been set for any batch job, the Total CPU limit is given as "None".

❼ Display area—Displays a list of the jobs that are in the selected queues.

Stopping a Print or Batch Job

To stop a job in the PrinterView or BatchView display:



1 Select the print or batch job you want to stop in the window's display area.

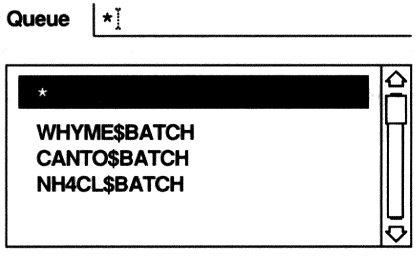
2 Choose the Delete Selected menu item from the Control menu.

If you decide not to stop it, choose the Select None menu item, instead, to cancel your selection.

Modifying the Status Window Displays

The queue list box in the PrinterView or BatchView window shows all the queues in your cluster and indicates which ones are selected for display. When you invoke a Status window, the asterisk wildcard (*) is initially highlighted. This indicates that all the print or batch jobs running in your cluster are displayed.

Changing the Queue Selection You can change the processes displayed in any Status window by selecting another queue in the queue list box. If you select a single queue in the BatchView queue list box, only the jobs running or waiting in that queue are displayed:



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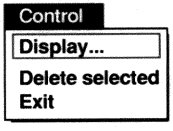
Notice that when you change your selection, the list of jobs in the display area does not change automatically. Click on the Update button to update the display.

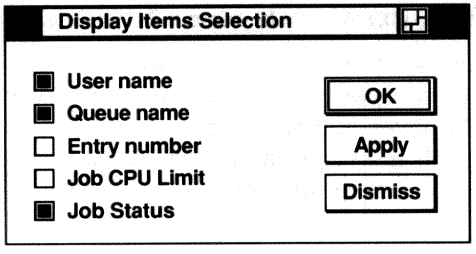
Changing the Display Items By default, the display lists only a few job characteristics. However, each of the Status windows can display additional characteristics.

Both the PrinterView and BatchView windows show the following job characteristics:

- Job—The job name
- User name—The user who submitted the job (If the system initiated the job, the user is "System")
- Queue name—The queue in which the job is executing or (waiting to be executed)
- Job status—The job is either executing or pending waiting

To see the additional display items that are available for either Status window, choose the Display... menu item from the Control menu. A Display Items Selection dialog box appears, as in the following example:





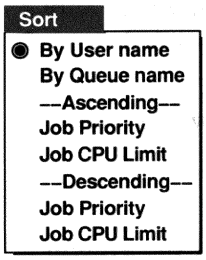
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The Display Items Selection box indicates the job characteristics that are enabled for display. To enable a new option, click on the button beside its name. The setting is enabled when its button is highlighted.

To update the main window display, click on the Display window's Apply button.

Click on the Dismiss button to get rid of the Display Items Selection box.

The OK button combines the action of the Apply button and the Dismiss button—the display is updated and the Display Items Selection box disappears.



Changing the Sort Order By default, the PrinterView and BatchView windows list jobs by job name, in alphabetical order.

You can change this order in any Status window by choosing another sort order from the window's Sort menu.

Monitoring System Processes

You may have noticed that the Status menu contains one other choice besides PrinterView and BatchView: the UserView window lets you monitor other kinds of activities in your cluster.

While you can invoke the UserView window through the Status menu, it is probably of limited use to you—it is primarily a tool to help the system manager check on the system's performance.

Accessing Files and Applications Quickly

To make your FileView sessions more efficient, FileView provides you with two shortcuts to access files and applications quickly: pop-up menus and double-click command definitions.

Using Pop-Up Menus to Execute Commands

You probably execute the same few commands on a specific file type. For example, you might edit, type, or copy a TXT file, but you would never run it. To help you perform file tasks more quickly, each file type has a corresponding pop-up menu that contains the commands you are most likely to use on that kind of file.

To see the contents of a pop-up menu for a specific file type, press and hold MB2 on a file name in your file list. Choose the command you want to execute on that file. The next time you display this pop-up menu, the command you last chose will be positioned under the pointer.

If you don't like the pop-up menu defined for a specific file type, you can change it. See Chapter 7 for information about changing the contents of a file type pop-up menu.

Using Double-Click Commands

FileView executes a predefined command when you double click on some file types. By using double-click commands, you can start file tasks quickly. For example, double clicking on a CARD file opens the Cardfiler. Double clicking on an EXE file executes the Run command on that file.

To see the double-click command defined for a specific file type:

1 Choose the File Types... menu item from the Customize menu.

FileView displays the File Types dialog box, described in detail in Chapter 7.

2 Click on a file type in the File Types list box.

The double-click command defined for that file type is displayed below the File Types list box.

If you don't like the double-click command defined for a specific file type, you can change it. See Chapter 7 for information about changing a double-click command definition.

Working with Directories

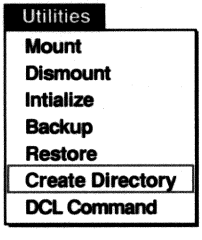
To access files on your system, you need to know how to work with and navigate directory structures. Because directories are stored on devices, you also need to know how to work with devices other than your default device.

You can access your own and other directory structures that have been set up to allow public access. See your system manager for a list of public directories to which you have access.

With FileView, you can perform the following device and directory operations:

- Create a directory
- Delete a directory
- Navigate a directory structure
- Change directories
- Change devices
- Search a directory structure with wildcards

Creating a Directory

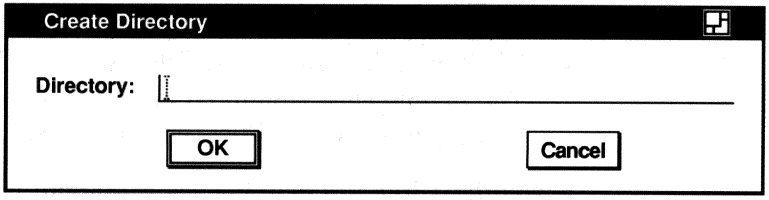


You can do all your work—including using files and running applications—in your top level directory and never move from it. However, by creating and using subdirectories, you can organize your files into convenient groups.

To create a directory:

1 Choose the Create Directory menu item from the Utilities menu.

FileView displays a dialog box.



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2 Enter the name of the directory you want to create.

For example, to create a subdirectory from [JONES] with the directory specification [JONES.TRAVEL], type TRAVEL. To create a subdirectory from [JONES] with the directory specification [JONES.TRAVEL.MILEAGE], type TRAVEL.MILEAGE.

3 Click on OK.

Deleting a Subdirectory

Before you attempt to delete a subdirectory file, you must confirm that it contains no files. Select the subdirectory from the navigation list box. If the subdirectory contains files, delete them. To delete the empty subdirectory file:

1 In the navigation list box, click on the [-] wildcard to move up one level in the directory structure.

2 Select the subdirectory file you want to delete from the file list.

The subdirectory file has a file type of DIR.

3 Choose the Delete menu item from the Files menu.

FileView displays a dialog box described in Deleting Files.

4 Click on OK.

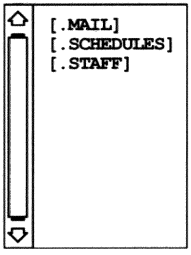
If the subdirectory is empty, FileView displays another dialog box asking you to confirm that you want to delete the subdirectory file.

5 Click on OK.

If the Work in Progress dialog box is displayed, it reports that the subdirectory file is being deleted.

If the subdirectory is not empty, a Task Output window opens, reporting that your subdirectory contains files and was not deleted. If you still want to delete the subdirectory file, delete the files it contains.

Navigating a Directory Structure



If you have subdirectories, FileView displays a navigation list box that lets you move up and down your directory structure and easily access your subdirectories and the files they contain. By **setting default** to another directory, you change the current directory. The current device and directory are displayed in the title bar and in FileView's icon in the Icon Box.

You can navigate your directory structure in one or in many windows. Keeping multiple FileView windows open provides you with different views of your directory structure, which makes for quick file access.

Any files created as a result of file operations you perform are placed in the current directory. The current directory remains in effect until you set default to another directory or end your session.

To list the contents of a subdirectory in the current FileView window, select the subdirectory to which you want to move from the navigation list box.

FileView appends the subdirectory name to the directory name in the Directory field and in the title bar and displays the contents of that subdirectory in the current file list.

If additional subdirectories are stored underneath this subdirectory, you can continue descending the directory structure, either in the current FileView window or in a new FileView window by selecting another subdirectory. You can move up in the directory structure one level at a time by selecting the hyphen in brackets ([-]).

To list the contents of a subdirectory in a new FileView window without changing your current directory:

1 Point to the subdirectory whose contents you want to list.

2 Press and hold the Shift key and click MB1.

FileView lists the contents of that directory in a new FileView window. The current file list does not change.

If you are using an account with System Manager privileges, you can access other top level directories or files and directories on other devices or systems. If your account does not have System Manager privileges, then it is your system manager's responsibility to decide which top-level directories you can access. Often these directories are shared by more than one user and are called "public" directories. For a list of the directories that are available to you, see your system manager.

To access another top level directory:

1 Edit the text in the Default field or delete the text in that field by placing the pointer there and double clicking MB1.

2 Enter the name of the new directory whose contents you want to list.

3 Click on the Apply button to update the file list and to display the files in the new directory.

Searching a Directory Structure with Search Wildcards

From any point in a directory structure, you can search a subdirectory in that structure or another directory by using the ellipsis (. . .) or hyphen (-) wildcard characters.

You do not have to change directories to search the contents of another directory. By entering a full file specification (including a directory and device name, if appropriate) in the File Filter text field, you can simply search the contents of that directory without changing directories. Any output produced by a FileView command continues to be directed to your current directory.

[. . .]

Using the Ellipsis (. . .) Wildcard Use the ellipsis wildcard to search down the directory structure. You can list the contents of directories or search for one file in a directory. Using the ellipsis wildcard allows you to conduct a broad search of an entire directory structure.

The following example shows how to use the ellipsis to list the contents of the subdirectories under [JONES]. Notice that the current directory is not changed.

```
File Filter: [JONES...]
Directory: $USERS:[JONES.STAFF]
```

The following example lists the latest versions of all files named DIRECTIONS.TXT in [JONES] and all subdirectories under [JONES].

```
File Filter: [JONES...]DIRECTIONS.TXT
Directory: $USERS:[JONES.STAFF]
```

If you begin the directory specification with an ellipsis, the search begins from the current directory. This example searches all subdirectories under [JONES] named PROJECT and lists the latest versions of all files named SALARIES.LIS.

```
File Filter: [...PROJECT]SALARIES.LIS
Directory: $USERS:[JONES]
```

In the following example, the current directory is [JONES]. This example searches [JONES] and all subdirectories under [JONES] and lists the latest versions of all files named HOLIDAYS.LIS.

```
File Filter: [...]HOLIDAYS.LIS
Directory: $USERS:[JONES]
```

However, if you begin the directory specification with a period, only the subdirectory that is one level lower in the directory structure than the current directory is searched. In the following example, the current directory is [JONES]. This example searches only the [JONES.LETTERS] subdirectory for the file OFFER.TXT, and not [JONES.STAFF.LETTERS].

```
File Filter: [.LETTERS]OFFER.TXT
Directory: $USERS:[JONES]
```

[-]

Using the Hyphen (-) Wildcard When you learned how to navigate a directory structure, you saw how to use the hyphen wildcard to move up the directory structure one level at a time. By using the hyphen wildcard in a file specification in the File Filter text field, you can list the contents of a directory or search for a file within a directory structure. Each hyphen refers to the directory one level up from the current one. You can follow the hyphens with directory and subdirectory names to move up and then down the directory structure on another path.

Unlike the ellipsis wildcard, the hyphen wildcard limits your search to one level of the directory structure at a time.

The following example lists the contents of $USERS:[JONES] while the current directory remains [JONES.STAFF].

```
File Filter: [-]
Directory: $USERS:[JONES.STAFF]
```

The current directory is [JONES.SCHEDULES] in the following example. This example lists the latest version of FUNDING.TXT in [JONES.STAFF]:

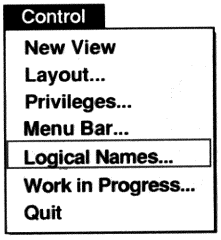
```
File Filter: [-.STAFF]FUNDING.TXT
Directory: $USERS:[JONES.SCHEDULES]
```

You can specify more than one hyphen. The following example displays the contents of the directory [JONES], which is two levels up in the directory hierarchy, while the current directory remains [JONES.SCHEDULES.CURRENT].

```
File Filter: [--]
Directory: $USERS:[JONES.SCHEDULES.CURRENT]
```

If you enter so many hyphens that you point above the master file directory (MFD), FileView displays an error message.

Using Logical Names



A **logical name** usually represents a complete or partial file specification, a device name, or another logical name. You can give frequently used files, directories, and devices meaningful logical names that are easier to remember and type than the full file specifications. For example, you can define WORK as a logical name for your device DUA0, or STAFF as a logical name for the file specification $USERS:[JONES.STAFF].

Logical names also let you keep your programs and command procedures independent of physical file specifications. For example, if a command procedure references the logical name ACCOUNTS, you can equate ACCOUNTS to any file on any disk before executing the command procedure.

Logical names can be defined by you or by the system. Logical names and their definitions are kept in tables called **logical name tables**. VMS provides the following logical name tables:

- The job table, which contains logical names available to all your processes and subprocesses.
- Your group table, which contains logical names available to all users with the same group name.
- The system table, which contains logical names available to all users on the system.

You can also create your own logical name table that is private to your process or shareable by others.

When you enter a logical name as part of a command line, the system translates the logical name. It does this by searching the job, group, system, and any other logical name tables specified by the logical name LNM$FILE_DEV. (LNM$FILE_DEV is a special system logical name defined in the LNM$SYSTEM_DIRECTORY table. It specifies the search order that FileView and all other VMS components use to translate logical names.)

You can specify that a logical name be defined as **concealed**. You can conceal logical names that refer to devices or directories.

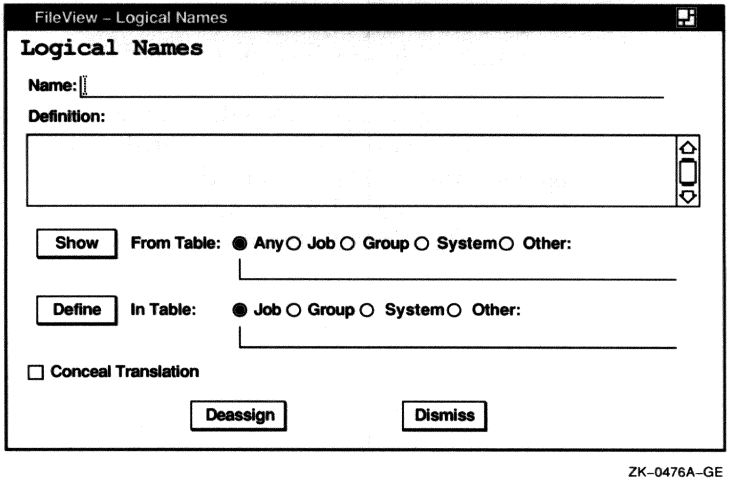
When you assign a logical name to a device, concealing the logical name allows you to write programs and command procedures and perform other operations without being concerned about which physical device actually holds the disk or tape.

When you assign a logical name to a directory or subdirectory, concealing the logical name can make the directory or subdirectory appear as the master file directory for the current device. This directory or subdirectory to which you assign a concealed logical name is called the **root directory**. You can then use this root directory as the base from which to access directories beneath it. For example, the top level directory [JONES] on device DUA0 contains a subdirectory [JONES.STAFF]. If you assign the logical name ME to DUA0:[JONES.], you can then refer to the subdirectory [JONES.STAFF] by typing ME:[STAFF].

Defining Logical Names To define a logical name from FileView:

1 Choose the Logical Names... menu item from the Control menu.

FileView displays a dialog box.



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2 Enter the logical name in the Name field.

3 Enter the definition you want to assign to the logical name in the Definition field.

For example, define the logical name STAFF with the file specification $USERS:[JONES.STAFF].

4 To define the logical name as concealed, click on the Conceal Translation toggle button.

5 Click on Define to add the logical name to your job logical name table.

Click on another option button to add the logical name to another table. To add the logical name to another logical name table, click on the Other option button, enter the name of the logical name table, and click on Define.

Displaying a Logical Name Definition To display a logical name definition and the name of the logical name table in which it is stored:

1 In the Name field, enter the logical name whose definition you want to display.

2 If you do not know the logical name table in which the logical name is stored, click on the Any button next to the From Table label. Click on the Job, Group, or System buttons if you want to see the definition in a specific table. Click on the Other button and enter the name of the logical name in the text field provided to display a logical name definition from another table.

3 Click on Show.

FileView displays the definition and the name of the logical name table in which it is stored.

If the Any option is selected, FileView searches through the logical name tables specified by the logical name LNM$FILE_DEV. If the logical name exists in more than one logical name table, FileView displays the logical name definition and the name of the logical name table in which the definition was first encountered.

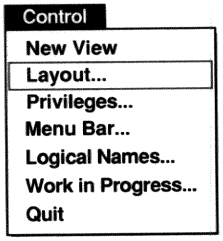
Deleting a Logical Name To delete a logical name definition:

1 In the Name field, enter the logical name you want to delete.

2 Click on Deassign.
FileView deletes the logical name definition.

If the Any option is selected and the logical name definition is not found in any logical name table, FileView reports that the logical name is not defined.

Changing the Look of Your File List

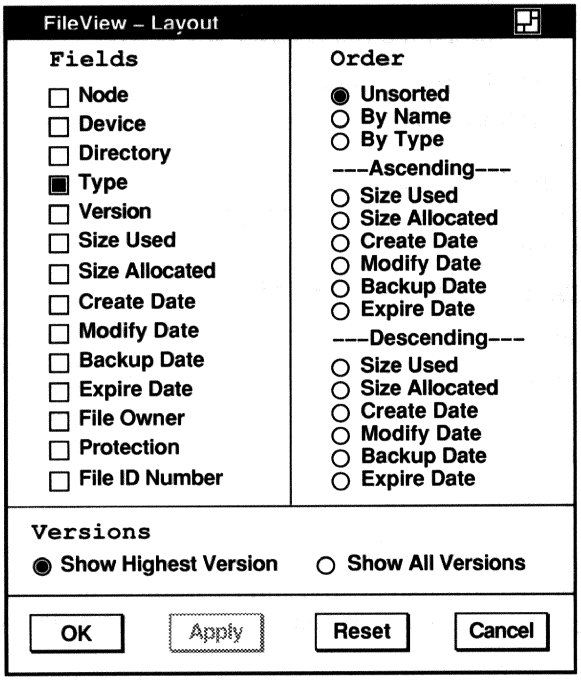


When you first start your Desktop-VMS system, your file list contains the following information about every file in your current directory:

- The file name
- The file type

You can change the way the files in your current and subsequent file list are listed. You might want to list each file by its size or the date it was created, or change the order in which the files are listed.

To change the way files are listed, choose the Layout... menu item from FileView's Control menu. FileView displays a dialog box:



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The settings in the Layout dialog box are divided into two groups. Some settings are preset and are already in effect. When you choose a setting from the Layout dialog box, it affects every subsequent file list until you change the setting again. By keeping the Layout dialog box open, you can quickly change the settings.

The following sections describe the settings you can change. Once you finish working with the Layout dialog box, you need to save your changes.

Choose	To
OK	Record new settings and dismiss the dialog box.
Apply	Record new settings without dismissing the dialog box.
Reset	Redisplay the current settings if you changed settings without applying them.
Cancel	Dismiss the dialog box without changing any settings.

Changing the Fields in Your File List

By using the toggle buttons in the Fields column, you can display the following information about each file in your file list:

- The Node field displays the node name of a file not on your node.
- The Device field displays the device on which the file is stored.
- The Directory field displays the directory in which the file is stored.
- The Type field displays the file type of the file.
- The Version field displays the version number of the file.
- The Size Used field displays the size, in blocks, of the file.
- The Size Allocated field displays the size, in blocks, allocated to the file.
- The Create Date field displays the date and time the file was created.
- The Modify Date field displays the date and time the file was last modified.
- The Backup Date field displays the date and time at which the file was last backed up.
- The Expiration Date field displays the date on which the file expires.
- The File Owner field displays the owner, in numeric or textual format, of the file.
- The Protection field displays the protection settings for the file.
- The File ID field displays the unique file identification for the file.

Notice that the Type toggle button under the Fields column as well as the Show Highest Version option button are preset. The file list you have been seeing all along reflects these preset options. Even though you do not see each file's version number, only the highest version of each file in your current directory is displayed.

To display all versions of the files in your current directory, click on the Show All Versions option button. Each file specification then includes its corresponding version number.

If you want to work with files on other nodes, include the node name of the file in the File Filter field and click on the Node option button.

Changing the File Order in Your File List

Unless you specify otherwise, the files in your file list are listed in the order in which they appear in the directory structure. This order is alphabetical unless your file list includes files from more than one directory. Click on the By Name toggle button under the Order column to list the files alphabetically even if multiple directories are shown. Click on the By Type toggle button to list the files alphabetically by file type. You can choose only one option from the Order column at a time.

You can also click on any one of the option buttons under the Ascending or Descending groups to list your files in high to low or low to high order according to one of the following options:

- The Size Used option sorts files in the file list by blocks used.
- The Size Allocated option sorts files in the file list by the blocks allocated to the file.
- The Create Date option sorts files in the file list by the date and time each file was created.
- The Modify Date option sorts files in the file list by the date and time each file was most recently changed.
- The Backup Date option sorts files in the file list by the date and time each file was most recently backed up.
- The Expire Date option sorts files in the file list by their expiration date.

Displaying a Partial File List

Sometimes you want to screen some files out of the full file list and display only a subset of files. Perhaps you want to display only those files with a LOG file type or whose version number is 1. By using the File Filter field, you can limit the list of files displayed.

To display a partial file list:

1 Click on the File Filter text field in the FileView window.

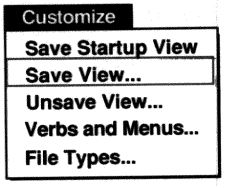
2 Type the file or files you want listed.

For example, to list all LOG files in your current directory, type *.LOG. When you use the asterisk wildcard, FileView lists only the files that match the characters you specified.

3 Click on Apply.

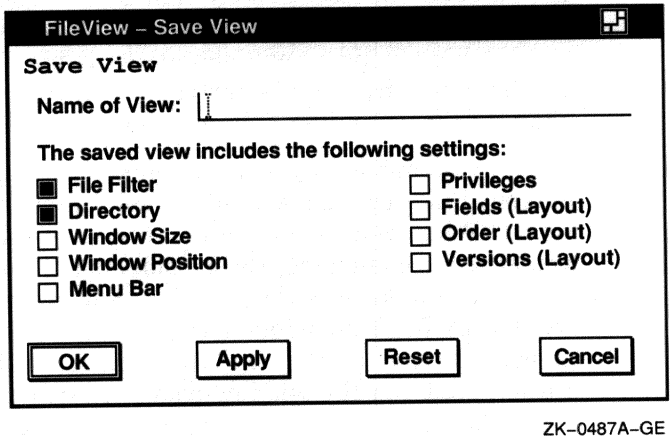
You can specify a **search list** in the File Filter field. A search list is a logical name that has more than one equivalence name. It provides FileView with a list of places to look for a file. If you use a search list in the File Filter, the file list automatically displays the directory in which the file is located.

Saving a View



Once FileView displays exactly the information you want, you can save it as a custom **view**. As you know, the FileView window is made up of several components, including the File Filter and Directory fields, and the fields, such as file version and create date, you can display in your file list. You can save one, all, or any combination of these components in a view that you can restore at any time.

You can design a view by choosing different combinations of the FileView components from the Save View dialog box.



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- Saving the File Filter preserves the text you specify in the File Filter text field.
- Saving the Directory preserves the text you specify in the Directory text field.
- Saving the Window Size preserves the size of the FileView window on your screen.
- Saving the Window Position preserves the location of the FileView window on your screen.

- Saving the Menu Bar preserves any menu names you added to the menu bar. This allows you to have different menu bars for different tasks.

  See Chapter 7 for more information about adding menu names to the menu bar.

- Saving the Fields preserves the field settings—such as Create Date and Size Used—you specify in the Layout dialog box.

- Saving the Order preserves the order settings—such as Unsorted or By Name—you specify in the Layout dialog box.

- Saving the Versions preserves the version number settings—either Show All Versions or Show Highest Version—you specify in the Layout dialog box.

If you enable all the component settings and save the current FileView display, your saved view will be a snapshot of that FileView window. For example, you might want to save a view of a subdirectory you frequently access. When you restore the view, the current FileView display changes to reflect the components of the view you saved. Because you saved every component, the FileView window will change to display a view of that subdirectory. By using a saved view in this way, you establish a shortcut for ascending and descending the directory structure.

When you enable only some component settings and save the current FileView display, only those components you specified are saved. When you restore that saved view, only those components you saved are changed; those components not saved are obtained from the current FileView display. For example, you might always want your FileView window in the upper left-hand corner of your screen. By moving the FileView window to the upper left-hand corner, enabling the window position setting in the Save View dialog box, and saving it as a view called "Corner FileView", you save only one component from the current FileView. You can continue to work with and change your FileView display. When you restore the Corner FileView saved view, no information in your current FileView display changes, but the FileView window moves to the upper left-hand corner of your screen.

To save a view:

1 Display the view you want to save.

2 Choose the Save View... menu item from FileView's Views menu. FileView displays the Save View dialog box.

3 Enter the name of the view you want to save.

Give it a name meaningful to you, for example, "Sales Project" or "C file sizes".

4 Click on the components you want saved.

5 Click on OK or Apply.

The view is saved.

Several commonly used views have already been saved for you. Pull down the Views menu to see the list of these built-in views. Your login directory is one built-in view. Other built-in views save selected components of the view, such as file size or file creation date. As you save additional views, FileView adds them to this list.

You can save the view you want to see whenever you start FileView. For example, perhaps you want to display your SCHEDULES subdirectory when you start FileView. To save a startup view, tailor the FileView display as you want it saved. Choose the Save Startup View menu item from FileView's Customize menu. You will see that FileView the next time you start FileView.

You can supersede a saved view by saving another view under the same name. To supersede a saved view:

1 Choose the Save View... menu item from the Customize menu.

2 In the Name of View text field, enter the name of the view you want to supersede.

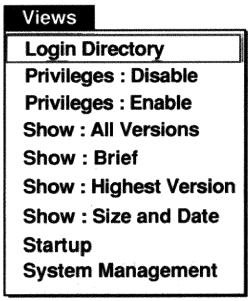
Give the new view exactly the same name as the view you want to supersede, preserving the same uppercase and lowercase letters.

3 Choose the components you want saved.

4 Click on OK.

The new view replaces the previous one.

Restoring a Saved View



When you restore a saved view, those components not saved are obtained from the current view. By saving only some components of a view, such as the fields and order, you can quickly change the look of your current FileView display.

To restore a saved view in the current FileView window, choose the saved view you want from FileView's Views menu.

If you want to see the components and settings, including privileges and file order, in effect in a saved view, open the Layout, Privileges, or Save View dialog boxes and restore a saved view. The settings in the open dialog boxes change dynamically to reflect the settings in effect for that saved view. To change the components of a saved view without changing the name, click on new settings and click on Apply.

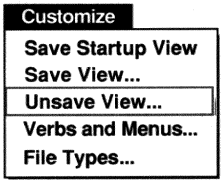
To restore a saved view in a new FileView window:

1 Press and hold Shift.

2 Choose the view you want to restore from the Views menu.

The saved view is restored in a new FileView window.

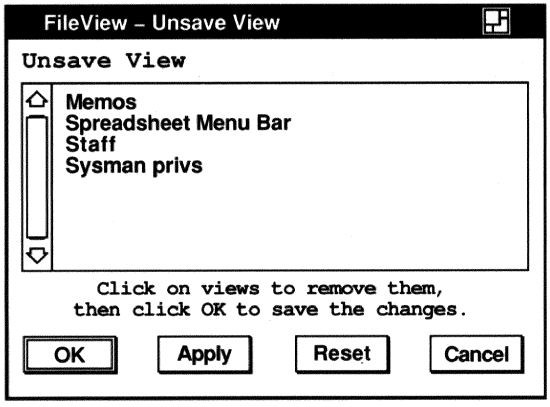
Deleting a Saved View



To delete a view you no longer need:

1 Choose the Unsave View... menu item from FileView's Customize menu.

FileView displays a dialog box.



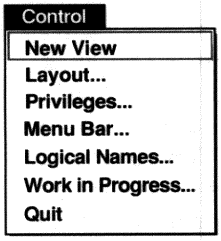
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2 Point to the view you want to delete and click MB1.

3 Click on OK.

The view is deleted. If you deleted a view that you had created to supersede a built-in view, the original view is restored.

Opening a New FileView Window



You can open a new FileView window that maintains the file and directory context of the current FileView window. When you choose the New View menu item from FileView's Control menu, FileView copies the display from the current FileView window into the new window and updates it, leaving the current FileView window in its original state. Any changes you made to the current FileView window (such as deleting a file or changing the information in the File Filter field) without applying them are reflected in the new FileView window.

You can also open a new FileView window that reflects changes you make to the File Filter or Directory fields in the current FileView display. To open a new FileView window:

1 Edit the File Filter or Directory fields to reflect the information you want displayed in the new FileView window.

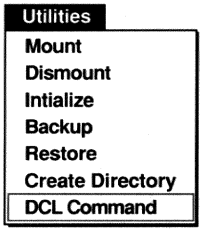
2 Choose the New View menu item from the Control menu.

3 Do *not* click on the Apply button.

A new FileView window is opened that reflects the new file and directory information you specified. The File Filter and Directory fields in the current FileView window are reset to the original text.

You can also work with files in different FileView windows. This means that you can select a file in one FileView window and choose a command from the Files menu in another FileView window to be performed on that selected file. For example, you can select a file in one window and choose the Copy command from the Files menu in the other. The file is copied to the current directory in the second FileView window. You can also select file names from other applications and perform tasks with them. For example, you can select a file name in a DECterm window and choose the Type menu item from FileView's Files menu to display the file.

Executing a DCL Command



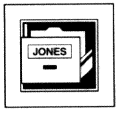
You can execute a DCL command directly from FileView by choosing the DCL Command menu item from the Utilities menu. FileView opens a window and displays the DCL prompt ($). Any DCL command you enter is executed in the context of the current directory.

If you want to close the Task Output window temporarily, click on the Dismiss button. Although the window closes, you can reopen it and use it to execute other DCL commands by choosing the Work in Progress menu item from FileView's Control menu. Select the DCL Command task in the Work in Progress dialog box. The Task Output window in which you earlier executed the DCL command opens.

By continuing to choose the DCL Command menu item from FileView's Utilities menu, you create additional Task Output windows. You can close and reopen them as you wish.

7

Customizing FileView

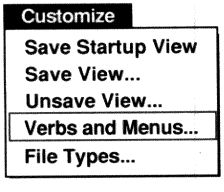


In Chapter 6, you learned how to create a custom view by saving selected components, including the menu bar and the fields displayed in your file list, in a saved view.

FileView provides additional ways for you to create a custom view. For example, you can add menu names to the menu bar, design an accompanying pull-down menu, build a pop-up menu, and add commands to FileView's Files menu. If you write your own application, you can add it to FileView's Applications menu and invoke it as you would any other DECwindows application.

This chapter describes how to customize FileView.

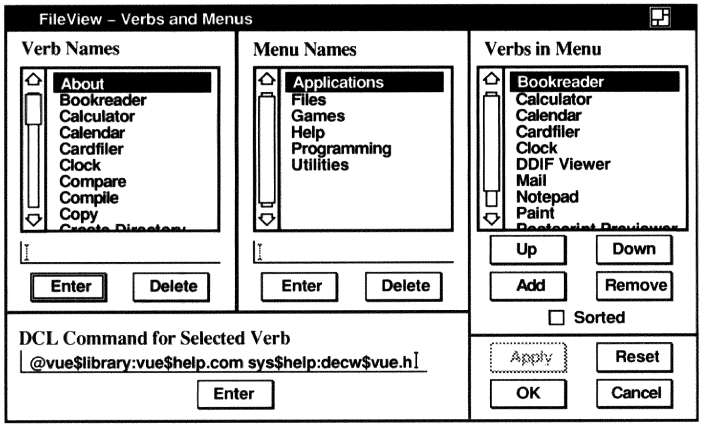
Adding Verbs and Building Pull-Down Menus



You can customize FileView's Files, Utilities, Applications, and Help menus by changing the menu items or **verbs** they contain. Your FileView may also contain additional menus added by your system manager. You can change the verbs on these additional menus as well.

By displaying FileView's Verbs and Menus dialog box, you can see how a FileView pull-down menu is built and what happens when you choose a verb from a FileView menu. Once you understand how these menus work, you can modify them and the verbs they contain.

To display the Verbs and Menus dialog box, choose the Verbs and Menus... menu item from FileView's Customize menu. The Verbs and Menus dialog box is comprised of several sections: Verb Names, Menu Names, Verbs in Menu, and DCL Command for Selected Verb.



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- The **Verb Names** list box displays the verbs currently defined, including those listed on FileView's Files, Utilities, Applications, and Help menus. Use this list box with the other sections of the Verbs and Menus dialog box to add new verbs to new or existing menus.
- The **Menu Names** list box displays the FileView menu names currently defined.
- The **Verbs in Menu** list box displays the verbs on the selected menu's pull-down menu. (The selected menu appears in the Menu Names list box.)
- The **DCL Command for Selected Verb** text field displays the DCL command or command file associated with the verb currently selected in the Verb Names list box.

Once you finish working with the Verbs and Menus dialog box, you need to save your changes:

Click on	To
OK	Record new settings and dismiss the dialog box.
Apply	Record new settings without dismissing the dialog box.
Reset	Redisplay the current settings if you changed settings without applying them.

Click on	To
Cancel	Dismiss the dialog box without changing any settings. If you made any changes without applying them, clicking on the Cancel button cancels those changes.

Adding a Verb to a Pull-Down Menu

Each verb on a FileView menu is associated with either a DCL command or a command file comprised of DCL commands. When you choose a verb from one of these menus, the corresponding command or command file executes. For example, when you choose the Clock verb from FileView's Applications menu, FileView executes the command file VUE$LIBRARY:VUE$CLOCK that starts Clock.

You can add your own verbs to FileView's Files, Utilities, Applications, and Help menus and to any other FileView menu that may have been added by your system manager. Like the verbs already defined on FileView menus, any verb you add must have a corresponding DCL command or command file. You can add an existing DCL command, for example, Show Users or Edit/Read, or add a new verb that executes a command file of your own design.

Appendix B illustrates a sample command file. See the *VMS User's Manual* for more information about writing command files.

Before you add a verb, look at the verbs already defined in FileView:

1. In the Menu Names list box, select the menu name whose contents you want displayed.

   The Verbs in Menu list box displays the verbs on the selected menu.

2. Select each menu name in turn to display the corresponding pull-down menu in the Verbs in Menu list box.

To add a verb to a FileView menu:

1. Click on the text field in the Verb Names list box.
2. Type the name of the verb you want to add exactly as you want it to appear.

   For example, type Show Users.
3. Click on the Enter button below the Verb Names list box.

4 In the DCL Command for Selected Verb text field, type the DCL command you want associated with your new verb.

   For example, type the command Show Users. If you want your verb associated with a command file, type @COMMAND_FILE_NAME.COM

5 Click on the Enter button below the DCL Command for Selected Verb text field.

6 In the Menu Names list box, select the menu name to which you want your new verb added.

   For example, select the Utilities menu. The verbs currently on that menu are displayed in the Verbs in Menu list box.

7 Click on the Add button below the Verbs in Menu list box to add your new verb to the selected menu's pull-down menu.

   New verbs are added alphabetically if the Sorted button is highlighted. New verbs appear in boldface to identify what you have customized.

8 To move the verb within the list, click on the Up or Down buttons.

9 Click on Apply or OK to see your change.

   Or, click on Reset or Cancel to retain the original settings.

Enabling the Sorted setting ensures that the private customization file created when you customize FileView is merged with any other system or public customization files that FileView reads. If you disable the Sorted setting, FileView cannot merge your new definition with the public and system definitions for that menu. A menu also becomes unsorted if you rearrange the contents of a menu by using the Up or Down buttons.

See Sharing a Custom FileView for more information about how FileView uses private, public, and system customization files.

Changing a Verb Definition

Each verb on a FileView menu has a corresponding DCL command or command file that executes when you choose the verb from a menu. You can, however, replace a verb's current command definition with a new command or command file that executes a different series of commands. For example, when you choose the Type verb from FileView's Files menu, the command file VUE$LIBRARY:VUE$TYPE executes. By designing a new command file and associating it with the Type verb, you can

execute a different series of commands when you choose Type from the Files menu.

In the Verbs and Menus dialog box, you can see the name of the DCL command file associated with a particular verb. When you select the verb in the Verb Names list box, the associated command file is displayed in the DCL Command for Selected Verb text field. To change the DCL command file that executes when a specific verb is chosen from a FileView menu, delete the name of the current command file in the DCL Command text field and type the name of the new command file.

If you want to make changes to a built-in (that is, predefined) FileView command file, you can use the command file for that verb as a template. To modify a command file that executes a built-in FileView command, copy the command file from the VUE$LIBRARY directory and edit it. You can easily recognize the contents of the command files by their file names. For example, the FileView command file that executes the Type command is named VUE$TYPE. Give your command file a name that identifies the task it performs and a file type of COM, for example, EDIT.COM. Do not delete the command files in the VUE$LIBRARY directory that execute FileView's built-in verbs. Also, do not give your command file the same name as an existing FileView command file.

If you delete your new verb definition, FileView once again uses the original command file to execute the built-in verb.

Appendix B illustrates a sample command file. See the *VMS User's Manual*, which is available online, for more information about writing command files.

Removing a Verb from a Pull-Down Menu

To remove a verb from a FileView pull-down menu:

1. In the Menu Names list box, select the menu name that contains the verb you want to remove.
2. In the Verbs in Menu list box, select the verb you want to remove.
3. Click on the Remove button in the Verbs in Menu list box.
   The verb is deleted from the list.
4. Click on Apply or OK to save your change.
   Or, click on Reset or Cancel to retain the original settings.

Note that, when you remove a verb from a pull-down menu, you create a copy of that menu in your private customization file. Any subsequent changes made to the public customization file (for example, an added pull-down menu) will not be reflected in your private FileView. See Sharing a Custom FileView for more information about how FileView uses private, public, and system customization files.

Adding a Menu Name

You can create new menu names to which you can then add verbs. To create a FileView menu name:

1 Click on the text field in the Menu Names list box.

2 Type the name of the menu you want to add exactly as you want it to appear on the menu.

For example, type Personal.

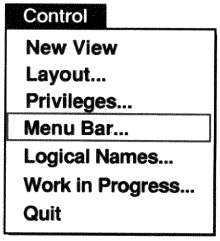
3 Click on the Enter button below the Menu Names list box.

Add any verbs to this menu using the steps described in Adding a Verb to a Pull-Down Menu.

4 Click on Apply or OK to see your change.

Or, click on Reset or Cancel to retain the original settings.

Adding or Removing Menu Names from FileView's Menu Bar

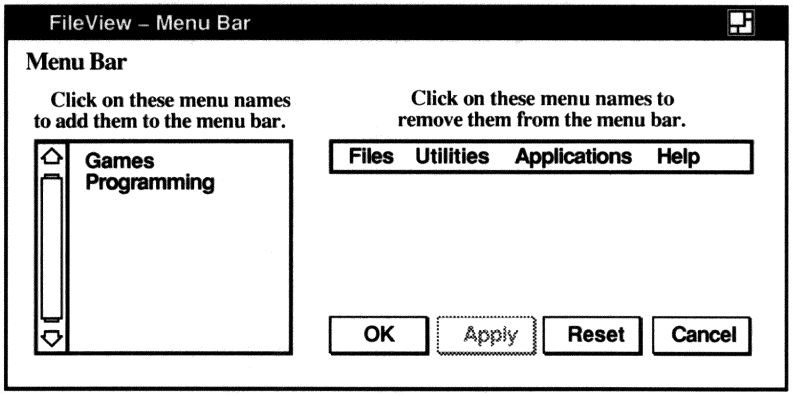


Once you create a new menu, you need to add it to FileView's menu bar. You can also remove menus that you do not need. By adding new menus to the existing menu bar, you can create a new menu bar to use for all your FileView tasks.

To add or remove menu names from FileView's menu bar:

1 Choose the Menu Bar... menu item from FileView's Control menu.

FileView displays the Menu Bar dialog box.



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Existing menu names appear in the menu bar facsimile on the right. New menu names appear in the list box on the left.

2 Click on the menu name you want added to or deleted from FileView's menu bar.

Once you finish working with the Menu Bar dialog box, you need to put your changes into effect:

Click on	To
OK	Record new settings and dismiss the dialog box.
Apply	Record new settings without dismissing the dialog box.
Reset	Redisplay the current settings if you changed settings without applying them.
Cancel	Dismiss the dialog box without changing any settings. If you made any changes without applying them, clicking on the Cancel button cancels those changes.

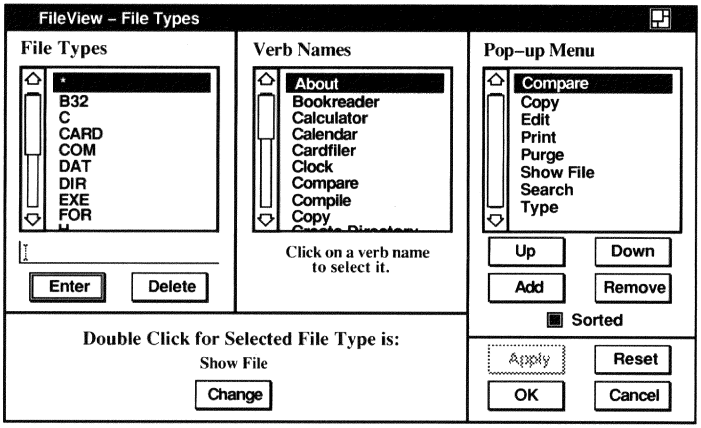
Any changes you make to the menu bar affect the current FileView window only. If you want different menu bars for different tasks, for example, one for system management tasks and another for text processing tasks, you can create multiple menu bars and save them as views as described in Chapter 6.

Building Pop-Up Menus and Defining Double-Click Commands



In Chapter 6, you learned that FileView provides pop-up menus and double-click command definitions to make it easier for you to work with files. From the File Types dialog box, you can modify the pop-up menus and double-click command definitions associated with each file type.

To display the File Types dialog box, choose the File Types... menu item from FileView's Customize menu. The File Types dialog box is comprised of several sections: File Types, Verb Names, Pop-Up Menu, and Double-Click for Selected File Type.



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- The **File Types** list box displays the file types for which double-click verbs and pop-up menus are currently defined. Use this list box with the Double-Click Verb and Verb Names list boxes to change the command executed when you double click on a specific file type in your file list.

  Use the File Types, Verb Names, and Pop-Up Menu list boxes to modify the contents of the pop-up menus defined for each file type.

- The **Verb Names** list box displays the verbs currently defined in FileView.

- The **Double-Click Command** list box displays the verb that executes when you double click on a file of the selected type.

Once you finish working with the File Types dialog box, you need to save your changes.

Click on	To
OK	Record new settings and dismiss the dialog box.
Apply	Record new settings without dismissing the dialog box.
Reset	Redisplay the current settings if you changed settings without applying them.
Cancel	Dismiss the dialog box without changing any settings. If you made any changes without applying them, clicking on the Cancel button cancels those changes.

Adding a Verb to a Pop-Up Menu

In Chapter 6, you learned that each file type has a corresponding pop-up menu that contains the commands you are most likely to use with that kind of file. When you press and hold MB2 on any file name, FileView displays the pop-up menu defined for that file type.

From the File Types dialog box, you can tailor an existing pop-up menu by changing the verbs it contains. First, look at what FileView's pop-up menus already contain:

1 Select the * file type in the File Types list box. (The asterisk refers to all file types not specifically listed in the File Types list box, for example, DDIF, ANL, and SDML files. If you press MB2 over a file in your file list for which no pop-up menu is defined, the pop-up menu defined for * is used.)

   FileView displays the corresponding pop-up menu in the Pop-Up Menu list box.

2 In turn, select each file type in the File Types list box.

   As you select a file type, its corresponding pop-up menu is displayed in the Pop-Up Menu list box.

To add a verb to a FileView pop-up menu:

1 In the File Types list box, select the file type whose corresponding pop-up menu you want to change.

2 In the Verb Names list box, select the verb you want to add to the pop-up menu.

3 Click on the Add button below the Pop-Up Menu list box.

The verb is added to the Pop-Up Menu list box. New verbs are added alphabetically if the Sorted button is highlighted. The verbs you add always appear in boldface to identify what you have customized.

4 To move the verb within the list, click on the Up or Down buttons.

5 Click on Apply or OK to see your change.

Or, click on Reset or Cancel to retain the original settings.

Enabling the Sorted setting ensures that the private customization file created when you customize FileView is merged with any other system or public customization files that FileView reads. If you disable the Sorted setting, FileView cannot merge your new definition with the public and system definitions for that menu. This means that you would not see any changes, for example, a new pull-down menu, made to a public customization file. A menu also becomes unsorted if you rearrange the contents of a menu by using the Up or Down buttons.

See Sharing a Custom FileView for more information about how FileView uses private, public, and system customization files.

Removing a Verb from a Pop-Up Menu

To remove a verb from a FileView pop-up menu:

1 In the File Types list box, select the file type whose corresponding pop-up menu you want to change.

2 In the Pop-Up Menu list box, select the verb you want to remove.

3 Click on the Remove button below the Pop-Up Menu list box.

The verb is removed from the list.

4 Click on Apply or OK to see your change.

Or, click on Reset or Cancel to retain the original settings.

Note that, when you remove a verb from a pop-up menu, you create a copy of that menu in your private customization file. Any subsequent changes made to the public customization file will not be reflected in your private FileView. See Sharing a Custom FileView for more information about how FileView uses private, public, and system customization files.

Changing a Double-Click Verb Definition

In Chapter 6, you learned that FileView executes a predefined command when you double click on a specific file type. In the File Types dialog box, you can replace the double-click verb currently defined for a file type with a different verb and execute a different command.

First look at the double-click verb currently defined for each file type:

1 Select the * file type in the File Types list box. (The asterisk refers to all file types not specifically listed in the File Types list box, for example, DDIF, ANL, and SDML files. If you double click on a file type in your file list for which no double-click verb is defined, the double-click verb defined for * is used.)

   The corresponding double-click verb is displayed below the File Types list box.

2 Select each file type in turn to see its corresponding double-click verb.

   As you select a file type, its corresponding double-click verb is displayed.

To change the double-click verb defined for a file type:

1 In the File Types list box, select the file type whose corresponding double-click verb you want to change.

2 In the Verb Names list, select the verb with which you want to replace the current double-click verb.

3 Click on the Change button.

   The double-click verb definition is changed. The file types whose double-click definitions you have changed always appear boldface to identify what you have customized.

4 Click on Apply or OK to see your change.

   Or, click on Reset or Cancel to retain the original settings.

Adding and Removing a File Type

You can build a pop-up menu for a new file type or associate a double-click verb with a file type not listed in the File Types list box, or you can remove a file type you added but no longer need.

To add a file type to the File Types list box:

1. Type the file type, for example, DDIF, that you want to add to the list.
2. Click on the Enter button.

   The file type is added to the list. The file types you add always appear in boldface to identify what you have customized.
3. Add verbs to the new file type's pop-up menu as described in Adding a Verb to a Pop-Up Menu. Or, define a double-click verb for the new file type as described in Changing a Double-Click Verb Definition.
4. Click on Apply or OK to see your change.

   Or, click on Reset or Cancel to retain the original settings.

To remove a file type you added but no longer need:

1. Select the file type in the File Types list box.
2. Click on the Delete button.

   The file type is deleted from the list.
3. Click on Apply or OK to save your change.

   Or, click on Reset or Cancel to retain the original settings.

Sharing a Custom FileView

In Chapter 6 and in previous sections of this chapter, you learned how to customize FileView and save views you use frequently. When you customize FileView, you create a **private customization file** that is read every time you start FileView.

But what if you want to share your custom FileView with other users? For example, you may want to share a custom pull-down menu with others on your project. When several users share a **public customization file**, they have access to a common custom FileView that might include custom verbs or pull-down menus defined for a group project.

The following sections describe how to create and manage private, public, and system customization files.

Using Shared Customization Files

In order to create a FileView that contains every built-in definition and the features you customized, FileView reads and merges the contents of the customization files to create your FileView environment. First, FileView reads the system customization file. The system customization file, which is shipped with the Desktop-VMS software, contains definitions that produce the menu bar, verbs, and saved views you saw when you first started FileView. Next, FileView reads the public customization files, if any exist. The public customization file contains any definitions that you share with other users, for example, a shared pull-down menu. Finally, FileView reads your private customization file, which contains your personal FileView definitions.

FileView locates your private customization file by using the logical name VUE$PROFILE. You can equate this logical name with a file specification to point to your private customization file. If no translation is found, FileView uses the file specification DECW$USER_DEFAULTS:VUE$PROFILE.VUE$DAT. This normally translates to your SYS$LOGIN directory, but you can redefine it to translate to any other directory.

When you rearrange the order of verbs on a menu in a public customization file or remove a verb from it, you create a copy of that menu in your private customization file. Because FileView reads your private customization file last, any subsequent changes made to the public customization file will not be reflected in your private FileView. For example, if new verbs are added to a FileView menu in the public customization file, you will not see those additions. Your private customization file will override the public file. Adding additional verbs to a sorted menu does not make a private copy of the public menu definition.

Building Shared Customization Files

FileView reads your private customization file by translating the logical name VUE$PROFILE. By redefining this logical name, you can force FileView to build another file that contains customized FileView components, such as new pop-up menus and saved views, that you want to share with other users.

To build a public customization file that you can share:

1 In FileView's Logical Name dialog box, redefine the logical name VUE$PROFILE to point to a nonexistent file.

In the Logical Name dialog box, type VUE$PROFILE in the Name text field, and the name of the customization file you will create in the Definition text field. Give the public customization file you will create a name that reflects its contents. Give the file a file type of VUE$DAT. For example, name the file that contains redefined verbs and a new menu for text processing EDIT_PROFILE.VUE$DAT. This file will hold the customized components you want to share, for example, new verb definitions and new pop-up menus. Click on the Define button to define the logical name. Make sure that you define the logical name in the Job logical name table. Click on Dismiss when you're done.

2 Create a custom FileView by creating any new verbs, menu names, pop-up menus, and including any saved views you want to share.

When you click on the OK or Apply button in the Verbs and Menus, File Types, or Save View dialog boxes, your customized components are saved in the file to which the logical name VUE$PROFILE now points.

3 Exit from FileView by choosing the Quit menu item from FileView's Control menu.

4 Place the file in the VUE$LIBRARY directory or in some other public directory to which VUE$PUBLIC_PROFILE points.

Users who want to access the shared customization file can then place a logical name definition for VUE$PUBLIC_PROFILE in their login command file (LOGIN.COM). For example, to point to the public customization file in a public directory, add the following to your LOGIN.COM:

```
$ DEFINE VUE$PUBLIC_PROFILE SYS$COMMON:[PUBLIC_DIR]OUR_PROJECT.VUE$DAT;*
```

When FileView is started, any public customization files will be read and merged with the system and private customization files to create a custom FileView.

The following example illustrates how to use a search list to ensure that FileView reads all the public customization files in VUE$LIBRARY. In this example, the logical name definition shown is added to a login command file. When FileView is invoked, it reads all public customization files that match the file specifications shown:

```
$ DEFINE VUE$PUBLIC_PROFILE WORK:[GROUP.FILEVIEW]PROJECT.VUE$DAT;*,VUE$LIBRARY:*.VUE$DAT
```

8

Using DECwindows Applications

Your Desktop-VMS software includes a variety of applications designed to increase productivity by automating basic tasks. For example, Mail automates sending and receiving interoffice mail; the Cardfiler automates creating and filing index cards.

Because Desktop-VMS software is based on the industry standard **X Window System**, you can also choose from an extensive offering of applications from Digital and other vendors.

This chapter begins by showing you how to use the Bookreader—an application for reading online documentation—and continues with descriptions of the following applications:

- Calculator
- Calendar
- Cardfiler
- Clock
- DDIF Document Viewer
- EVE text editor
- Mail
- Notepad text editor
- Paint
- Puzzle
- DECterm

Following the descriptions is an explanation of how you can run these applications remotely from another computer. At the end of the chapter, you'll find information on printing the files you create with these (or other) DECwindows applications.

For details on each of these applications, read the *VMS DECwindows Desktop Applications Guide*, which is available online.

Using the Bookreader



The Bookreader lets you read online documentation on your workstation screen.

This section describes how to

- Start the Bookreader
- Open shelves and books
- Navigate the table of contents and index
- Read text and display figures, tables, and examples
- Exit from the Bookreader

Starting the Bookreader

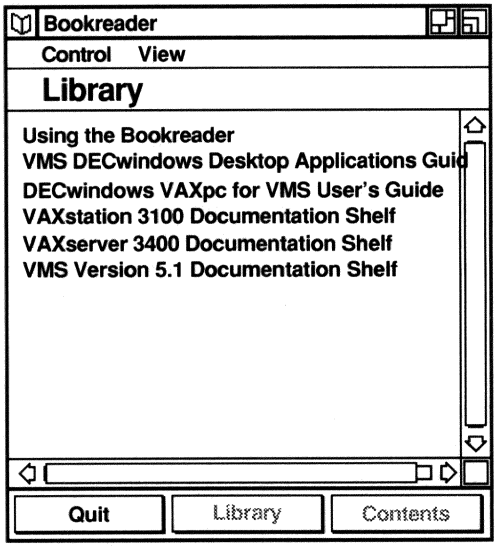
To start the Bookreader, choose the Bookreader menu item from FileView's Applications menu.

The selection window opens, listing the library of shelves and books available from the Bookreader, as illustrated in Figure 8–1. Shelves contain groups of related books to make the process of locating the book you want simpler. To view a book that is on a shelf, you must first open that shelf.

Opening Shelves and Books

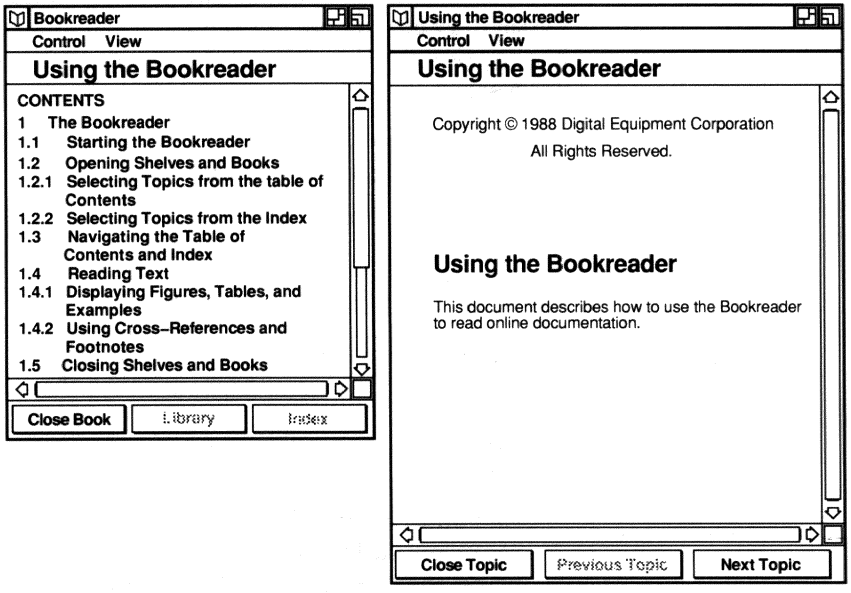
To select a title, position the pointer on the desired title and click mouse button 1 (MB1). To open a shelf or book, select the title you want and choose the Open Shelf or Open Book menu item from the Control menu. Alternatively, you can double click MB1 on a title to select and open that book or shelf. If you open a shelf, a list of the books on that shelf appears in the selection window. If you open a book, the table of contents for that book appears in the selection window. The title page for the book appears in a second window, called the topic window. The two windows, selection window and topic window, are illustrated in Figure 8–2.

Figure 8–1 Bookreader Library



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Figure 8–2 Bookreader Selection and Topic Windows



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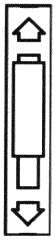
Selecting Topics from the Table of Contents You can display a chapter or section from the table of contents by selecting the title and choosing the Topic menu item from the View menu. Or, you can point to the title you want and double click MB1. The text appears in the topic window.

Selecting Topics from the Index To view the index, choose the Index menu item from the View menu or click on the Index button at the bottom of the selection window. The index replaces the table of contents in the selection window. (To return to the table of contents, choose the Table of Contents menu item from the View menu or click on the Contents button at the bottom of the selection window.)

To view the section that corresponds to an index entry, select the entry from the index and choose the Topic menu item from the View menu. Alternatively, you can double click on the desired entry. The text appears in the topic window.

If an entry applies to more than one section, the Bookreader displays a pop-up menu listing all the sections in which the entry appears. Click on the section you want to view.

Navigating the Table of Contents and Index



For easy navigation of the table of contents and index, use the vertical scroll bar on the selection window. The vertical scroll bar represents the entire table of contents or index. The slider represents:

- The position in the table of contents or index relative to the entire table of contents or index
- The relative portion of the table of contents or index that appears in the selection window

There are several ways to use the scroll bar to navigate:

- You can drag the scroll bar with MB1 to navigate quickly up or down the table of contents or index. For example, if you drag the slider to the bottom of the scroll bar and release MB1, the end of the table of contents or index appears in the selection window.

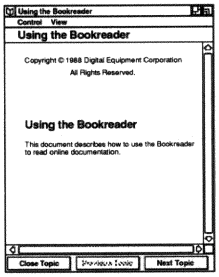
  As you drag the slider, an index window displays the entries represented by that region of the scroll bar. Release MB1 to bring that region into the selection window.

- You can click MB1 on the area above or below the slider to bring the previous or next window of entries into the selection window.

For example, if you are looking at the table of contents entries for Chapter 2 and click MB1 in the area above the scroll bar, the immediately preceding window of entries for Chapter 1 will scroll into the window.

- You can click on the stepping arrows to move one entry at a time up or down through the table of contents or index.

Reading Text



When you select a text topic from the table of contents or index, it is displayed in the topic window. You can read forward and backward from that topic by clicking on the Next Topic and Previous Topic buttons at the bottom of the topic window, or by choosing the corresponding menu items from the View menu.

The length of some topics is greater than the length of the window. Use the scroll bar, as in the selection window, to navigate up and down the topic. For example, click MB2 on the scroll bar to bring the line of text directly across from the pointer to the top of the topic window.

Displaying Figures, Tables, and Examples When you select a topic that is a figure, table, or example from the table of contents, it is displayed in a separate window. The window is sized according to the dimensions of that topic. If the topic is large—for example, if its dimensions exceed the dimensions of the screen—the window will have scroll bars to navigate the topic.

The windows that figures, tables, and examples are displayed in must be explicitly closed by clicking on the Close Topic button or by choosing the Close Topic menu item from the Control menu. These windows can also be made into icons, allowing you to save a topic for as long as you need to refer to it.

Using Cross-References and Footnotes Cross-references in text to figures, tables, and examples are "hot spots." That is, if you point at the reference and click MB1, the figure, table, or example is displayed in a separate window. For example, clicking on Figure 8–1 on the screen produces a display of that figure.

Cross-references to other sections of text are similarly hot, except that the cross-referenced topic replaces the current topic in the topic window. For example, clicking on Using the Bookreader on the screen causes that section to appear in the topic window. Footnotes are also hot spots.

Closing Shelves and Books

To close a book or shelf, click on the Close Book, Close Shelf, or Library button at the bottom of the selection window. Clicking on the Close Book button takes you back to the shelf from which that book was selected. Similarly, clicking on the Close Shelf button takes you back to the window from which that shelf was selected. When you are viewing a shelf, clicking on the Library button takes you back to the "top shelf," or in other words, the top level of the Bookreader library.

Exiting from the Bookreader

To exit from the Bookreader, click on the Quit button while viewing the library, or select the Quit menu item from the Control menu in the selection window.

Using Other DECwindows Applications

The following sections describe additional VMS DECwindows applications. For more information on these applications, see the *VMS DECwindows Desktop Applications Guide*, which is available online.

Calculator

The Calculator performs simple arithmetic functions: addition, subtraction, multiplication, division, percentages, and square roots. You can enter data by using the mouse to click buttons on the screen, or you can use the keyboard. The Calculator has two displays: one display shows the current operation; the other display shows the contents of memory.

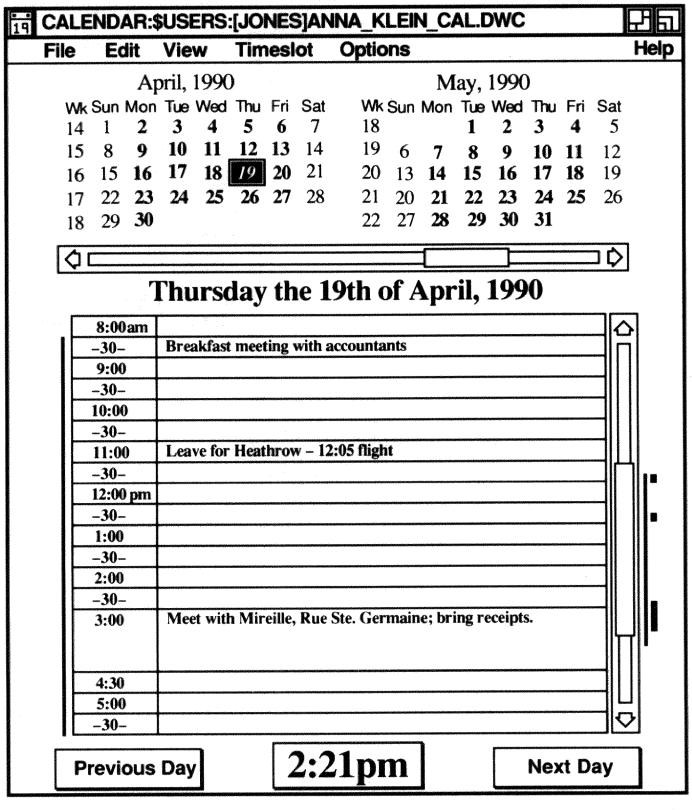
Calendar

The Calendar provides a convenient method for scheduling appointments and planning work. Using the Calendar, you can do the following:

- Display a day, week, month, or year
- Set alarms that remind you of upcoming events
- Create and maintain multiple calendars
- Customize the display

Figure 8–3 shows the Calendar window.

Figure 8–3 Calendar Window



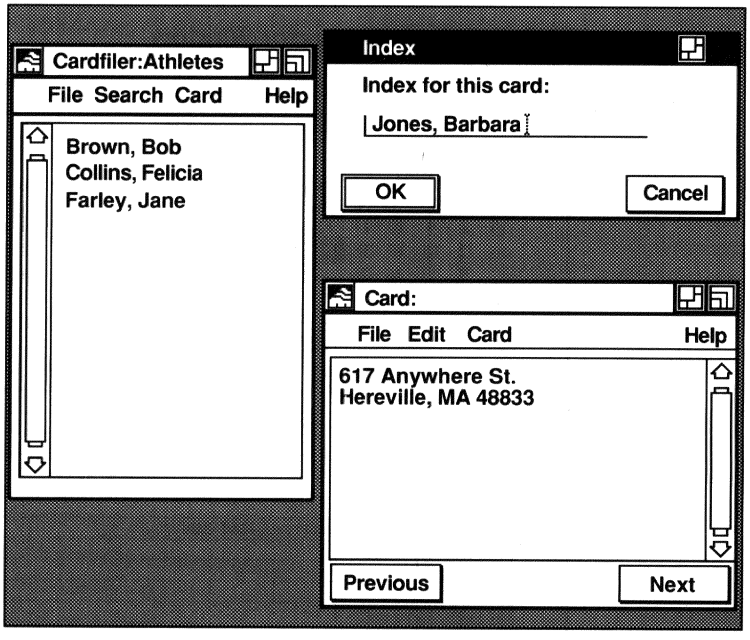
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Cardfiler

The Cardfiler provides a system for organizing information similar to using index cards. Using the Cardfiler, you create cards that contain information such as names, addresses, phone numbers, and graphics. You can also create files that group cards with similar information. For example, you might create a file for business cards and a file for personal cards.

Figure 8–4 shows the Cardfiler windows.

Figure 8–4 Cardfiler Windows



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Clock

The Clock displays the time (in analog and digital format) and date and provides an alarm to remind you of important events. You can also customize the display to produce different formats.

DDIF Viewer

The DDIF Viewer displays a DDIF file and lets you page through the contents. The Digital Document Interchange Format (DDIF) is a standard format for the storage and interchange of compound documents. Compound documents are documents that contain multiple elements (for example, text and graphics).

EVE Text Editor

The EVE editor is a general-purpose text editor based on the VAX Text Processing Utility (VAXTPU). EVE provides a graphic interface that lets you do the following functions:

- Perform basic text-editing operations
- Create and edit more than one file in an editing session
- Use multiple buffers and windows, and resize windows

- Define keys and create learn sequences
- Set editing preferences, such as a bound or free cursor
- Use wildcards for searching text
- Execute system commands from within the editor
- Spawn subprocesses or attach to other processes
- Compile and execute VAXTPU procedures to extend the editor
- Create section files to save key definitions and extensions
- Use initialization files and set private defaults

Mail

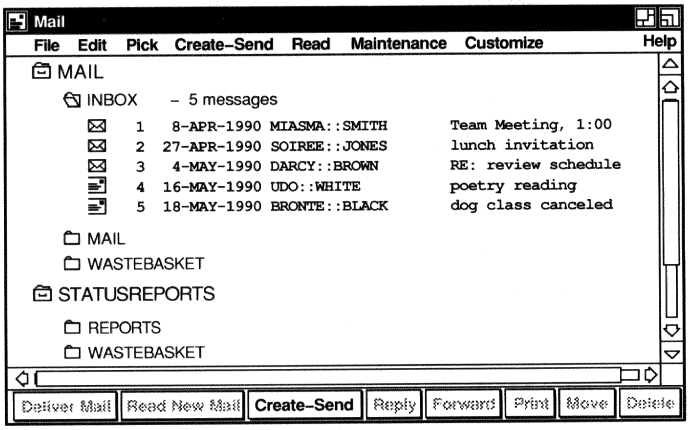
The Mail application provides a way to communicate with other users on the system or network. Mail's graphic interface lets you perform the same functions as the VMS Mail Utility.

Using Mail, you can do the following:

- Send messages to any user on the system or network
- Read messages from other users
- Print messages
- Reply to messages
- File messages
- Forward messages
- Delete messages
- Send files
- Extract files from messages you receive

Figure 8–5 shows the main Mail window.

Figure 8–5 Main Mail Window



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Notepad Text Editor

The Notepad text editor is a basic text editor that you can use to create and edit text files. The Notepad text editor also lets you perform the following functions:

- Search for text strings
- Move to specified line numbers
- Use a journaling feature to recover lost edits

Paint

Paint is an application that you use to create and save screen images. Using Paint is much like painting or drawing. You select a brush and trace designs. However, Paint makes the process easier. You can pick shapes from a menu and let paint draw the shape, and you can select fill patterns to shade or "color" your picture. To provide greater detail for part of your picture, you can use the zoom feature to magnify a specified area. If you are unhappy with your picture, you can erase it and start over. If you like the picture, you can print a copy.

Paint stores images as DDIF files. Applications that display graphics can use files that you create using Paint.

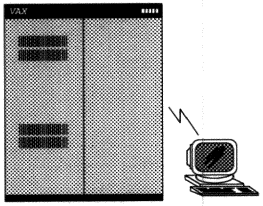
Puzzle

The Puzzle lets you solve a classic, sliding-tile puzzle on your workstation display.

DECterm

DECterm displays a window that looks and functions like a VT340 terminal. Applications written for VT52, VT100, VT220, VT320, and VT340 terminals can run without modification in the DECterm window.

Running Applications Across the Network

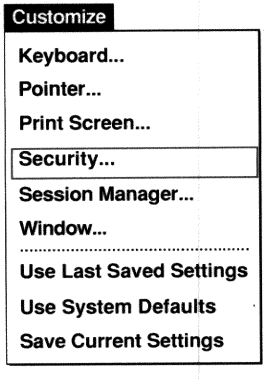


Desktop-VMS software opens the door to new computing opportunities by allowing you to run applications across a network. Distributing applications in this way means that they can run on another computer and display on your workstation monitor, so you can take advantage of larger computers that may be better suited to a specific computing task. Although the application runs on another system, it looks the same as any other application running on your workstation.

By default, your workstation monitor can display only those applications that are running on your workstation. This prevents users on other systems in the network from displaying applications on your workstation monitor or from capturing and displaying your keystrokes (including your password) on another monitor.

By specifying node and user names in the Session Manager's Customize Security dialog box, you can authorize yourself or others to use your monitor to display applications running on other systems. Authorized users can then display applications on your workstation with the DCL command SET DISPLAY.

Enabling Network Access to Your Workstation Monitor

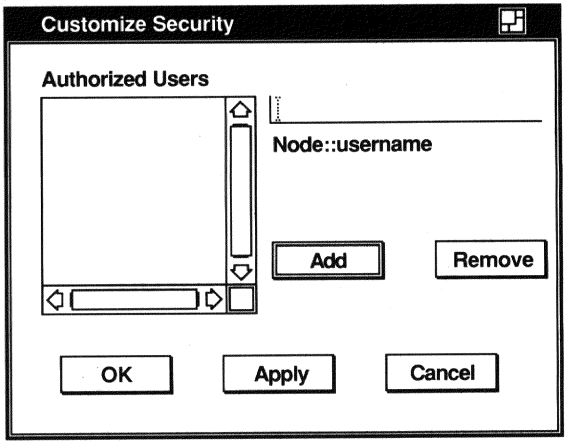


You are authorized to run applications only from your workstation—where your current session is running. This means that you cannot log in to another system and run applications for display on your workstation monitor unless you authorize yourself to do so.

To authorize yourself or others to display applications on your workstation monitor:

1 Choose the Security... menu item from the Session Manager's Customize menu.

The Session Manager displays the Security dialog box.



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2 Type the node name and user name of the user you want to authorize, using the format

```
node::username
```

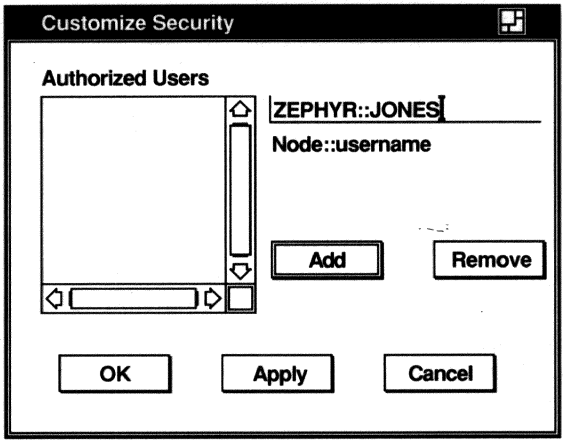
3 Click on Add.

The user name is added to the list of authorized users.

4 Click on OK or Apply.

5 Save your change by choosing the Save Current Settings menu item from the Session Manager's Customize menu.

The following example shows how to add your name to the list of authorized users of your display, ensuring that you can display DECwindows applications on your workstation from system ZEPHYR.



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The node name you provide cannot be a cluster alias (a name that represents multiple nodes configured in a VAXcluster, but must instead identify an actual node.

You can use an asterisk wildcard to add all users who match the node and user name information you specify. For example, to authorize all users logged on to your node HUBBUB to display on your workstation, type HUBBUB::* in the text field and click on Add. The Session Manager adds that text to the list of authorized users. It's a good idea to give access to only those users who you know require it. Giving access to an indeterminate number of users can compromise the security of your system.

To remove a user from the list of currently authorized users:

1 Choose the Security... menu item from the Session Manager's Customize menu.

  The Session Manager displays the Security dialog box.

2 Select the node and user name you want to remove.

3 Click on Remove.

  The user name is removed from the list of authorized users.

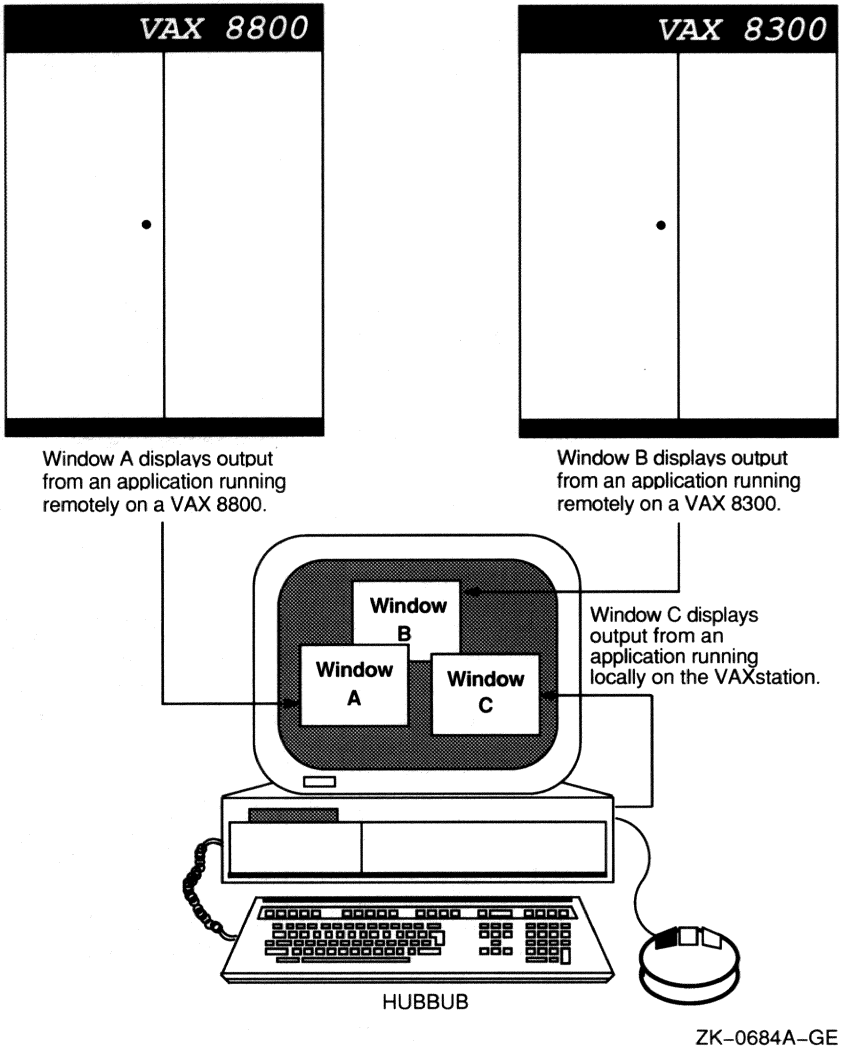
4 Click on OK or Apply.

5 Save your change by choosing the Save Current Settings menu item from the Session Manager's Customize menu.

Displaying Remote Applications on Your Workstation Monitor

Once you are authorized to display applications on your workstation from another system, you can log in to other systems and redirect the display to your workstation by using the command SET DISPLAY. Although VMS DECwindows must be available on these systems, they need not be workstations.

The SET DISPLAY/CREATE command affects only those applications that are run from the window from which you issue the command. This means that although you may be running one application on your workstation and displaying it on another workstation, you can continue to run applications on your workstation for display in other windows on your monitor.



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From DECterm or a FileView DCL Command window, log in to the remote system using the SET HOST command and enter the following command at the DCL prompt ($):

```
$ SET DISPLAY/CREATE/NODE=display_node Return
```

Display_node is the workstation on which you want the application displayed. You specify the /CREATE qualifier the first time you want to run an application and redirect the display. If you subsequently redirect the display to another system, omit this qualifier.

Enter the command SHOW DISPLAY to make sure the display now points to your workstation. For example, if you logged in to remote system ZEPHYR from your system HUBBUB and redirected your display back to HUBBUB, you see this information:

```
Device:          WSA2:
Node:            HUBBUB
Transport:       DECNET
Server:          0
Screen:          0
```

Device is your workstation device and may vary each time you use SET DISPLAY and SHOW DISPLAY. *Node* is the network system to which the display is now pointing. *Transport* refers to the mechanism, either DECNET or LOCAL, that passes information between the application and the display. *Server* and *Screen* are always 0.

You can then run your application on ZEPHYR for display on HUBBUB if you are authorized to do so. See Running Applications from a DCL Command Line for more information.

When you finish running the application, you can disable the remote display or redirect the display to a third system named ROMA. To disable the remote display from ZEPHYR to HUBBUB, enter the following command at the DCL prompt:

```
$ SET DISPLAY/NOPERMANENT [Return]
```

Specifying the /NOPERMANENT qualifier disables your connection to the remote display. Any applications you run on ZEPHYR will no longer be displayed on HUBBUB.

If you do not disable your connection to the remote display, you can redirect the display to a third system by entering the following command:

```
$ SET DISPLAY/NODE=ROMA [Return]
```

Enter the command SHOW DISPLAY to see that the display now points to ROMA.

If you access your own system using the SET HOST command, you need to define your display before you can run applications on your system. If your system is HUBBUB, you can define your display using either of the following commands:

```
$ SET DISPLAY/CREATE/TRANSPORT=LOCAL/NODE=0 [Return]
```

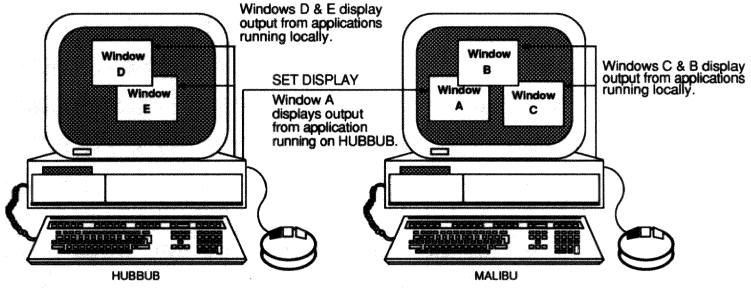
```
$ SET DISPLAY/CREATE/TRANSPORT=LOCAL/NODE=HUBBUB [Return]
```

Using the /TRANSPORT=LOCAL qualifier increases the performance of applications running and displaying on your system.

Be sure the node name you used in the SET DISPLAY command matches the node name from which you are authorized to display applications. For example, if you specify NODE=HUBBUB and you are not specifically authorized to display applications on HUBBUB, DECwindows reports that you are not authorized to use that display. This is because DECwindows regards nodes other than 0 as remote systems. By default, you are authorized to display applications only from node 0. Either specify SET DISPLAY/CREATE/TRANSPORT=LOCAL/NODE=0 or authorize yourself on HUBBUB to display applications from HUBBUB.

Running Applications on Your Workstation for Remote Display

You can also run applications on your workstation for display on other workstations on which Desktop-VMS software (or just DECwindows) is installed.



To display an application running on your system HUBBUB on a system named MALIBU, first enter the command SHOW DISPLAY to verify that your display is directed to HUBBUB, represented by a 0 in the node field. "0" is the standard shorthand notation for representing your system. Then enter the following command from DECterm or FileView's DCL Command window:

```
$ SET DISPLAY/CREATE/TRANSPORT=DECNET/NODE=MALIBU Return
```

Run the application. When you finish running the application, disable the remote display from HUBBUB to MALIBU and redirect your display back to HUBBUB by entering the following command:

```
$ SET DISPLAY/NOPERMANENT Return
```

Running Applications from a DCL Command Line

Once you have redirected your display to point to your workstation, you can run FileView and the desktop applications described in the *VMS DECwindows Desktop Applications Guide* from another system by entering the following command lines at the DCL prompt ($):

To run this	Enter this
Bookreader	RUN SYS$SYSTEM:DECW$BOOKREADER
Calculator	RUN SYS$SYSTEM:DECW$CALC
Calendar	RUN SYS$SYSTEM:DECW$CALENDAR
Cardfiler	RUN SYS$SYSTEM:DECW$CARDFILER
Clock	RUN SYS$SYSTEM:DECW$CLOCK
DDIF Viewer	VIEW/SELECT=X filename (to view a DDIF file)
	VIEW/SELECT=X/FORMAT=TEXT filename (to view a text, or ASCII, file)
EVE	EDIT/TPU/DISPLAY=DECWINDOWS
FileView	RUN SYS$SYSTEM:VUE$MASTER
Mail	RUN SYS$SYSTEM:DECW$MAIL
Notepad Editor	RUN SYS$SYSTEM:DECW$NOTEPAD
Paint	RUN SYS$SYSTEM:DECW$PAINT
Puzzle	RUN SYS$SYSTEM:DECW$PUZZLE

You can also use these command lines to run the desktop applications from DECterm or from FileView's DCL Command window on your workstation. To run multiple applications simultaneously from a single DECterm or FileView DCL Command window, add SPAWN/NOWAIT/INPUT=NL: to the beginning of the command lines. Note that you cannot run DECterm from a command line.

You can start one or more applications each time you start a session by creating a command file named DECW$LOGIN.COM that contains the command lines listed in the previous table. For example, to run Clock each time you start a session, create DECW$LOGIN.COM and add the following text:

```
$ SPAWN/NOWAIT/INPUT=NL: RUN SYS$SYSTEM:DECW$CLOCK
```

Place this file in your top level directory (SYS$LOGIN). Your Desktop-VMS system will execute the commands contained in the file each time you start a session.

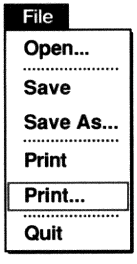
Printing Files with Desktop-VMS Software



Desktop-VMS software allows you to print the files that you create and work with in applications. For example, you can print a mail message or a drawing you created in Paint. This section describes how to print the files you create.

Whenever you choose the Print command in an application, the application creates a file that it then sends to the printer. You can also specify further printing instructions if you want to execute more sophisticated printing tasks. While your job is being printed, you can continue to work in your current application or go on to other tasks.

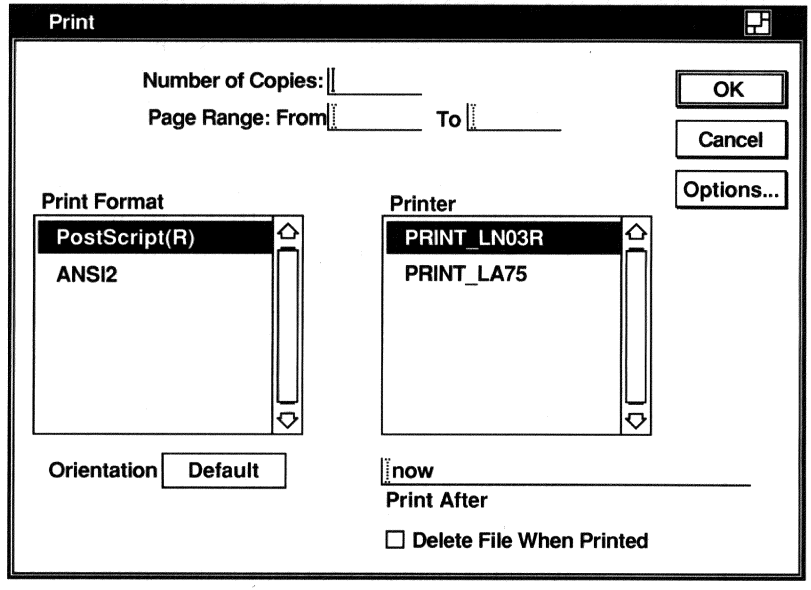
Printing Files from Applications



When you simply want to print something currently displayed, for example, a mail message, choose the Print menu item from the application's File menu. The file is sent to a print queue, which holds jobs waiting to be printed. Your print job is sent to the next available printer that can accept print jobs from that application. When your job is printed, the Session Manager displays a message that tells you the name of the printer on which your job was printed.

Desktop-VMS software also lets you provide additional information about how you want your job printed. For example, you can specify the print queue to which you want your job sent and how many copies you want printed.

To provide this additional printing information, choose the Print... menu item from the application's File menu. The application displays a dialog box.



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In the Print dialog box, you can record your settings or dismiss the dialog box.

Click on	To
OK	Record new settings, dismiss the dialog box, and print your job.
Cancel	Dismiss the dialog box without changing any settings and cancel your print request.
Options...	Display the advanced print settings dialog box. See Using Advanced Print Settings for more information.

From the Print dialog box, you can change any of the following settings:

Number Of Copies

Normally, one copy of a job is printed. To print more copies, type the number of copies you want.

Page Range

When you print a file, the entire file is printed. If, however, you want to see page 2 of a five-page mail message, you can save paper by printing only that page. To change the page number at which the file starts printing, type a number in the From text

field. Do the same in the To text field. For example, to print only page 2 of a five-page mail message, type a 2 in both text fields.

Print Format

The Print Format list box contains the file formats produced by the current application for printing. These formatted files can be printed only on those printers that recognize the specific format.

The Printer list box displays only those printers that can support the selected print format. If you select another print format, the Printer list box changes its display accordingly.

For example, card files you create with the Cardfiler are formatted as text files. Every print queue that can accept text files—from line printers to sophisticated laser printers—is listed in the Printer list box. Paint, however, produces files formatted for POSTSCRIPT and ANSI2 output. If the selected print format is POSTSCRIPT, the Printer list box displays only LN03R and LPS40 print queues. If the selected print format is ANSI2, only LN03, LN03R, and LPS40 print queues are displayed.

Note, however, that FileView and Mail display all print formats supported by your Desktop-VMS software, no matter what the file type of the file you selected for printing. Neither FileView nor Mail convert files already in one format to the print format you choose. If, for example, you select a TXT file in FileView, choose the Print command from FileView's Files menu, click on the Show Queue Options button in the Print dialog box, and click OK, the print format list box displays all print formats, not just Text.

By default, the first print format in the list is selected.

Printer

The Printer list box lists the print queues that can accept the selected print format.

By default, the first print queue in the list is selected. Your print job will be sent to the selected queue. To change the print queue to which your print job will be sent, select another print queue. Use the scroll bars to view the list of available print queues.

Orientation

All printers except line printers can print pages in two different page orientations, portrait and landscape. In **portrait** orientation, characters print parallel to the short edge of the paper. For example, this page is printed in a portrait orientation. In **landscape** orientation, characters print parallel to the long edge

of the paper. Note that the definition of portrait and landscape may be altered if you choose advanced print settings.

Your system assigns each printer a default orientation. The printer uses this default orientation when it prints your job. To change the orientation for your print job:

1 Point to the Default button.

2 Press and hold MB1.

3 Choose the Portrait or Landscape menu item.

Print After

Once you choose your print settings, your job is immediately submitted to the selected print queue. You can change the time at which your job is actually printed by changing the information in the Print After text field. By requesting that a print job be held until a specific time, you can ensure that a large print job is printed after hours when fewer users are sharing printers.

To change the time at which your job is printed, double click on the Print After text field and type the time using the following format:

```
19-APR-1990 14:32
```

This print job will be held for printing until April 19, 1990, at 2:32 p.m.

Delete File When Printed

When you tell your Desktop-VMS system to print a text or graphics file, it sends a copy of that file to the printer. These print files are not deleted once they are printed. This setting is indicated by an unshaded button. If you want to delete the print file after it is printed, click on the Delete File When Printed button.

This button may not be displayed in all applications.

Using Advanced Print Settings

Click on the Options... button to display another print dialog box where you can specify advanced print settings for your print job.

Some of these settings, including File Start Sheet and Message Log, correspond to qualifiers available from the DCL command PRINT. See the description of the DCL command PRINT in the *VMS User's Manual* for more information.

9

Using the Session Manager



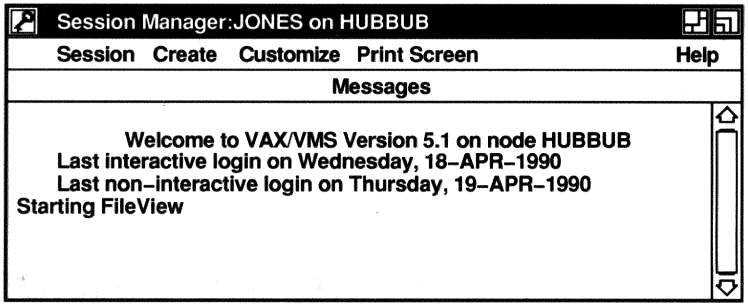
The Session Manager is displayed on your screen at the start of every session. It acts as a control panel for your current session. From the Session Manager, you can create new DECterm and FileView windows, capture screen snapshots in a file for printing, lock your workstation, and end your session.

You can also use the Session Manager to customize your Desktop-VMS environment. You can make these changes for the current session only or save them so that every subsequent session reflects your fine tuning.

This chapter describes how to customize your workstation and Desktop-VMS environment by choosing and saving new settings. Where appropriate, this chapter also describes how to customize the screen display for three types of workstations:

- Monochrome system—Supports black and white output only
- Intensity system—Supports shades of gray
- Color system—Supports a full spectrum of color

The Session Manager looks like this:

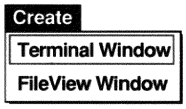


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- The title bar displays your node name and user name.
- The menu bar displays the names of menus available from the Session Manager.
- The Messages region displays system status information. When you start your session, this information includes a welcome message, the date you started your last session, and notification of any new mail messages.

As with any other window, you can change the size of the Session Manager window by using the resize button. If you save this change (described in Saving Your New Settings) and start another session, the Session Manager window is displayed in the new size.

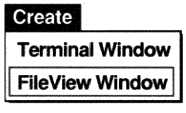
Creating a DECterm Window



By choosing the Terminal Window menu item from the Session Manager's Create menu, you open a DECterm window, which emulates a VT340 terminal. From DECterm, you can then enter DCL commands or use any other command line interface. Since your system is part of a network, you can communicate with other systems and share information and resources.

See the *VMS DECwindows Desktop Applications Guide* for more information about using DECterm.

Creating a FileView Window

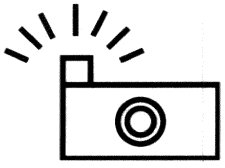


By choosing the FileView Window menu item from the Session Manager's Create menu, you open a FileView window. From FileView, you can access applications and work with files and directories.

By default, a FileView window opens whenever you start a session. Most often, you open additional FileView windows from within FileView. The ability to open a FileView window from the Session Manager is provided as a safety net: if only one FileView window is open and you close it by mistake, you can still access FileView.

See Chapter 6 for more information about using FileView.

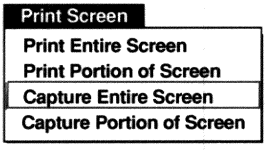
Capturing Screen Snapshots for Printing



DECwindow's print screen feature lets you take a snapshot of your entire screen or just a portion of it and print the file containing this snapshot now or later.

In the Customize Print Screen dialog box, you supply some information, including the output file format and default output file specification, that your system needs to capture and format a screen snapshot. You can change this information permanently. See Changing Your Print Screen Settings for more information.

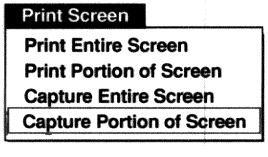
To capture your entire screen display in a file:



1. Arrange the windows on your screen as you want them captured.
2. Choose the Capture Entire Screen menu item from the Session Manager's Print Screen menu.

   The Session Manager displays a dialog box. By default, the screen is captured in a file called SYS$LOGIN:DECW$CAPTURE.TMP. Enter another file specification to direct the output to another directory or file. Do not use any logical names defined in the system login command file (SYLOGIN.COM) or in your login command file (LOGIN.COM).
3. Click on OK.

To capture a partial screen display:



1. Arrange your screen to display the windows you want to capture.
2. Choose the Capture Portion of Screen menu item from the Session Manager's Print Screen menu.

   The Session Manager displays a dialog box. By default, the screen will be captured in a file called SYS$LOGIN:DECW$CAPTURE.TMP. Enter another file specification to direct the output to another directory or file. Do not use any logical names defined in the system login

command file (SYLOGIN.COM) or in your login command file (LOGIN.COM).

3 When the pointer changes to a capture cursor, which looks like a plus sign (+), press and hold MB1.

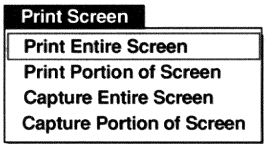
A box appears.

4 Drag the capture cursor until it surrounds the area you want.

5 Release MB1.

Instead of capturing a snapshot of your screen in a file and printing it later, you can send the file to a **print queue** directly from the Session Manager. A print queue holds jobs waiting to be printed. The Session Manager lets you provide additional information about how you want your job printed. This information includes the print queue to which you want your job sent and how many copies you want printed. See Printing Files with Desktop-VMS Software for more information about changing the print queue options.

To capture your entire screen and immediately send the output file to a print queue:



1 Choose the Print Entire Screen menu item from the Session Manager's Print Screen menu.

2 The Session Manager displays the Queue Options dialog box.

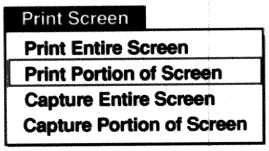
3 Enter the settings information you want.

By default, the Session Manager formatted the captured file for POSTSCRIPT output, which appears highlighted in the Print Format list box. The print queue to which your file will be sent is also highlighted. To send your file to another print queue, select one from the list. Make sure the printer you select can accommodate your file's format.

4 Click on OK.

The screen snapshot is written to a file that is deleted after printing.

To capture a portion of your screen and immediately send the output file to a print queue:



1 Choose the Print Portion of Screen menu item from the Session Manager's Print Screen menu.

2 Follow steps 3 through 5 for capturing a portion of your screen.

3 The Session Manager displays the Queue Options dialog box.

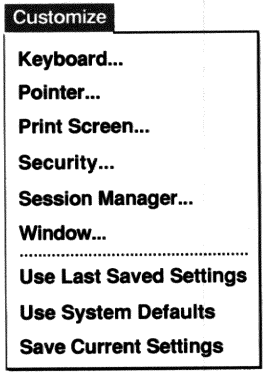
4 Enter the settings information you want.

By default, the Session Manager formatted the captured file for POSTSCRIPT output, which appears highlighted in the Print Format list box. The print queue to which your file will be sent is also highlighted. To send your file to another print queue, select one from the list. Make sure the printer you select can accommodate your file's format.

5 Click on OK.

The screen snapshot is written to a file that is deleted once it is printed.

Customizing Your Desktop-VMS Environment



Desktop-VMS software comes to you with a host of preset options that you are invited to change. You can work successfully with your Desktop-VMS system and never change these options, but by taking advantage of these customization features, you can design an environment to fit your own working style.

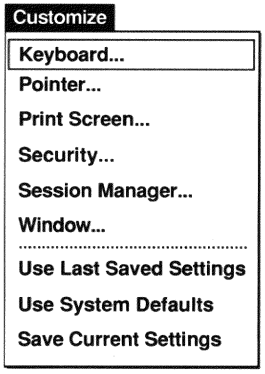
These options, which include keyboard, window, pointer, and security settings, are accessible from the Session Manager's Customize menu. By using the Customize menu, you can look at the current settings and choose and save new settings.

Choosing each menu item from the Customize menu displays a dialog box. In any of the Customize dialog boxes, you can record your settings or dismiss the dialog box.

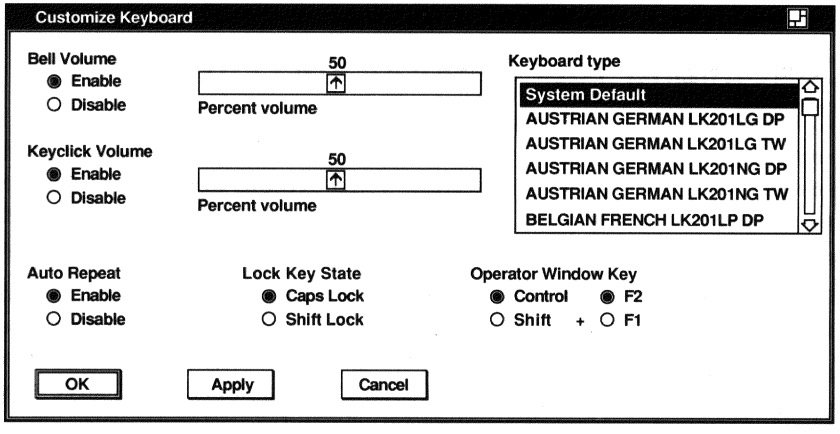
Click on	To
OK	Record new settings and dismiss the dialog box.
Apply	Record new settings without dismissing the dialog box.
Cancel	Dismiss the dialog box without changing any settings. If you made any changes without applying them, clicking on the Cancel button cancels those changes.

The sections that follow list the various preset options and describe how to change and save them.

Changing Your Keyboard Settings



To change your keyboard settings, choose the Keyboard... menu item from the Session Manager's Customize menu. The Session Manager displays the Keyboard dialog box.



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From the Customize Keyboard dialog box, you can change any of the following settings:

Bell Volume

A warning bell sounds to alert you to system messages. Adjust the bell's volume by dragging the arrow in the Percent Volume slider right or left, or move the pointer to a location on the slider and click MB1. Click on the Disable button to disable the bell.

Keyclick Volume

Each time you press a key, the keyboard makes a clicking sound. This setting is indicated by a shaded button. Adjust the clicking volume by dragging the arrow in the Percent Volume slider right

or left, or move the pointer to a location on the slider and click MB1. Click on the Disable button to disable keyclick.

Auto Repeat

When a key is pressed longer than normal, it repeats until it is released. This setting is indicated by a shaded button. Click on the Disable button to disable auto repeat.

Lock Key State

Normally, you can produce capital letters but not shifted number keys when you press the Lock key on your keyboard. You can, however, make your keyboard work just like a typewriter keyboard by clicking on the Shift Lock button. Choosing the Shift Lock option produces both capital letters and shifted number keys when you press the Lock key.

Operator Window

Normally, you press Ctrl/F2 to open the operator window. You may, however, want to assign other definitions to those keys. Click on any combination of the Ctrl or Shift and F2 or F1 buttons to change how you open the operator window.

Keyboard Type

The location of specific characters on the keyboard varies depending on the keyboard model. Selecting the keyboard type that matches your keyboard model allows the system to echo the correct character when you press the corresponding key.

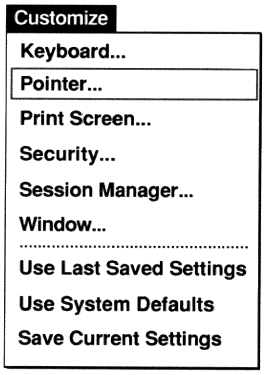
The system default keyboard type is North American. If you want to use a keyboard model that does not match the default keyboard type, you must set the keyboard type to match the keyboard model. This changes the keyboard type temporarily without permanently changing the system default keyboard type. (For example, you might plug an Austrian German keyboard into a workstation whose system default keyboard type is French.)

To find your keyboard model number, turn the keyboard upside down and look for a label that specifies the model number. The model number should be in a format similar to LK201-xx. (The model number may also be listed as simply LK201. In this case, the "xx" you need is in another place on the label. Look for a number similar to nn-nnnnn-xx.) Use this number to select a keyboard type from the Keyboard Type list box. For example, if you are using an Austrian German keyboard and your keyboard model is LK201 NG, select the Austrian German LK201 NG keyboard type.

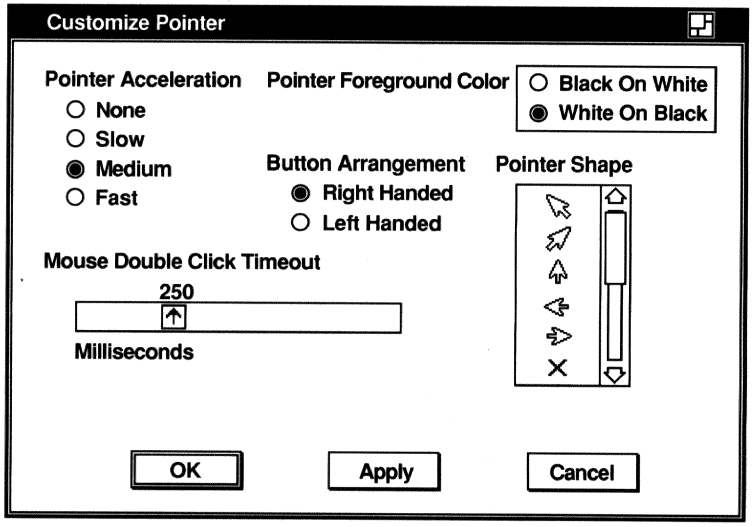
For any language other than North American or US, you can also specify whether you want your keyboard to act as a data processing (DP) or typewriter (TW) keyboard. Selecting a data processing keyboard type enables the characters on the right half of the keycaps. Selecting a typewriter keyboard enables the characters on the left half of the keycaps.

To use this new keyboard type for your subsequent sessions, you must save the new setting before you end the current session. The new keyboard type will be in effect for your sessions only after Desktop-VMS verifies your password at the start of each new session.

Changing Your Pointer and Mouse Settings

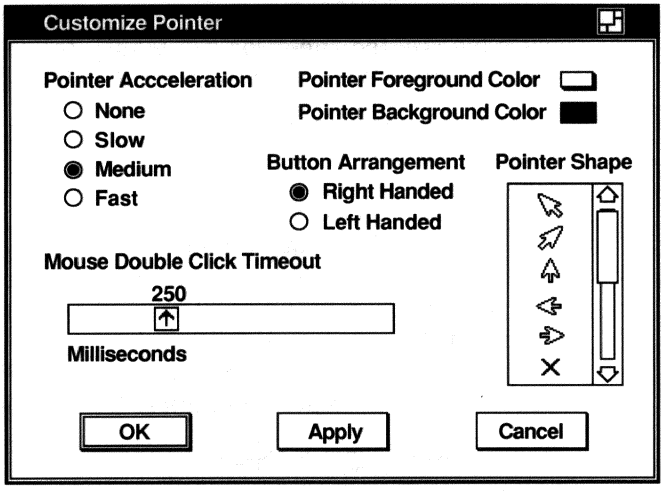


You can change the shape and color of the pointer, as well as certain mouse characteristics. To change your mouse and pointer settings, choose the Pointer... menu item from the Session Manager's Customize menu. The Session Manager displays the Pointer dialog box. The Pointer dialog box on a monochrome system looks like this:



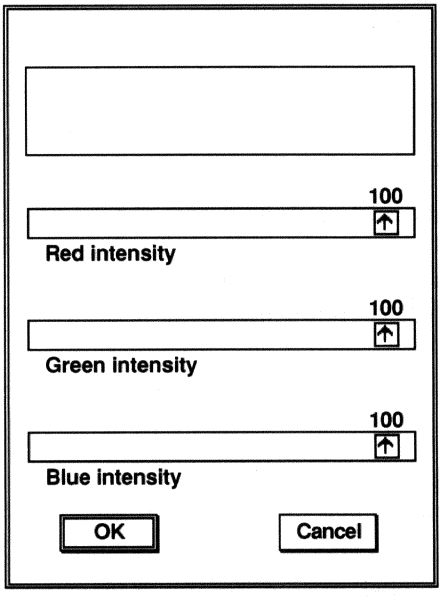
ZK–0225A–GE

The Pointer dialog box on intensity and color systems looks like this:



ZK-0222A-GE

On intensity and color systems, clicking on some of the pointer settings displays a color box, which allows you to set specific colors for your session.



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On an intensity system, you can mix black and white to create shades of gray. On a color system, you can mix amounts of red, green and blue. To create these mixes on either system, drag the

arrows in the slider right or left, or move the pointer to a location on the slider and click MB1. Click on OK in the color box when you have created the color you want. To see your new setting in effect, click on Apply or OK in the Customize Pointer dialog box.

From the Customize Pointer dialog box, you can change any of the following settings:

Pointer Acceleration

Click on one of the four options to vary the rate at which the pointer moves in relation to the mouse. The None setting keeps the pointer speed constant. The Fast setting makes the pointer move farther as you move the mouse faster. Thus, you can move the pointer to another part of the screen without moving the mouse the same relative distance. The preset option is Medium.

Mouse Double-Click Timeout

Desktop-VMS software can tell two successive single clicks from a double click. To change the speed by which your system expects one click to follow another in a double-click sequence, drag the arrow in the slider right or left, or move the pointer to a location on the slider and click MB1.

Pointer Foreground Color

The pointer consists of an outline and filled center.

On a monochrome system, the pointer's filled area is normally white with a black outline. Click on the Black On White button to reverse the fill and outline colors.

On intensity and color systems, the pointer's filled area or foreground is normally yellow. To change this setting, click on the Pointer Foreground Color button. The Session Manager displays a color box. Click on OK in the color box when you have created the color you want.

To see your changes, click on Apply or OK in the Pointer dialog box.

Pointer Background Color

This setting applies to color and intensity systems only.

The pointer's outline or background is normally purple. To change this setting, click on the Pointer Background Color button. The Session Manager displays a color box. Click on OK in the color box when you have created the color you want. To see your changes, click on Apply or OK in the Pointer dialog box.

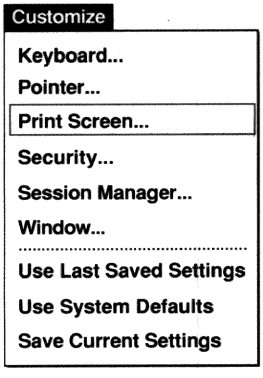
Button Arrangement

The preset mouse button arrangement—MB1 on the left and MB3 on the right side of the mouse—is natural for a right-handed user. You can switch the mouse button arrangement by clicking on the Left Handed option. The right mouse button becomes MB1 and the left mouse button becomes MB3. MB2 stays the same.

Pointer Shape

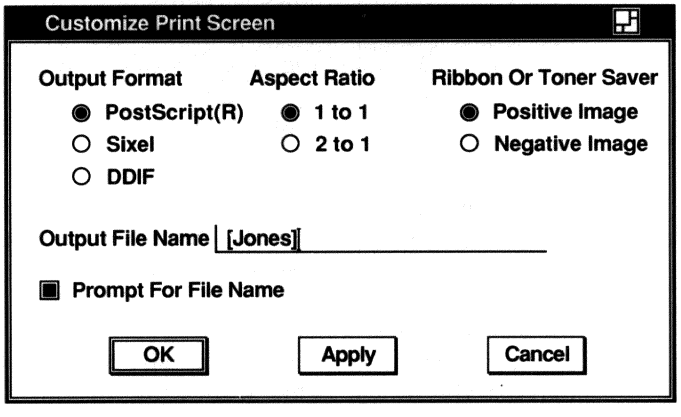
Normally, the pointer is a left arrow. To change the pointer shape, scroll through the list of shapes and select the one you want.

Changing Your Print Screen Settings



DECwindow's print screen feature lets you take a snapshot of an entire screen or just a portion of it and print the resulting output file. (See Printing Files with Desktop-VMS Software for information about printing.)

To change the print screen settings, choose the Print Screen... menu item from the Session Manager's Customize menu. The Session Manager displays the Print Screen dialog box.



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From the Customize Print Screen dialog box, you can change any of the following settings:

Output Format

Normally, Print Screen captures a screen snapshot in a file formatted for POSTSCRIPT. Click on the Sixel or DDIF buttons to change this output format.

To capture a screen snapshot that you can display in a DECterm window (using the DCL command TYPE), click on the Sixel and 1 to 1 aspect ratio buttons.

Aspect Ratio

The **aspect ratio** refers to the relationship between the size of the original screen image and the size of the printed screen snapshot. A printed screen snapshot may not be the same size as the original screen image. If the aspect ratio is 2 to 1 (2:1), the printed output will be twice the size of the original screen image. If the aspect ratio is 1 to 1 (1:1), the printed output will be the same size as the original screen image.

The 1 to 1 setting allows screen snapshots to be printed without distortion on most devices, including both hardcopy printers and terminals. This setting is indicated by a shaded button. Some sixel printers, however, require a 2 to 1 aspect ratio. If your printed screen snapshot appears distorted, click on the 2 to 1 button.

To capture a screen snapshot that you can then display in a DECterm window (using the DCL command TYPE), click on the 1 to 1 aspect ratio and Sixel buttons.

Ribbon Or Toner Saver

Normally, captured screen snapshots are printed as you would expect: the image is black and the background (the portion of the paper not printed on) stays white. Printing an image that is nearly or completely solid using the conventional method consumes a great deal of printer ribbon or toner. To reverse the dark and light portions of the printed output and conserve ribbon or toner, click on the Negative Image button.

Output File Name

By default, Print Screen names the output file containing a screen snapshot DECW$CAPTURE.TMP. This file is placed in your SYS$LOGIN directory, which is probably your top level directory. Enter another file specification in the Output File Name text field to direct the output to another directory or file.

Do not use any logical names defined in the system login command file (SYLOGIN.COM) or in your login command file (LOGIN.COM).

Prompt For File Name

When you take a screen snapshot, the Session Manager displays a dialog box that asks you for the name of the output file. This lets you override the output file specification that you specified in the Customize Print Screen dialog box. This means that you can redirect the screen snapshot to another directory or give it another file name.

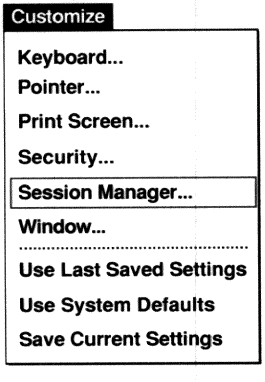
This setting is indicated by the shaded button. To prevent the Session Manager from asking you for the output file name each time you take a screen snapshot, disable the Prompt For File Name setting.

Changing Your Security Settings

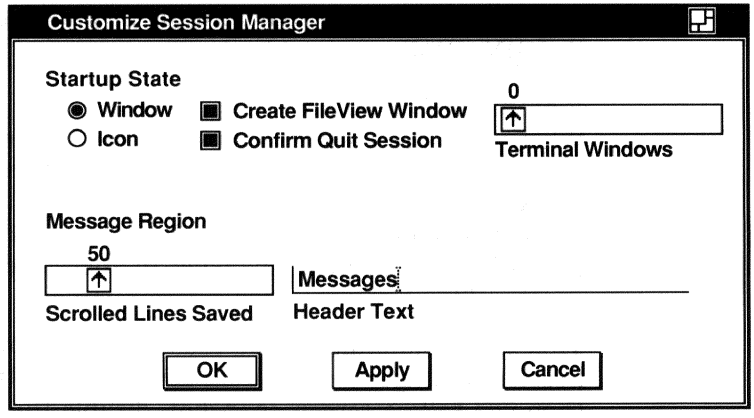
Desktop-VMS software allows you to run applications from another computer for display on your workstation monitor. By default, your workstation monitor can display only those applications that are running on your workstation. This prevents users on other systems in the network from displaying applications on your workstation monitor or from capturing and displaying your keystrokes (including your password) on another monitor.

From the Session Manager's Customize Security dialog box, you can authorize yourself or others to use your monitor to display applications running on other systems. See Running Applications Across the Network for information about supplying this authorization.

Changing Your Session Manager Settings



To change your Session Manager settings, choose the Session Manager... menu item from the Session Manager's Customize menu. The Session Manager displays the Session Manager dialog box.



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From the Customize Session Manager dialog box, you can change any of the following settings:

Startup State

The Session Manager is displayed as a window at the start of each session. Click on the Icon button to specify that the Session Manager be stored as an icon at the start of every session.

A FileView window is opened at the start of each session. This setting is indicated by a shaded button. Click on the Create FileView Window button to prevent a FileView window from opening when you start a session.

By default, no DECterm windows are created when you start a session. To set the number (up to five) of DECterm windows you want opened when you start a session, drag the arrow in the Terminal Windows slider right or left, or move the pointer to a location on the slider and click MB1.

When you end a session, the Session Manager asks you for confirmation. This setting is indicated by the shaded option button. By clicking on the Confirm Quit Session button, you will not be asked to confirm that you want to end a session.

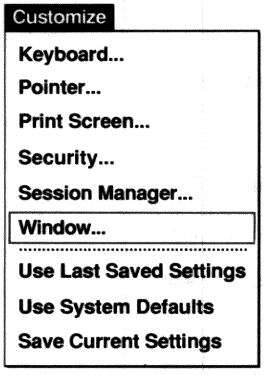
Message Region: Scrolled Lines Saved

By default, you can scroll through the last 50 lines of text in the Session Manager's message area to view messages you may have missed. The Scrolled Lines Saved slider lets you vary the number of lines that the Session Manager saves.

Message Region: Header Text

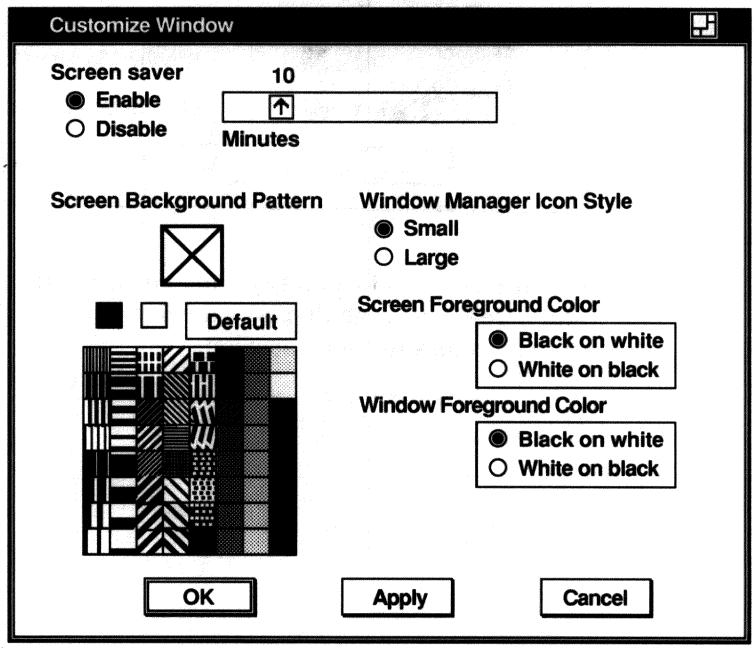
The Session Manager message area is labeled Messages. To change this heading, enter a new heading in this text field.

Changing Your Window Settings



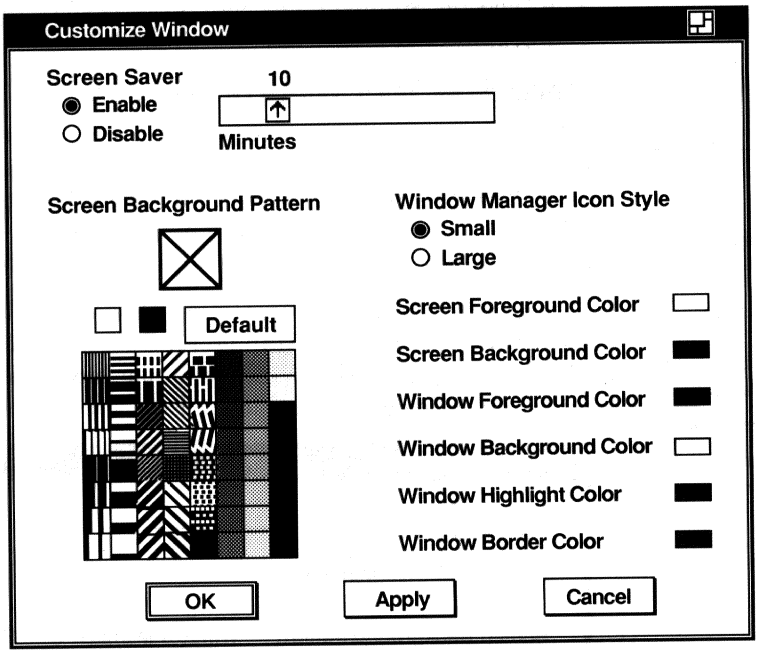
Whether you have a monochrome, intensity, or color system, you can change the look of your workstation display. For example, you can alter the background and foreground pattern and the window and screen colors. If you have a color system, you can choose from a wide palette of colors to design a visually pleasing display.

To change your window settings, choose the Window... menu item from the Session Manager's Customize menu. The Session Manager displays the Window dialog box. The Window dialog box on a monochrome system looks like this:



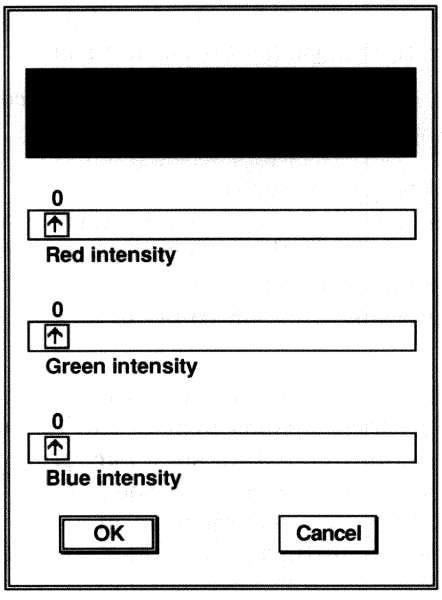
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The Window dialog box on color systems looks like this:



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On intensity and color systems, clicking on most of the window and screen settings displays a color box, which allows you to set specific colors for your session.



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An intensity system color box provides just one slider in which you can mix black and white to create shades of gray. On a color system, you can mix amounts of red, green, and blue. To create these mixes on either system, drag the arrows in the slider right or left, or move the pointer to a location on the slider and click MB1. Click on OK in the color box when you have created the color you want.

Some changed settings take effect when you click on Apply or OK in the Customize Window dialog box. Others take effect the next time you log in. See the individual setting to see which applies.

From the Customize Window dialog box, you can change any of the following settings:

Screen Saver

Screen Saver extends the life of your monitor by shutting off its display after a specified time. Normally, the monitor shuts off its display after 10 minutes of keyboard or mouse inactivity. To vary the time screen saver waits before shutting down the display, drag the arrow in the slider right or left, or move the pointer to a specific location on the slider and click MB1. Click on the Disable button to keep the display on indefinitely. Click on Apply or OK to apply your change.

Window Manager Icon Style

Normally, the icons stored in the Icon Box are small. Click on the Large button to change the size of the icons.

If you save your changes, the Icon Box will contain large icons when you start your next session.

Screen Background Pattern

Normally, the screen background pattern is a tight, gray crossweave. To change the background pattern, click on a pattern in the pattern palette. The pattern you selected is displayed in the pattern viewer. Click on Apply or OK to see your selection in effect.

You can also create a solid background by clicking on one of two background pattern buttons next to the Default button. Click on the left button to create a solid background in the screen foreground color. For example, if the Screen Foreground Color is Black On White on your monochrome system, click on the left button in the Screen Background Pattern to create a solid black background.

Click on the middle button to create a solid background in the screen background color. For example, if the Screen Background Color is red on your color system, click on the middle button in the Screen Background Pattern to see a solid red background.

Screen Foreground Color

The screen pattern, when set to anything other than the default pattern, consists of a screen foreground (the filled area in the pattern) and a screen background (the pattern's outline).

On a monochrome system, the screen foreground color is normally black on white. Click on the White On Black option button to reverse the fill and outline colors.

On intensity and color systems, the screen foreground color is normally dark gray. To change this setting, click on the Screen Foreground Color button. The Session Manager displays a color box. Click on OK in the color box when you have created the color you want.

To see your new setting in effect, click on Apply or OK in the Customize Window dialog box.

Screen Background Color

This setting applies to intensity and color systems only.

The screen pattern, when set to anything other than the default pattern, consists of a screen foreground (the filled area in the pattern) and a screen background (the pattern's outline).

On intensity and color systems, the screen background color is normally green. To change this setting, click on the Screen Background Color button. The Session Manager displays a color box. Click on OK in the color box when you have created the color you want. To see your new setting in effect, click on Apply or OK in the Customize Window dialog box.

Window Foreground Color

Changing the Window Foreground Color setting in a window containing text changes the color of that text. If the window contains graphics, the color of the graphics is changed.

On a monochrome system, the window foreground is normally black. Click on the White On Black option button to change the window foreground to white.

On intensity and color systems, the window foreground is normally black. To change this setting, click on the Window Foreground Color button. The Session Manager displays a color box. Click on OK in the color box when you have created the color you want.

If you save your changes by clicking on Apply or OK in the Customize Window dialog box, your new setting will be in effect when you start your next session.

Window Background Color

This setting applies to intensity and color systems only.

On intensity and color systems, the window background is normally off-white. To change this setting, click on the Window Background Color button. The Session Manager displays a color box. Click on OK in the color box when you have created the color you want.

If you save your changes by clicking on Apply or OK in the Customize Window dialog box, your new setting will be in effect when you start your next session.

Window Highlight Color

This setting applies to intensity and color systems only.

Screen objects—for example, toggle and option buttons and title bars—are normally red to indicate the current setting or input focus. To change this setting, click on the Window Highlight Color button. The Session Manager displays a color box. Click on OK in the color box when you have created the color you want.

If you save your changes by clicking on Apply or OK in the Customize Window dialog box, your new setting will be in effect when you start your next session.

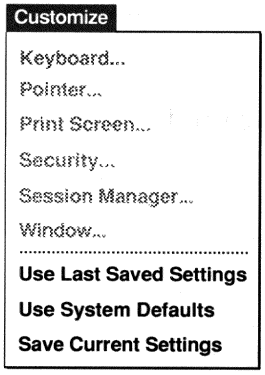
Window Border Color

This setting applies to intensity and color systems only.

On intensity and color systems, the window border is normally gray. To change this setting, click on the Window Border Color button. The Session Manager displays a color box. Click on OK in the color box when you have created the color you want.

If you save your changes by clicking on Apply or OK in the Customize Window dialog box, your new setting will be in effect when you start your next session.

Saving Your New Settings



You must save your new settings or they will be lost when you end your current session. From the Customize menu, you can choose any of the following menu items to save new settings or reinstate old ones:

Choose	To
Use Last Saved Settings	Reinstate the last settings you saved. Choose this menu item if you want to reset any attributes that you changed temporarily but did not save.
Use System Defaults	Reinstate the system default settings defined when the Desktop-VMS software was installed.
Save Current Settings	Save the settings you just changed for use in every subsequent session.

Some new settings will not be in effect until you end your current session and begin another one.

When you save your current settings, the Session Manager creates the following files and places them in your top level directory (SYS$LOGIN):

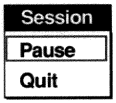
- DECW$SM_GENERAL.DAT
- DECW$SM_COLOR.DAT (color systems only)
- DECW$SM_GRAY.DAT (intensity systems only)
- DECW$SM_BW.DAT (monochrome systems only)

The Session Manager uses these files to customize your DesktopVMS environment each time you start a session.

If you try to end your session without saving your changes, your system asks you whether you want to save your settings before you end your session.

Click on	To
Yes	Save your workstation settings and end your session.
No	End your session without changing the current settings.
Cancel	Continue working in your current session. The settings you changed are still in effect.

Putting a Session on Hold



From the Session Manager, you can put your current session on hold indefinitely and lock your workstation without ending your session. When you put your session on hold, your screen is cleared, but your session is maintained exactly as it was. This means you can resume working without having to restart any applications.

It's a good idea to save any files and close any mail drawers that might be open before you put your session on hold. If your system fails while your session is on hold, you won't have lost any information.

To put your current session on hold, choose the Pause menu item from the Session menu. Your screen is cleared and the Continue Session dialog box is displayed.

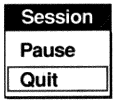
To continue your session:

1 Enter your password.

2 Click on OK.

Once the system verifies your password, your session resumes. If the Continue Session dialog box remains on your screen, you probably made a typing mistake. Click on the Clear button and reenter your password.

Ending a Session



You can end a session at any time. When you end a session, the system stops all applications and clears the screen.

To end your session, choose the Quit menu item from the Session menu. Unless you have disabled the confirmation option, the system asks you to confirm that you indeed want to end your session. Click on Yes to confirm that you want to end. All windows are closed and the session ends. If you change your mind and decide not to end your session, click on No to return to your session.

10

Using Storage Devices

Your VAXcluster uses disk drives and tape drives, also called **storage devices**, to store information. Some storage devices are integral (built in) to a VAXstation 3100, and others can be added as expansion boxes. The Desktop-VMS system accesses files and programs from storage devices as they are needed. Disks and tapes allow your system to use far more information than it could keep in internal memory.

This chapter tells you how to use the storage devices on your system to store and access data. It also tells how to use storage devices to avoid the accidental loss of data on your system.

If your VAXstation 3100 system does not include a diskette drive or tape drive, you do not need to read this chapter because your system manager is responsible for storing and safeguarding the files on your system. Most Desktop-VMS system files and user files are stored on your server's hard disks. Since hard disks operate at high speed and have a large storage capacity, the information is immediately available, or **on line**, at all times.

Magnetic tapes are not as fast as hard disks, but they are removable (you can use different tapes in the same drive), have ample storage capacity, and are more economical. Tapes are commonly used to store copies of valuable files from hard disks. Then, if the disk is damaged or files are accidentally lost, the copies can be recovered from the tape.

Diskettes combine some of the advantages of both hard disks and tapes: they operate at high speed; they are readily removable and easy to use; and they are extremely economical. Their main limitation is that they have only a fraction of the storage capacity of tapes or hard disks.

In this chapter, storage media are sometimes referred to as **volumes**. While the storage media itself is just a piece of hardware, we frequently think of it in terms of the data that is stored on it. Just as a book is defined by the information it contains, a disk or tape is an organized collection of data—a volume.

Accessing Devices

Device Management

You do not need to do anything special to access the hard disks in your system. They are always on line and ready to use. However, to use storage devices with removable media (tapes or diskettes), you need to access them specifically by observing the following steps:

1. **Load** the medium into the drive.

   Using the RX23 Diskette Drive, at the end of this chapter, describes how to handle, load, and unload diskettes.

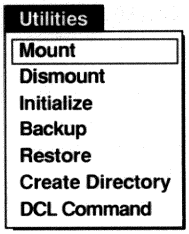
2. **Initialize** a new medium only the first time you use it. Initializing gives the medium a name, or **volume label**, and prepares it to accept the Files-11 format, the standard file structure that VMS operating systems require.

3. **Mount** the device. Mounting reserves the drive for a particular use and alerts the system to the fact that data will be transferred to or from the drive. Every time you load a new volume into the drive, you must mount it.

4. **Dismount** a device when you are done with it. Dismounting removes the drive from your control and frees it to be used for another job. Before you can use another volume in a drive, the last one used must be dismounted.

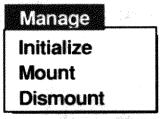
Note *You cannot initialize, mount, or dismount hard disks: they are mounted automatically when your Desktop-VMS system is configured.*

5. **Unload** and remove the volume from the drive. The drive is now ready to accept another volume.



Except for the manual operations of loading and unloading your media, you access storage devices by using the Device Management windows: to invoke the Initialize, Mount, and Dismount windows, choose the application you want from the FileView Utilities menu.

If you are currently using one of the Device Management windows, you can invoke any of the other windows without having to return to the FileView window: choose the Initialize, Mount, or Dismount menu item from the Manage menu in any Device Management window. The current window changes into the one you selected.

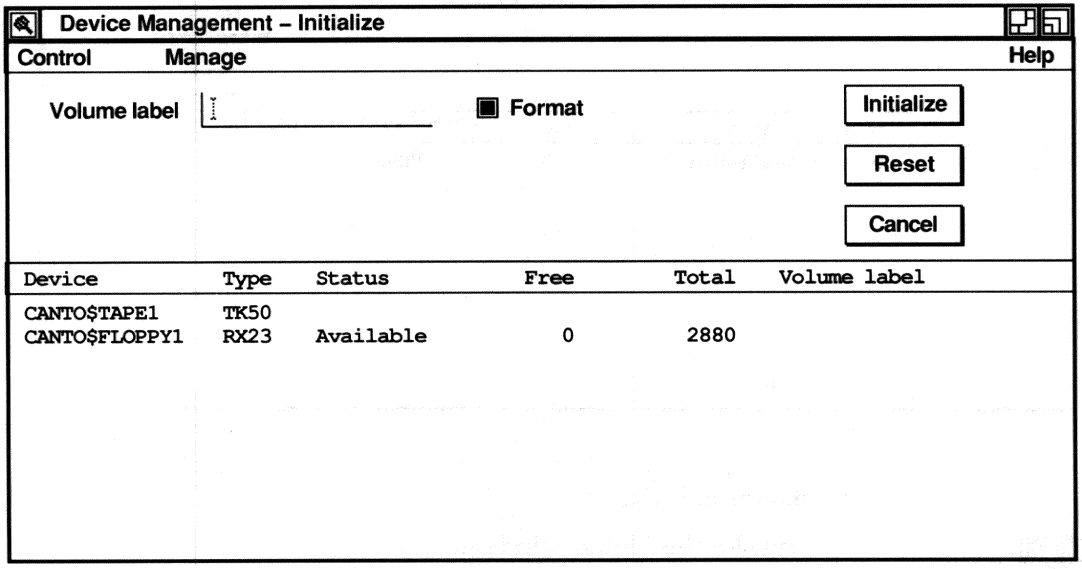


This method allows you to step through different Device Management windows in quick succession.

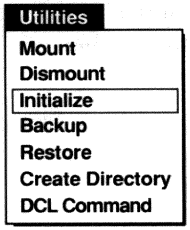
Initializing a Device

You only need to initialize a volume the first time you use it.

The Initialize window looks like this:



ZK–0747A–GE



To initialize a new volume:

1. Invoke the Initialize window.
2. Select (highlight) the device you want to initialize.
3. Enter a volume label in the Volume label text entry field.

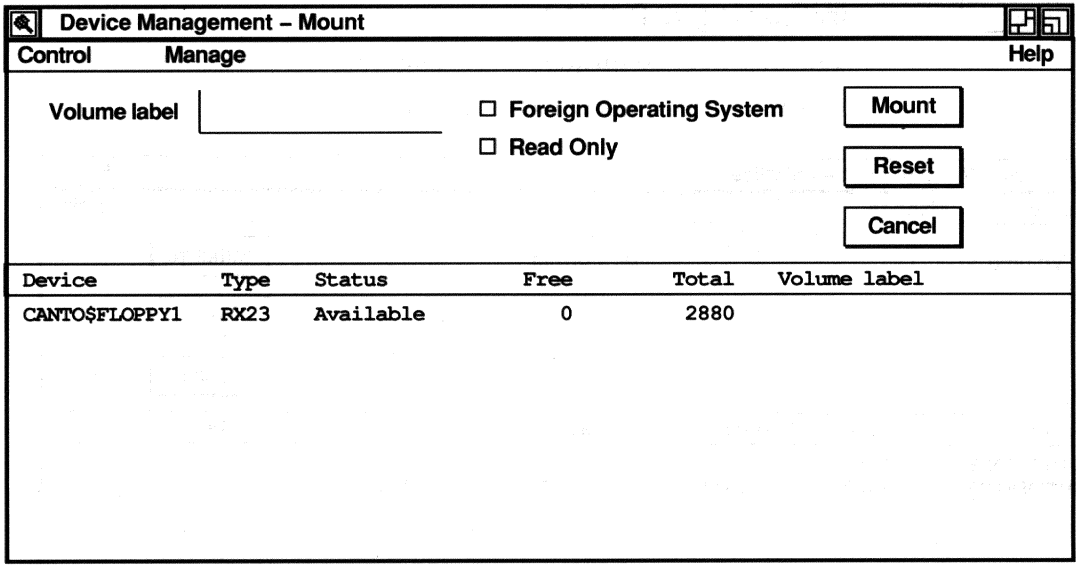
4 If you are initializing a tape, disable the Format button by clicking on it; tapes do not need to be formatted.

   If you are initializing a diskette that is already in the standard VMS format (such as a factory-formatted diskette), you can disable the Format button. This eliminates a step and makes the process faster. If you are not sure, leave the Format button enabled.

5 Click on the Initialize button.

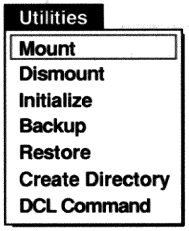
Mounting a Device

A volume must be mounted in order for your system to access it. The Mount window looks like this:



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To mount a device:



1 Invoke the Mount window.

2 Select the device you want to mount.

3 If the volume you are mounting is not in the standard VMS format (for example, an MS-DOS application), enable the Foreign Operating System button.

4 Enable the Read Only button if you want to prevent data from being written on the volume.

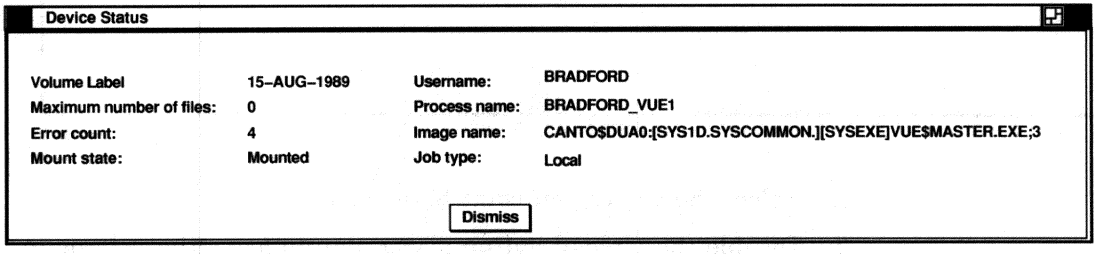
For example, if you only want to display or print files or directories from the volume, you might want to prevent them from being inadvertently modified.

However, in order to edit a file or create a new file on the volume, you must be able to write to the device and should not enable the Read Only button.

5 Click on the Mount button.

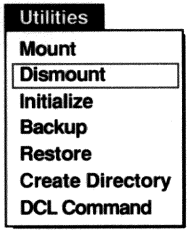
Once the device is mounted, its status in the selection window changes from Available to Mounted.

Once a volume is mounted, the Desktop-VMS system can tell you more about the device's status. To see a full summary of a mounted device's status, double-click on the device name in the selection window. The Device Status summary looks like this:



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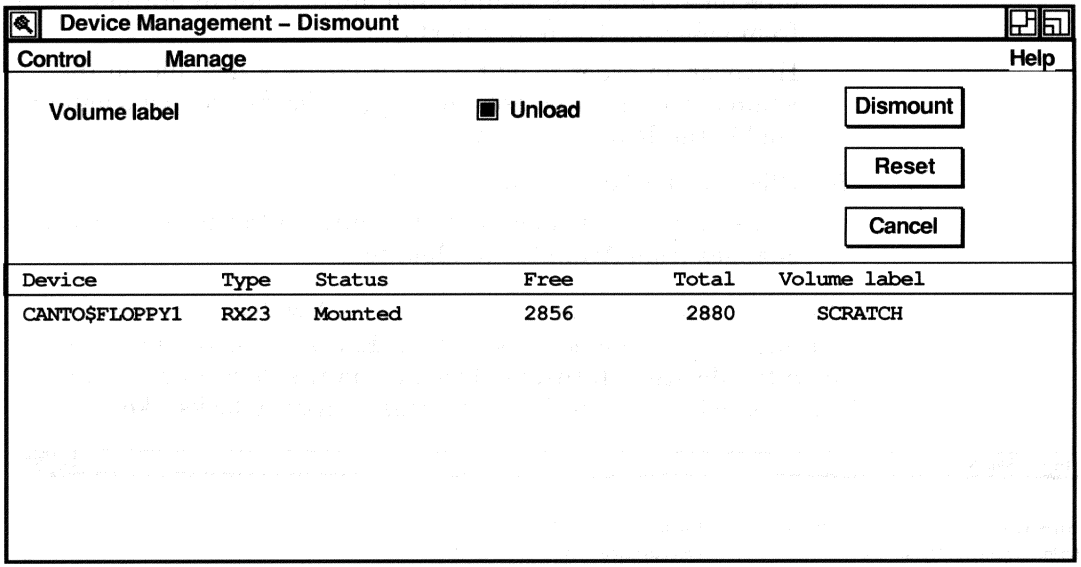
Dismounting a Device



To dismount a device:

1 Invoke the Dismount window.

The Dismount window appears on your screen.



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2 Select the device you want to dismount.

3 Disable the Unload button if you plan to leave the volume in the drive. If you plan to remove the volume, leave the Unload button enabled.

4 Click on the Dismount button.

Backing Up Your Files

Backup

Backing up files is the best way to prevent the loss of data in case a disk is damaged or your files are corrupted. Your system manager is responsible for performing regular backups of your system's files. These are files that are stored on the server's system, user, and public disks.

However, if your VAXstation 3100 Model 30 contains a hard disk that you use to store your own files locally, you should back up those files yourself.

While you could, in theory, copy any number of individual files to another medium by using the Copy command, the Backup utility is a more effective tool for ensuring the integrity of your files.

The Backup utility safeguards your files by letting you perform the following operations:

- The Backup operation creates a backup **save set**. A save set is a copy of your files in a compressed format that only the Backup utility can interpret.

  The Backup utility verifies that the files in the save set are accurate copies of the originals.

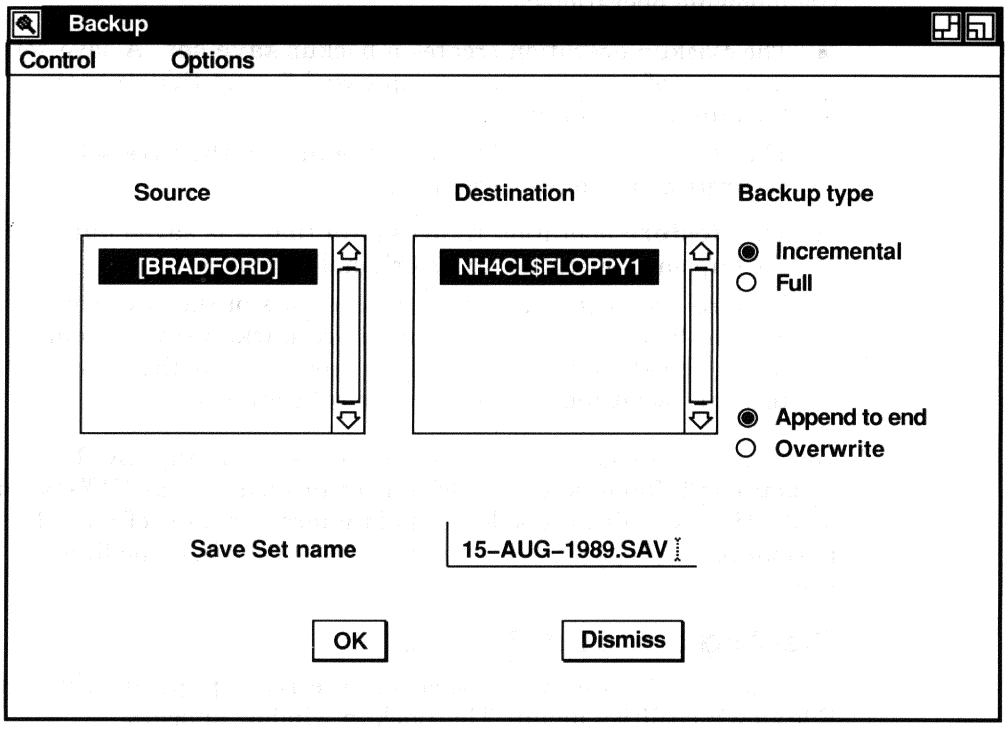
- The **Restore** operation returns data that was saved during a Backup save operation to its original format.

  Restore also lets you look at the contents of the save set created by a Backup operation. Since Backup save sets are not in the standard VMS format, this listing is the only way to verify what files a Backup save set contains.

You can create your private Backup save sets on any RX23 diskette or TK50 tape whose drive is connected to your VAXstation 3100. However, diskettes do not hold a large amount of data; for normal backup operations, magnetic tape is the best medium to use.

Creating a Backup Save Set

To invoke the Backup window, choose the Backup menu item from FileView's Utilities menu. The Backup window appears.



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The Backup window has the following fields:

- Source—Displays the directories on your system that you can back up files from.
- Destination—Displays devices that you can back up files to.

  The Backup procedure copies files from the source directory to the destination device.
- Save Set name—Specifies the name of the Backup save set. The current date is automatically given as the save set name, but you can enter a different name in this field.
- Backup type:
  - Incremental—Lets you select the files you want to back up, omitting other files in the source directory.

    By default, an incremental backup copies only the highest version of each file.

For example, if the file MEETINGS.TXT;5 is backed up, MEETINGS.TXT;4 and lower versions are omitted from the save set.

- Full—Backs up the entire directory and all the files in it.

- You can determine where on the destination volume the save set is created by choosing one of the following:
  - Append to end button—Creates the Backup save set at the end of the last save set. You can keep appending save sets until the volume runs out of space. If you run out of space, Backup pauses, prompts you to load a new volume, and then continues saving files on the new volume.
  - Overwrite button—Creates the Backup save set at the beginning of the destination volume. This means that any existing data is overwritten and cannot be accessed again.

Performing a Full Backup

To create a full Backup save set:

1. Select the source directory (the directory that contains the files you are backing up).
2. Select the destination device (where the save set will be loaded).
3. Enter a save set name.
4. Click on the Full button.
5. Click on the OK button.

   A dialog box appears, prompting you to insert the save set volume into the destination drive.
6. Load the volume that will contain the save set into the destination drive. You do not have to initialize or mount the device—Backup does it for you automatically.
7. Click on the dialog box's OK button when the volume is loaded.

   A Backup Work in Progress box appears, indicating that the backup is in progress. When the files are copied from the source to the destination, the Work in Progress box disappears.
8. To exit, choose the Exit menu item from the Backup window Control menu.



Performing an Incremental Backup

To create an incremental Backup save set:

1. Select the source directory.
2. Select the destination device.
3. Enter a save set name.
4. Determine the type of incremental backup you want:
   - If you want the standard (default) incremental backup described in Creating a Backup Save Set, go on to step 5.
   - To select incremental backup options, go on to Choosing Incremental Options and follow the steps described there.
5. Click on the Backup window's OK button.
6. A dialog box appears, prompting you to load the save set volume into the destination drive.

   Load the volume into the drive and click on the dialog box's OK button. The dialog box disappears.
7. The Backup Work in Progress box appears. When the backup operation is finished, the Work in Progress box disappears.
8. Choose the Exit menu item from the Backup window Control menu to exit.

While you can create Backup save sets on diskettes, diskettes do not hold a large amount of data. For normal backup operations, magnetic tape is the best medium to use.

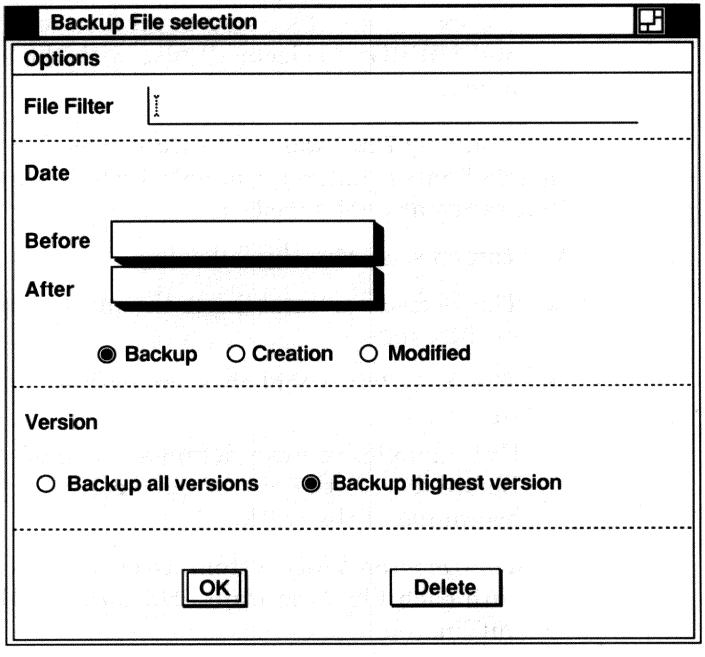
Choosing Incremental Options

By default, the incremental Backup saves the highest versions of files that have not been backed up. Thus, if you did a backup recently, only files that were created or modified since the previous backup will be saved.

This type of backup is effective and easy to use on a regular basis. However, in some situations, you may want to back up different files than the default incremental backup selects.

Options
Select files...

To perform a different kind of incremental backup, choose the Options menu in the Backup window menu bar. The Backup File selection window that appears looks like this:



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There are three distinct file characteristics that you can use in the File Selection window to customize your backup operation:

- File specifications
- The dates associated with files
- File versions

You can use any combination of these file characteristics to select some files and exclude others from your save set. The sections that follow describe how to use each one.

Selecting by File Specification The file filter text editing field in the Backup File Selection window lets you specify one or more files that you want to be copied. If you do not use this field, all files are included.

If you want to select by file specification, enter one of the following:

- A single file name.

- A series of files separated by commas. For example:

  ```
  PROFORMA.TXT, PROJECTIONS.TXT, PERSONNEL.LIS.
  ```

- Multiple files using wildcard (*) file specifications.

  For example, *.TXT selects all files with the TXT file type, and *BERG*.* selects all files with the string "berg" in their names.

Selecting by File Date The Date selection field lets you specify a range of dates that determines which files are saved. Files outside that range are not saved.

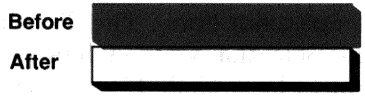
You can choose from the following:

- The Before bar establishes the most recent date to be included in the range.
- The After bar establishes the earliest date to be included in the range.

  For example, you can define a range of one week, in which the Before date is the end of the week, and the After date is the beginning of the week.
- The Desktop-VMS system associates several kinds of dates with each file. The Date field contains three date selection buttons:
  - Backup—Saves only files that were backed up between the dates you selected or files that have never been backed up.
  - Creation—Saves only files that were created between the dates you selected.
  - Modified—Saves only files that were modified between the dates you selected.

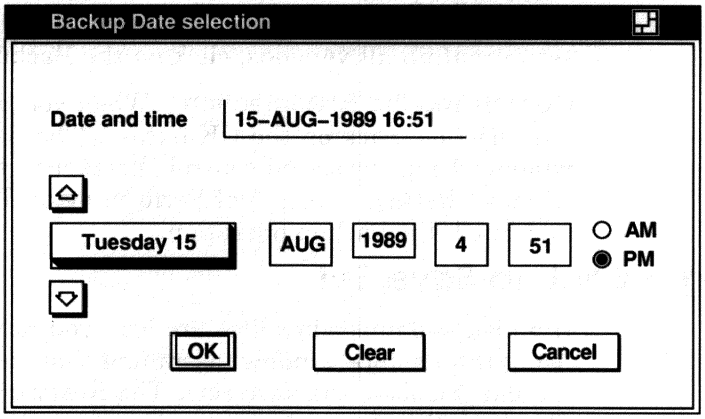
The best way to learn how to use the date selection field is to try it.

Click on the Before bar.



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A date selection dialog box like the following appears, displaying the current date and time:



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Clicking on OK at this point would select all files with dates before August 15, 1989. Instead, click on the down arrow and see what happens to the date. You have decremented the date by one day.

Next, click on the box with the month in it. The arrows move to that box, and you can increment or decrement the month. Now, try navigating the hour, minute, and AM/PM fields and changing them.

As you change the date and time, notice what happens to the Date and time text entry field—it always shows your current selection. Instead of clicking on the boxes, you can enter the date and time you want here. This value will supersede any date and time in the date boxes. (Please note that this entry field uses 24-hour time values. Thus, 4:51 PM in the time boxes appears as 16:51 in the text entry field.)

When you click on the OK button, the date in the text entry field is selected as the Before date. The Backup Date selection box disappears.

Now, click on the After bar in the Backup File selection window. A new dialog box appears. Use it just as you did the Before dialog box. This time, however, you are establishing the lower limit of your selection range—only files dated *after* the date you choose will be saved.

Selecting by File Version By default, an incremental backup saves only the highest version of each file. If you want your save set to contain all versions, click on the Backup all versions button.

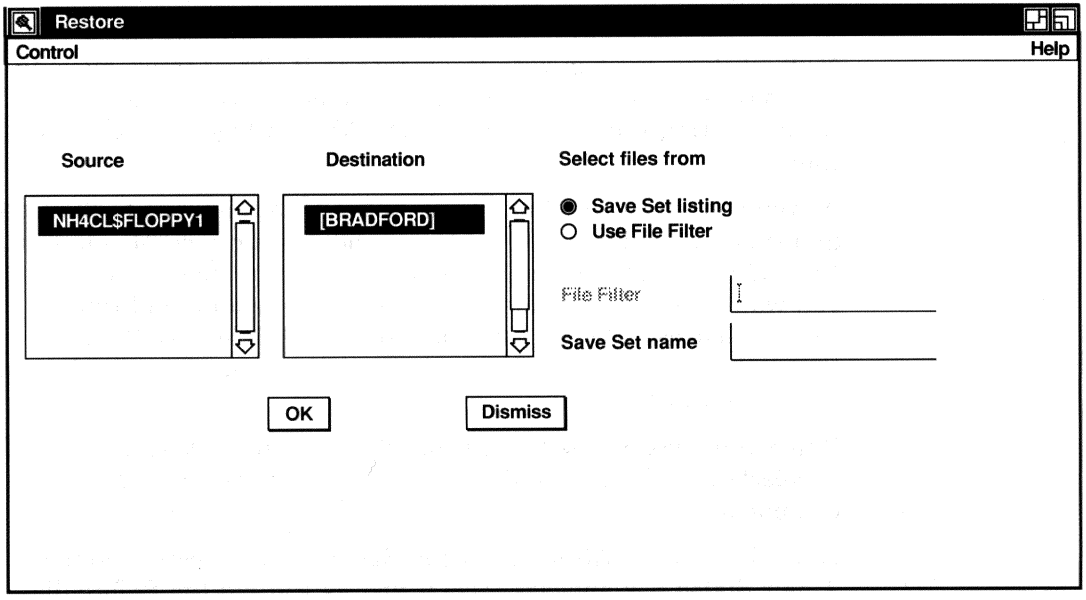
Completing the File Selection When you have completed your file selection, click on the OK button. The Backup File selection window disappears, and control is returned to the main Backup window. Return to step 5 of Performing an Incremental Backup and finish the backup operation.

Restoring a Backup Save Set

Restore

If a disk is damaged or files are lost, you can restore the files by using the Restore window (assuming that the files were backed up and you have the save set). The Restore operation restores files from the source device, copying them to the destination you specify.

To invoke the Restore window, choose the Restore menu item from the FileView Utilities menu. The Restore window looks like this:



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The Restore window is similar to the Backup window. It has the following fields:

- Source—Displays the devices on your system where you can load a save set.

- Destination—Shows the directories that you can restore the files to.
- Save Set listing—Generates a listing of files that are on the save set. If you do not want to restore the entire save set (or are not sure what is on the save set), you can examine the save set listing first.
- Use File Filter—Lets you specify one or more files to be restored.

  Enter one of the following in the File Filter text entry field:

  - A single file name
  - A series of files separated by commas
  - Multiple files using wildcard (*) file specifications
- Save Set name—Enter the name of the Backup save set you are restoring. There is no default name—you must supply this information.

Performing a Restore Operation

To begin a typical sequence of steps in a Restore operation:

1 Select the source device (where the save set is loaded).

2 Select the destination directory (where the files will be restored).

3 Enter a save set name.

Restoring Without a Save Set Listing If you want to restore the entire save set without generating a save set listing or if you know exactly which files you want to save:

1 Click on the Use File Filter button.

2 Enter the files you want to save in the File Filter text entry field. If you do not enter any file names, all files are selected.

3 Click on the OK button.

A dialog box appears, prompting you to insert the save set volume into the source drive.

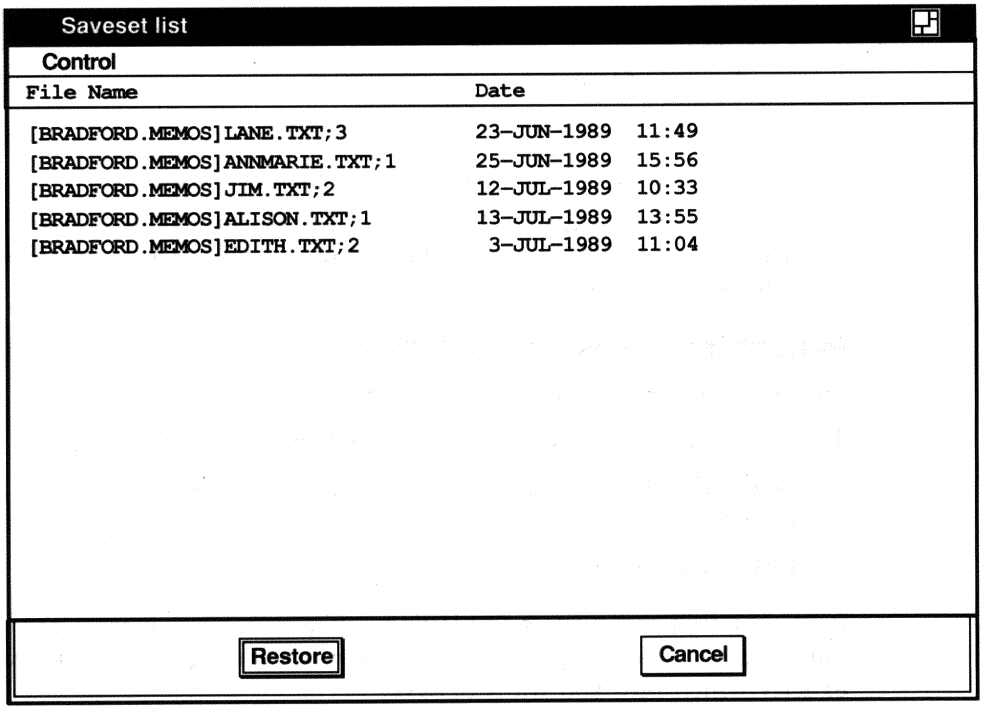
4 Load the volume into the drive. You do not have to mount the device—Restore does it for you.

5 Click on the dialog box's OK button. The dialog box disappears.

Generating a Save Set Listing If you want to examine a save set listing before you restore the files:

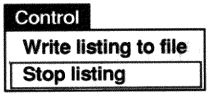
1 Click on the Save Set listing button.

2 Click on the OK button. The Saveset List window appears and begins listing the files in the save set. Here is an example of a Saveset List window:



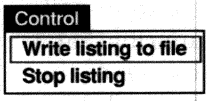
ZK-0758A-GE

When the save set has been listed in the window, select the files that you want to restore.



You can stop the Saveset list window from listing files at any time by choosing the Stop listing menu item from the Control menu.

If the save set is large, it can take some time to list all the files. It can be easier to examine the listing if it is written to a file.



To create a file that contains the save set listing, choose the Write listing to file menu item from the Control menu. Then you can examine the file in a separate window or even print a hard copy of it.

To complete the Restore operation:

1 Click on the Restore button.

2 A dialog box appears, prompting you to insert the volume into the drive.

3 Load the volume and click on the dialog box's OK button.

The dialog box disappears, and a Restore Work in Progress box appears, indicating that the Restore operation is in progress.

When the files are restored, the Work in Progress box disappears, and your Restore operation is complete.

Using the RX23 Diskette Drive

The RX23 diskette drive installed in your system unit provides 1.2 megabytes of storage space on RX23K diskettes.

Using Diskettes

Diskettes are magnetic disks that store information the same way a hard disk does, though their storage capacity is considerably less. Digital recommends that you use high-density (HD) diskettes.

Keep your diskettes dry, out of extreme temperatures and direct sunlight, and away from anything that contains a magnet, such as a telephone.

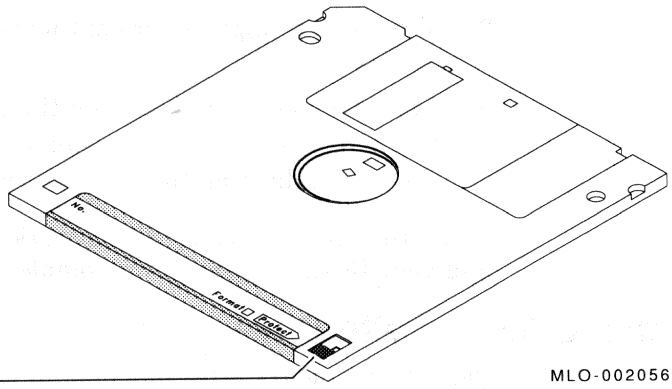
Caution *Do not place diskettes or magnetic media on or near your monitor. The electromagnetism from your monitor may damage diskettes by distorting or erasing the magnetic patterns.*

Writing to and Protecting Diskettes

Write-protecting a diskette prevents accidental erasure of information. The diskette drive can read information on the diskette regardless of the position of the **write-protect switch**. However, the diskette drive cannot write data to a write-protected diskette.

Write-Protecting a Diskette When you use a diskette to install software applications on your system, or to protect information on the diskette, move the write-protect switch on the back of the diskette down until it locks in place, as shown in Figure 10–1.

Figure 10–1 Write-Protecting a Diskette



Writing to a Diskette When you use a diskette to make a backup copy of a file or to write out data, set the write-protect switch to enable writing to the tape.

To enable writing, slide the switch up until the switch locks in place.

Inserting a Diskette

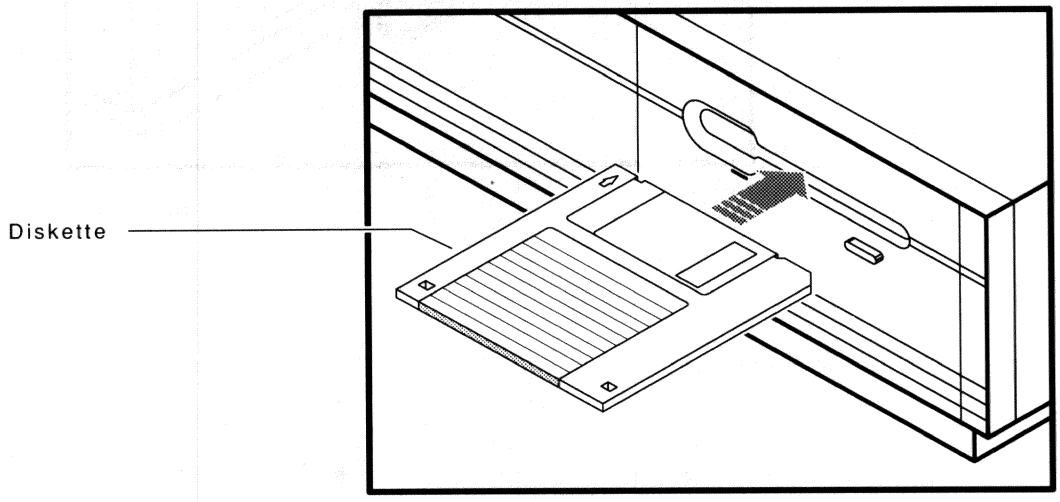
The diskette drive is on the front of your system unit. The drive can hold one diskette.

Caution *Never remove or insert a diskette while the diskette drive is performing a function. Inserting or removing a diskette while your system is using the diskette can cause incorrect data to be written to the diskette, and can cause damage to the diskette itself. Wait until the diskette drive finishes doing whatever you requested it to do. When the diskette drive is in use, the green light on the front of the diskette drive is on.*

To insert a diskette into the diskette drive slot, slide the diskette into the drive, as shown in Figure 10–2.

The diskette slides straight in and drops down to its load position. To learn how to mount and initialize diskettes, see Accessing Devices.

Figure 10–2 Inserting a Diskette



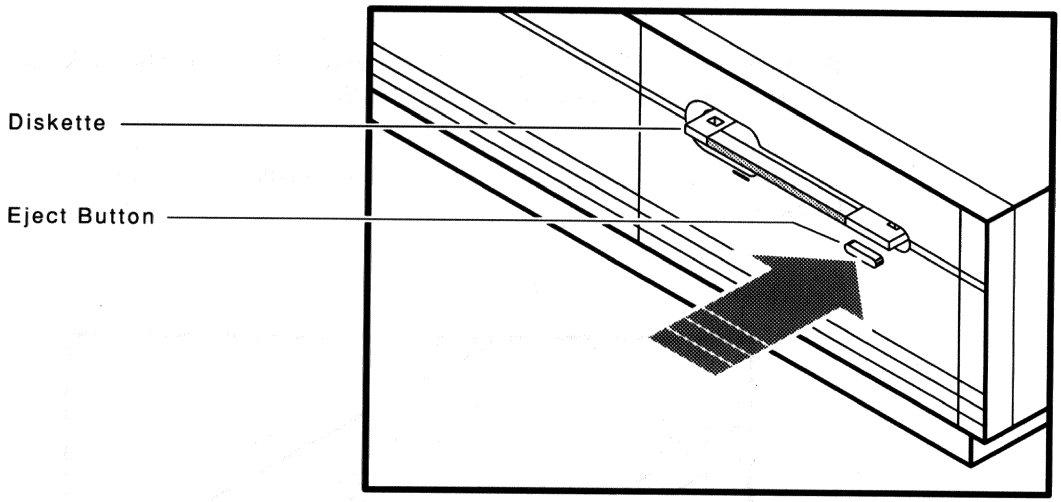
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Removing a Diskette

You must dismount the diskette drive before removing a diskette. For information on dismounting, see Accessing Devices.

To remove a diskette from the diskette slot, push the eject button in the lower right side of the diskette drive, as shown in Figure 10–3.

Figure 10–3 Removing a Diskette



11

Handling Problems

This chapter provides procedures for:

- Determining the source of your problem
- Using the troubleshooting table

If you know the source of your problem, see Table 11–1 for suggested solutions.

Determining the Source of Your Problem

To determine where your problem is, follow these steps:



1 Turn your equipment off (0) in the following order:
   - Expansion boxes
   - Printer, modem, or other equipment
   - System unit and monitor

2 Check the following connections:
   - Monitor cable
   - Monitor power cord
   - System unit power cord
   - Expansion box connector cable
   - Expansion box power cord



3 Turn your equipment back on (|) in the following order:

- Expansion boxes (in the following order):
  - RZ55
  - TK50Z
  - RRD40
- Printers and modems
- System unit and monitor

4 Adjust the contrast and brightness on your monitor.

Using the Troubleshooting Table

After you have determined the source of your problem, follow these steps:

- For problems with your monitor, see your monitor guide.
- For problems with the RRD40 compact disc expansion drive, see the *RRD40 Disc Drive Owner's Manual* that comes with the expansion box, and the *VAXstation 3100 Maintenance Guide*. You can purchase the *VAXstation 3100 Maintenance Guide* from your Digital sales representative.
- For other problems:

  1 Note the symptoms of the problem.

  2 Check the Symptom column in Table 11–1 for a match.

  3 Check the conditions for that symptom in the Possible Cause column. If more than one possible cause is given, check the possible causes and their suggested solutions in the order listed.

  4 Follow the advice in the Suggested Solution column.

  5 If a problem persists, call your service representative.

If you perform all the suggested solutions and the problem still exists, talk to your system manager.

Table 11–1 Troubleshooting

Symptom	Possible Cause	Suggested Solution
System Unit Problems		
System unit fan is off.	Power cord is not plugged in.	Check connections and power source.
Power-up display does not appear after 20 seconds.	Monitor cord or video cable not plugged in.	Check monitor cord and video cable connections.
	Monitor brightness and contrast controls may be too dark to see screen display.	Adjust contrast and brightness on monitor.
	Keyboard cable may not be connected.	Check keyboard cable connection.
	Monitor fuse may be blown.	Refer to monitor guide to replace monitor fuse.
DECwindows display does not appear on screen.	Software may not be installed.	Talk to your system manager.
Mouse Problems		
Pointing device (mouse or optional tablet) pointer does not appear on screen, or monitor does not respond to pointing device commands.	Cable is installed incorrectly or is loose.	Turn off system, then unplug and replug cable to reset device.
Keyboard Problems		
Keys do not work.	Hold Screen key is active.	Press Hold Screen key to release hold on screen.
Diskette Problems		
Software cannot be read from diskette drive or diskette read or write error message is displayed.	Diskette was inserted incorrectly.	Check that label is on top.
	Diskette is damaged or does not contain software.	Try another diskette.

Console Commands

Console commands, and the tests or utility programs they execute, are listed in Tables 11–2 and 11–3.

To see a list of these commands enter HELP at the console prompt and press Return.

Table 11–2 SHOW Commands

Command	Information Displayed
HELP	All commands
SHOW BOOT	Default boot device
SHOW DEVICE	Boot devices available
SHOW ETHER	Hardware Ethernet address
SHOW HALT	Default action after your system halts
SHOW KBD	Keyboard type selected
SHOW MEM	Memory for your system unit
SHOW SCSIA	SCSI-A bus device ID numbers
SHOW SCSIB	SCSI-B bus device ID numbers
SHOW VER	Version of ROM

Table 11–3 SET Commands

Command	Default Set
SET BOOT	Default boot device
SET HALT	Default recovery action
SET KBD	Keyboard language
SET SCSIA	SCSI-A bus device ID numbers
SET SCSIB	SCSI-B bus device ID numbers

Service Information

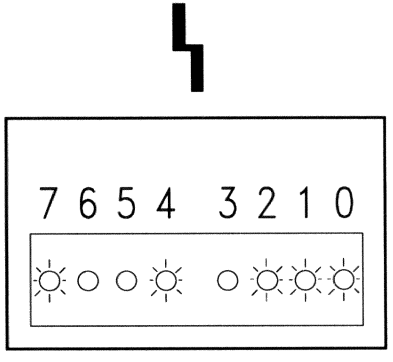
If you followed the corrective actions listed in this chapter and you continue to have problems with your VAXstation 3100, call your Digital service representative.

Before you call:

1. Write down the serial and model numbers of your system. Your system is identified on the back of the system unit with a label: Model: VS42A-xx is a VAXstation 3100 Model 30 system. Your service representative may need this number when you call. The numbers in place of xx identify the contents of the system unit.
2. Make notes based on Table 11–1.

   This information helps your Digital service representative know the state of your system when the problem occurred.
3. Be prepared to read information from the screen and to enter commands at the keyboard while you talk to your Digital service representative on the telephone.
4. Eight recessed lights on the back of the system unit (Figure 11–1) come on when you turn on the system. Your Digital service representative may ask you to describe which lights on the back of the system unit are on.

Figure 11–1 Diagnostic Lights



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12

Adding and Using Expansion Boxes

This chapter provides information about installing and using compact disc, hard disk, and tape expansion boxes. An expansion box is an external box that connects to your system unit to provide additional compact disc, hard disk, or tape storage. If you have a diskless VAXstation 3100, you do not need to read this chapter.

The following expansion boxes can be used with a VAXstation 3100 Desktop-VMS system:

- 600-megabyte RRD40 compact disc expansion box
- 332-megabyte RZ55 hard disk expansion box
- 95-megabyte TK50Z tape expansion box

Instructions for the following are included in this chapter:

- Connecting one or two expansion boxes to your system unit
- Verifying the SCSI ID default (factory) switch setting on the first expansion box
- Resetting the SCSI switches on a second expansion box

When to Add Expansion Boxes

The RZ55 and the TK50Z provide disk and tape storage for your system. Optionally, the TK50Z can be used to load additional software.

The RRD40 is a read-only storage device that reads data from removable compact discs.

The RRD40 can be used for many purposes. For example, it can be used for software installation, database storage, and online documentation.

Guidelines for Connecting Expansion Boxes

Use the following guidelines when connecting expansion boxes.

- Digital recommends connecting up to three RRD40s, three RZ55s, or one TK50Z and two other devices or expansion boxes to your system.
- You can connect any combination of the three expansion boxes, as long as you do not connect more than three expansion boxes or more than one TK50Z to the system.
- Use only the expansion boxes purchased for the VAXstation 3100. Expansion boxes purchased for use with other Digital equipment must be updated by Digital field service.
- A system must have an integral hard disk and SCSI controller in order to support an expansion box. Diskless VAXstation 3100 systems do not support external expansion boxes.
- You must attach the 50-pin terminator that comes with your expansion box to the unused SCSI port on the back of the last expansion box.
- All expansion boxes should be plugged into the same grounded power source or electrical outlet.
- Be sure to turn on expansion boxes (before you turn on the VAXstation 3100 system unit) in the following order:

  1 RZ55 hard disk expansion box

  2 TK50Z tape expansion box

  3 RRD40 compact disc expansion box

  This procedure ensures that the device in each expansion box will be ready to be used and that the system **firmware** will include the device in its configuration.

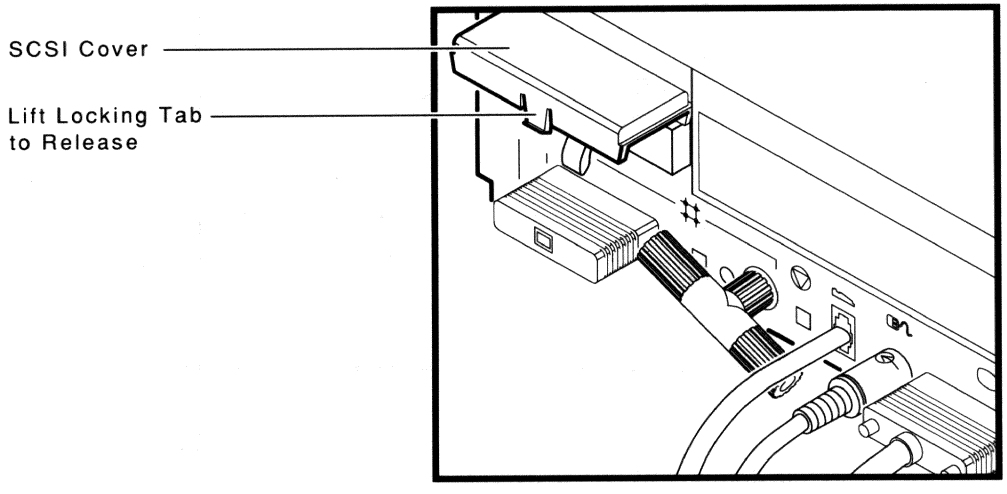
Preparing Your System

To add an expansion box to your system, you must first remove the SCSI cover and the terminator from the SCSI port.

1 Turn your system off (0).

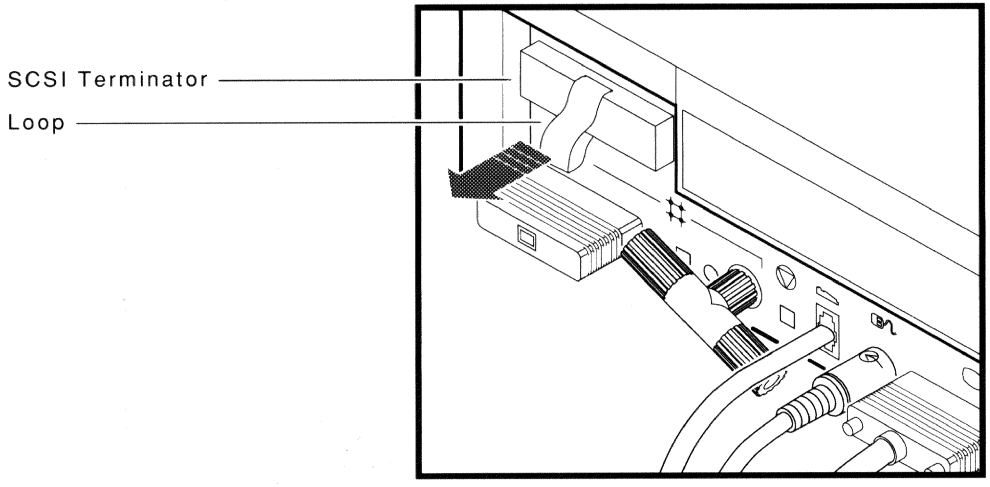
2 To remove the SCSI cover, place your fingers under the locking tab and lift the cover to release it, as shown in Figure 12–1.

Figure 12–1 Removing the SCSI Cover



3 To remove the SCSI terminator, place your fingers under the loop and pull out. Figure 12–2 shows how to remove the terminator.

Figure 12–2 Removing the SCSI Terminator



Save the terminator—you must reattach it if you disconnect the expansion box from the system unit.

Unpacking an Expansion Box

Each expansion box is shipped from the factory with the following accessories:

- One cable with a 68-pin connector at one end and a 50-pin connector at the other end. Use this cable to connect the expansion box to the system unit.

Note *The 68-pin connector is smaller than the 50-pin connector. See Figure 12–3.*

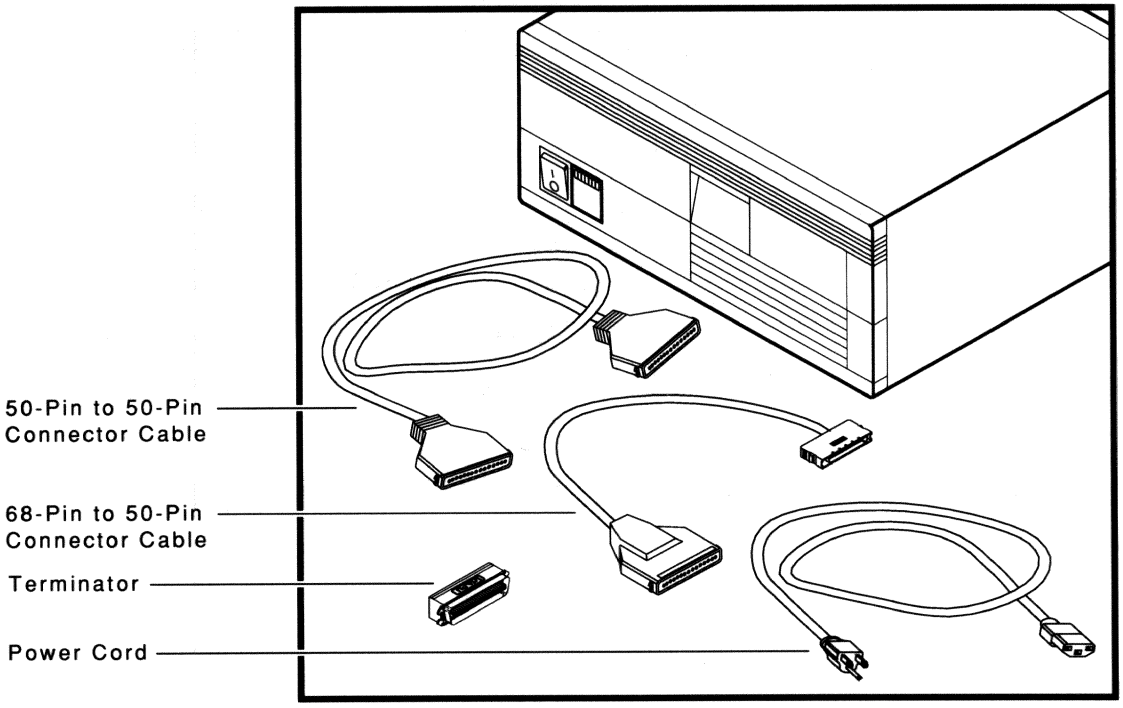
- One 50-pin to 50-pin cable. Use this cable to connect two expansion boxes in a chain.
- A power cord.

- A terminator, as shown here. Use this one to terminate the last expansion box.
- A dress cover.

Note that the RRD40 compact disc expansion box differs somewhat from the RZ55 or TK50Z shown in the figure, but the cables and terminator are identical. The bottom dress cover is not shown.

The TK50Z expansion box comes with a blank tape cartridge. The RRD40 compact disc drive comes with an empty compact disc caddy and test disc.

Figure 12–3 Unpacking an RZ55 or TK50Z Expansion Box



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Installing the Bottom Dress Cover

A bottom dress cover comes with the RZ55 hard disk and TK50Z tape drive expansion boxes. To install the bottom dress cover:

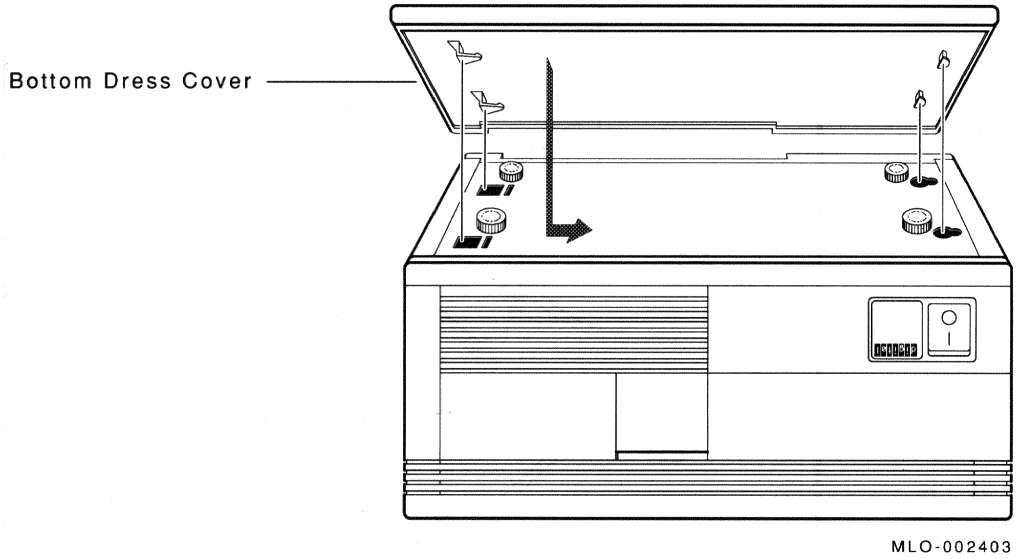
1 Place the expansion box upside down on a level surface.

2 Remove the four rubber feet (optional).

3 Locate the bottom dress cover. Line up the molded inserts on the inside of the bottom dress cover over the holes on the bottom of the expansion box. See Figure 12–4.

4 Slide the bottom dress cover until it locks into place.

Figure 12–4 Installing Bottom Dress Cover



Connecting One Expansion Box



To connect a single expansion box to your system unit, perform the following steps:

1 Turn the system unit off and make sure the expansion box is off (0).

2 Turn the expansion box so that the back is facing you.

3 Verify the SCSI switch positions.

Each device is shipped from the factory with the default switch positions shown in Table 12–1.

Table 12–1 Expansion Box SCSI IDs and Switch Positions

Expansion Box	SCSI ID	Switch Positions (Left to Right)
RRD40	4	Up, Down, Down, Down
RZ55	1	Down, Down, Up
TK50Z	5	Down, Up, Down

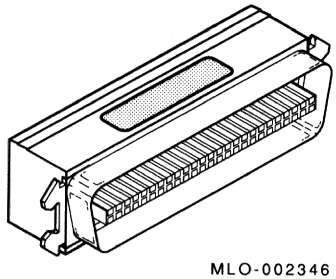
4 Connect the 68-pin to 50-pin cable.

Press the clips on the sides of the the 68-pin connector (small end) and push the connector into the system unit SCSI port until the clips lock into place.

Connect the other end to either port on the back of the expansion box and snap the bail lock in place.

5 Connect a SCSI terminator to the unused port on the expansion box. Figure 12–5 shows you what the 50-pin terminator looks like.

Figure 12–5 SCSI Terminator

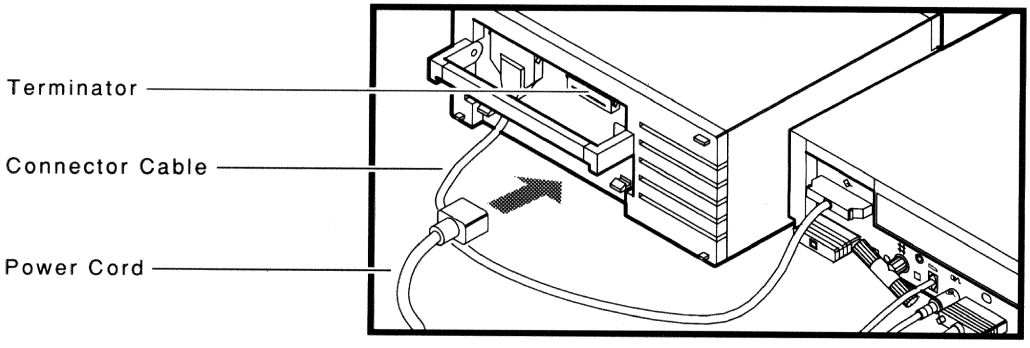


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6 Connect the power cord to the expansion box receptacle and plug the other end into an electrical outlet.

Figure 12–6 shows how to connect one RZ55 or one TK50Z expansion box to your system unit.

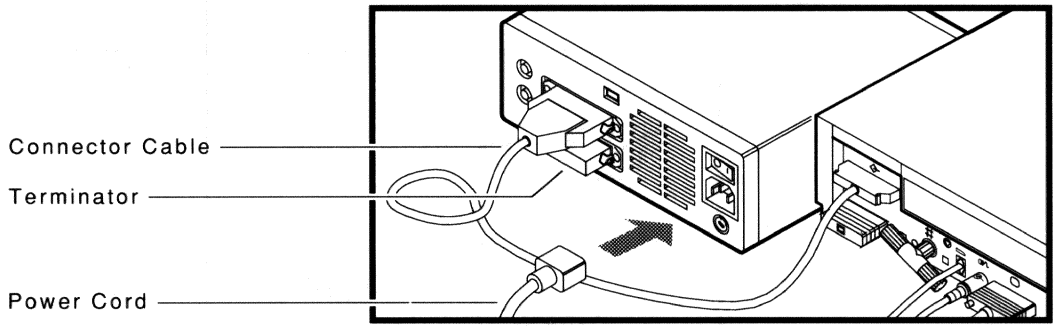
Figure 12–6 Connecting One TK50Z or One RZ55 Expansion Box



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Figure 12–7 shows how to connect one RRD40 expansion box.

Figure 12–7 Connecting One RRD40 Expansion Box



Daisy-Chaining Two Expansion Boxes

You can add an additional expansion box and **daisy-chain** the second box to the first. To daisy-chain (link two expansion boxes together in series) one expansion box to another expansion box, perform the following steps:

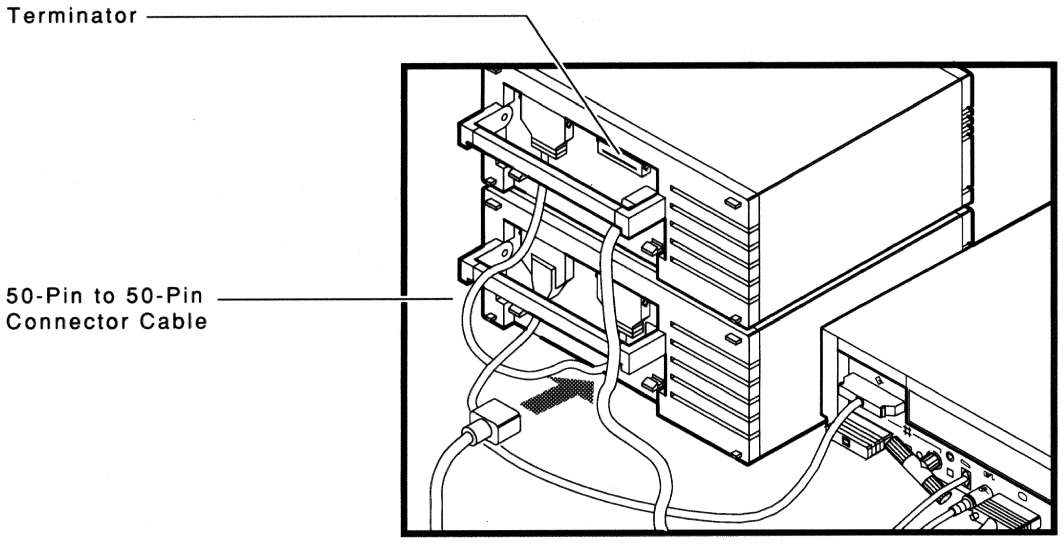
1. Remove the 50-pin terminator on the first expansion box. Store the terminator for future use.
2. Connect one end of the connector cable to the second expansion box.

Note *If you have two RZ55s or two RRD40s attached to your system, you must change the SCSI ID on the second device to an open ID on the SCSI bus. See Resetting the SCSI ID on a Second RRD40 and Resetting the SCSI ID on the Second RZ55.*

3. Connect the other end of the connector cable to an available port on the first expansion box.
4. Attach a 50-pin terminator to the unused SCSI port on the second expansion box.
5. Connect the power cord to the expansion box power receptacle and plug the other end into an electrical outlet. Each expansion box needs its own power cord.

Figure 12–8 shows how to daisy-chain two expansion boxes.

Figure 12–8 Daisy-Chaining Two Expansion Boxes



Adding and Using the RRD40 Compact Disc Expansion Box

This section shows you how to:

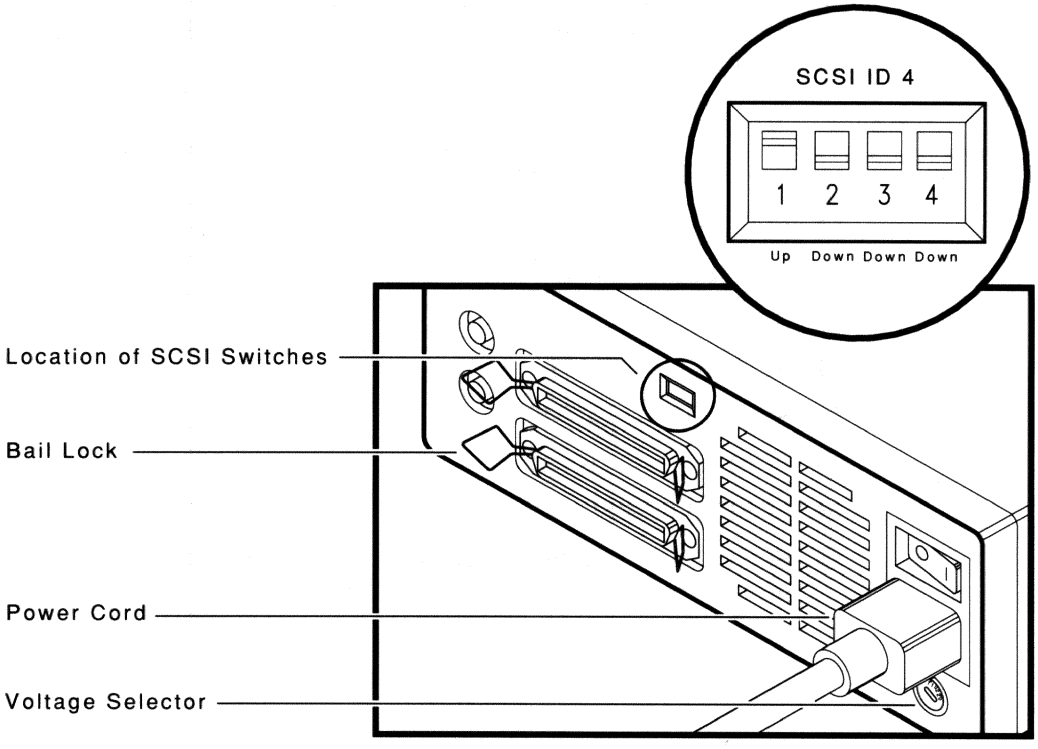
- Select the voltage on the RRD40
- Verify and set SCSI IDs on one or two RRD40s
- Insert and remove compact discs

For instructions on unpacking and installing an RRD40 expansion box, read the first half of this chapter.

Selecting the Voltage

Turn the RRD40 so that the back is facing you. Note that the RRD40 has a voltage selector switch that can be set to one of two voltages (110V or 220V). Check that the voltage selector switch on your RRD40 is set to the correct voltage for your power requirements (Figure 12–9).

Figure 12–9 RRD40 Voltage Selector and Factory SCSI ID Switch Positions



Verifying the SCSI ID on the First RRD40

The RRD40 expansion box is shipped from the factory with the SCSI ID set to 4. Leave the SCSI ID on the first RRD40 set to 4, the factory setting, as shown in Figure 12–9. If you are adding a second RRD40 to your system, see Resetting the SCSI ID on a Second RRD40 for information on the correct SCSI ID setting for a second RRD40.

Resetting the SCSI ID on a Second RRD40

If you are adding a second RRD40 expansion box to your configuration, you must reset the switches. The second RRD40 expansion box should be set to an open SCSI ID (one that is not currently being used); for example, SCSI ID 1 with the switches in the following positions: down, down, up.

To determine available IDs on the SCSI-B bus, enter TEST 50 at the console prompt (>>>), then press the Return key. Your system configuration appears on the screen. The following example is for a fully configured Model 30 system. FFFFFF05 indicates an open SCSI ID.

```
SCSI-B      1C1C.0001   V1.0
FFFFFF05 FFFFFF05 FFFFFF05 00000001 05020001 01000000 FFFFFF03 FFFFFF05
   ❶        ❷        ❸        ❹        ❺        ❻        ❼        ❽
```

❶ SCSI ID 0 — open

❷ SCSI ID 1 — open

❸ SCSI ID 2 — open

❹ SCSI ID 3 — RZ23

❺ SCSI ID 4 — RRD40

❻ SCSI ID 5 — TK50Z

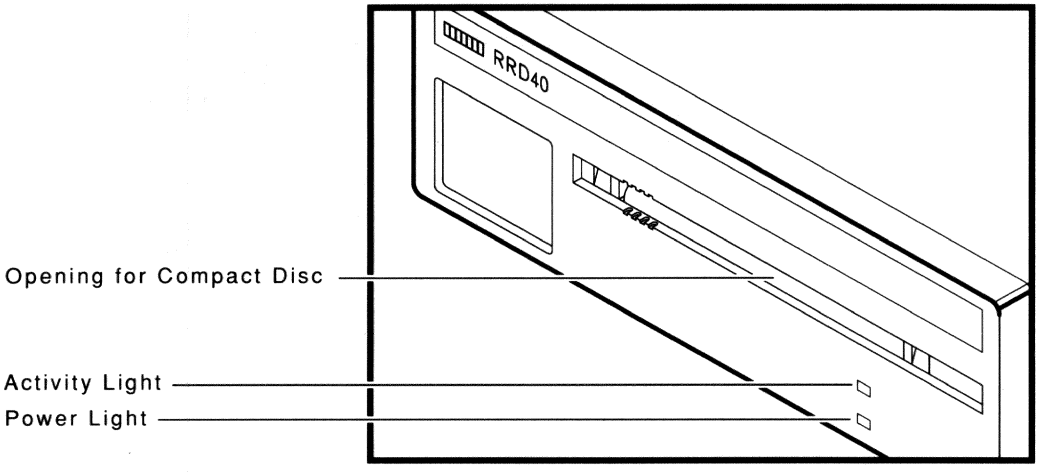
❼ SCSI ID 6 — SCSI-B controller

❽ SCSI ID 7 — Reserved for devices requiring the highest priority on the bus

Inserting a Compact Disc

The RRD40 compact disc expansion box has an opening for a compact disc and two lights, as shown in Figure 12–10.

Figure 12–10 RRD40 Expansion Box



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When you turn on the RRD40 expansion box, the power light comes on. The activity light comes on when you insert and load a compact disc in the drive; it flashes when the disc is transferring information.

Make sure the power light on the front of the compact disc drive is on. Insert the entire disc caddy into the disc opening on the drive. Do not remove the disc from the caddy.

To insert a disc:

1 Examine the disc caddy.

Make sure that it is not cracked or damaged in any way. Never insert a damaged caddy into a compact disc drive.

2 Examine the disc inside the caddy.

The label on the disc should always be facing up when you insert the disc into the drive. When the label is facing up, the four notches on the disc housing are on the left. These notches line up with four similar notches on the front of the compact disc drive.

If you have the disc positioned in the caddy label side up and the notches are on the right, then the disc is improperly oriented in the caddy. See the RRD40 installation/owner's guide for more information.

Caution *Do not write on the disc with any implement. The silk-screened label side of the disc is easily damaged.*

3 Slide the caddy in as far as it will go and then remove the transparent sleeve. The disc and its housing remain in the drive. Only the transparent sleeve comes out. Figure 12–11 illustrates how to insert a compact disc.

4 The activity light should come on within 5 seconds.

If the drive accepted the disc and the activity light does not come on, then the disc may be sitting incorrectly in the caddy.

If your software does not load properly, see Chapter 11 for information on using the RRD40 test disc.

Removing a Compact Disc

Before removing a disc, make sure that the activity light is not blinking. If it is blinking, the compact disc drive is transferring data. Wait until the activity light stops blinking.

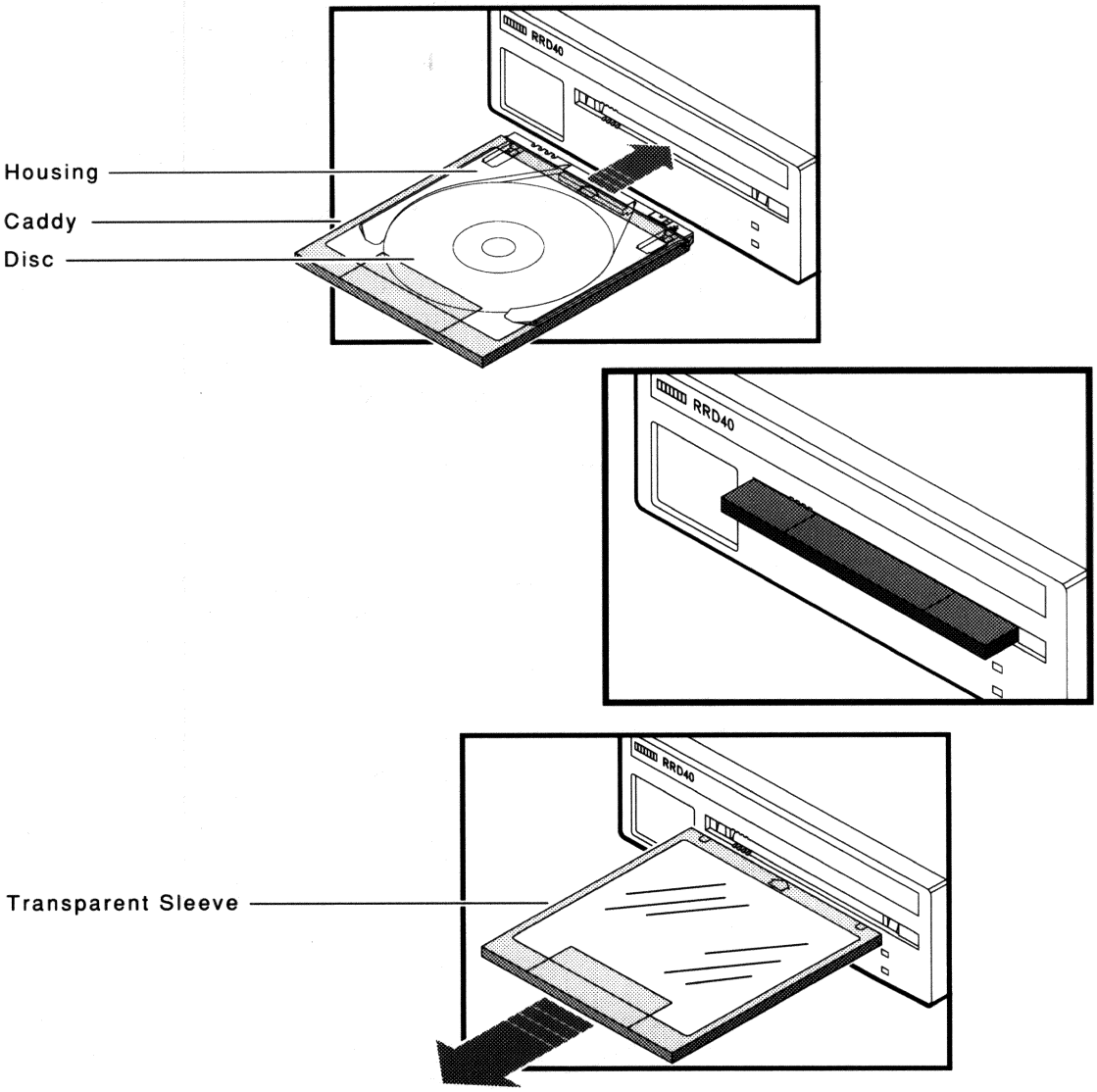
1 Position the transparent sleeve so that the arrow on the sleeve is going into the drive first.

2 Insert the sleeve into the door as far as it will go. The activity light goes on.

3 Remove the caddy.

The disc and housing are back in the caddy. The activity light goes out.

Figure 12–11 Inserting a Compact Disc



Adding an RZ55 Hard Disk Expansion Box

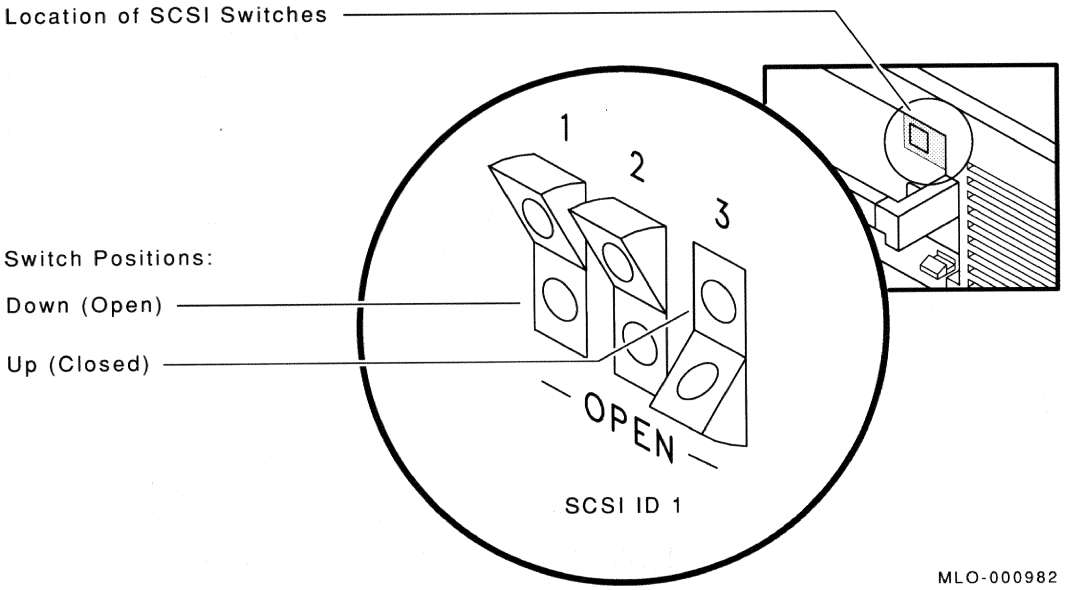
An RZ55 hard disk is available in an expansion box. If you need additional disk storage, you can add up to three RZ55 hard disks to your system. Each hard disk provides an additional 332 megabytes of disk storage. See Unpacking an Expansion Box and Daisy-Chaining Two Expansion Boxes for installation instructions. See Chapter 10 for instructions on using tape cartridges.

Verifying the SCSI ID on the First RZ55

Turn the expansion box so that the back of the unit is facing you. On the right side in a small recessed area behind the handle is a set of red and white switches surrounded by a label.

Figure 12–12 shows the back of the expansion box and the location of the switches. Do not remove the label.

Figure 12–12 Verifying the SCSI ID on the First RZ55



Verify that the switches are in the following positions (left to right) down, down, up. The RZ55 hard disk expansion box is shipped from the factory with the switches set to SCSI ID 1. You do not need to change the SCSI ID on the first RZ55 expansion box.

Resetting the SCSI ID on the Second RZ55

To determine available IDs on the SCSI-B bus for a fully configured system, enter TEST 50 at the console prompt (>>>), then press the Return key. Your system configuration is displayed on the screen. The following example is for a fully configured Model 30 system. FFFFFF05 indicates an open ID.

```
SCSI-B      1C1C.0001    V1.0
FFFFFF05 FFFFFF05 FFFFFF05 00000001 05020001 01000000 FFFFFF03 FFFFFF05
   ❶        ❷        ❸        ❹        ❺        ❻        ❼        ❽
```

❶ SCSI ID 0 — open

❷ SCSI ID 1 — open

❸ SCSI ID 2 — open

❹ SCSI ID 3 — RZ23

❺ SCSI ID 4 — RRD40

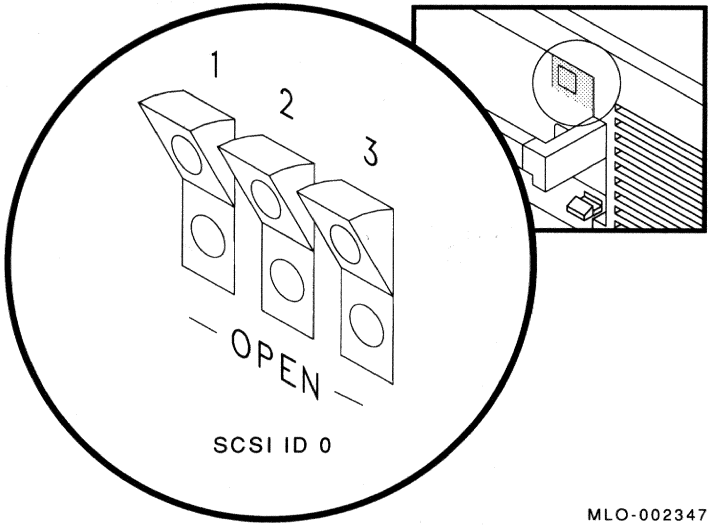
❻ SCSI ID 5 — TK50

❼ SCSI ID 6 — SCSI-B controller

❽ SCSI ID 7 — Reserved for devices requiring highest priority on the bus

If you are adding a second RZ55, you must change the SCSI ID to 0 or any other open ID on the SCSI-B bus. Each device on the bus must have a unique SCSI ID. For SCSI ID 0, set the switches to the following positions: down, down, down. Figure 12–13 shows the proper switch setting.

Figure 12–13 Resetting the SCSI ID on the Second RZ55



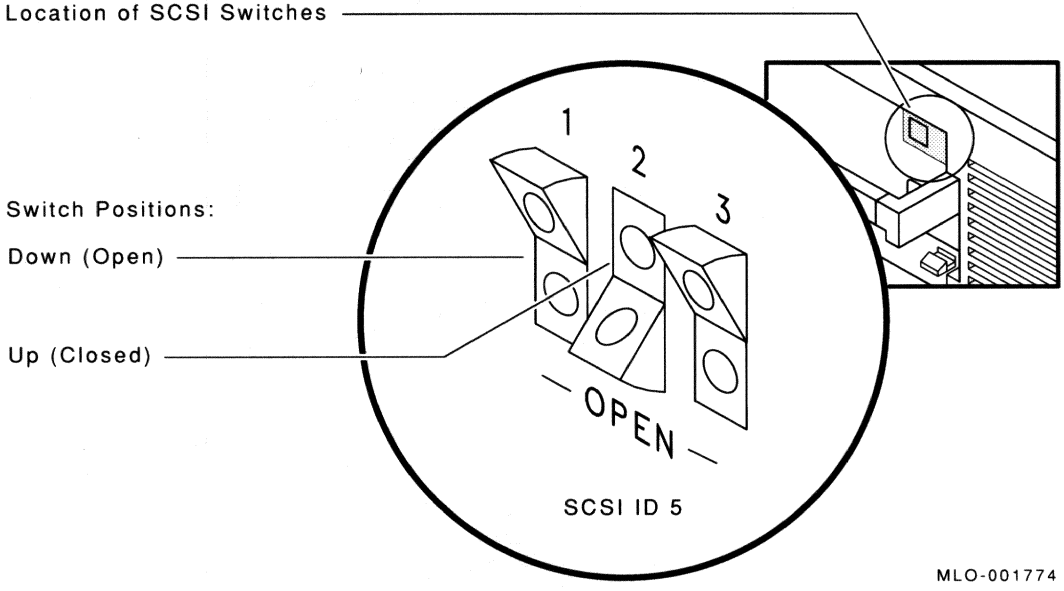
Adding and Using a TK50Z Tape Expansion Box

The TK50Z tape drive is available in an expansion box. The drive holds one removable TK50K or TK52K magnetic tape cartridge. The tape cartridge stores up to 95 megabytes of data. Use the tape cartridge to load software, databases, or to make copies (or backups) of your files. See Unpacking an Expansion Box for installation instructions.

Verifying the SCSI ID on the TK50Z

Turn the expansion box so that the back is facing you. On the right side in a small recessed area is a set of red and white switches surrounded by a label. Do not remove the label. Figure 12–14 shows the back of the expansion box and the location of the switches.

Figure 12–14 Verifying the SCSI ID on the TK50Z



The TK50Z expansion box is shipped from the factory with the SCSI ID set to 5. The switches should be in the following positions: down, up, down. Leave the switches in the default (factory) position.

Using Tape Cartridges

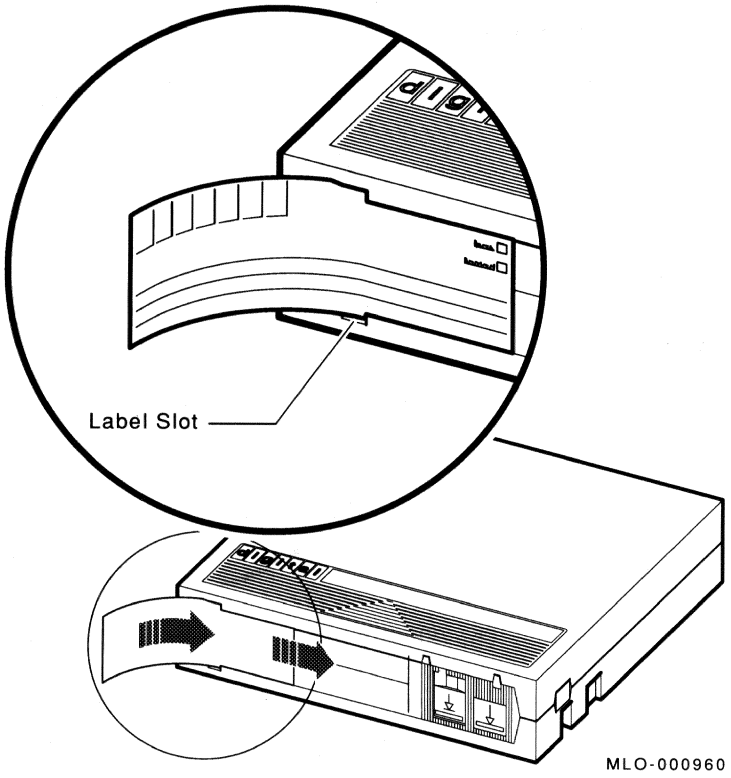
This section shows you how to:

- Label a tape cartridge
- Write to and protect tape cartridges
- Handle and store tape cartridges

Labeling a Tape Cartridge

Always label tape cartridges. A slot for the label is provided on the front of the cartridge, as shown in Figure 12–15. This label is visible when the cartridge is in the drive. Labels or markings on any other part of the cartridge can interfere with proper operation of the drive. Do not write directly on the cartridge with pen, pencil, or other marking medium.

Figure 12–15 Labeling a Tape Cartridge



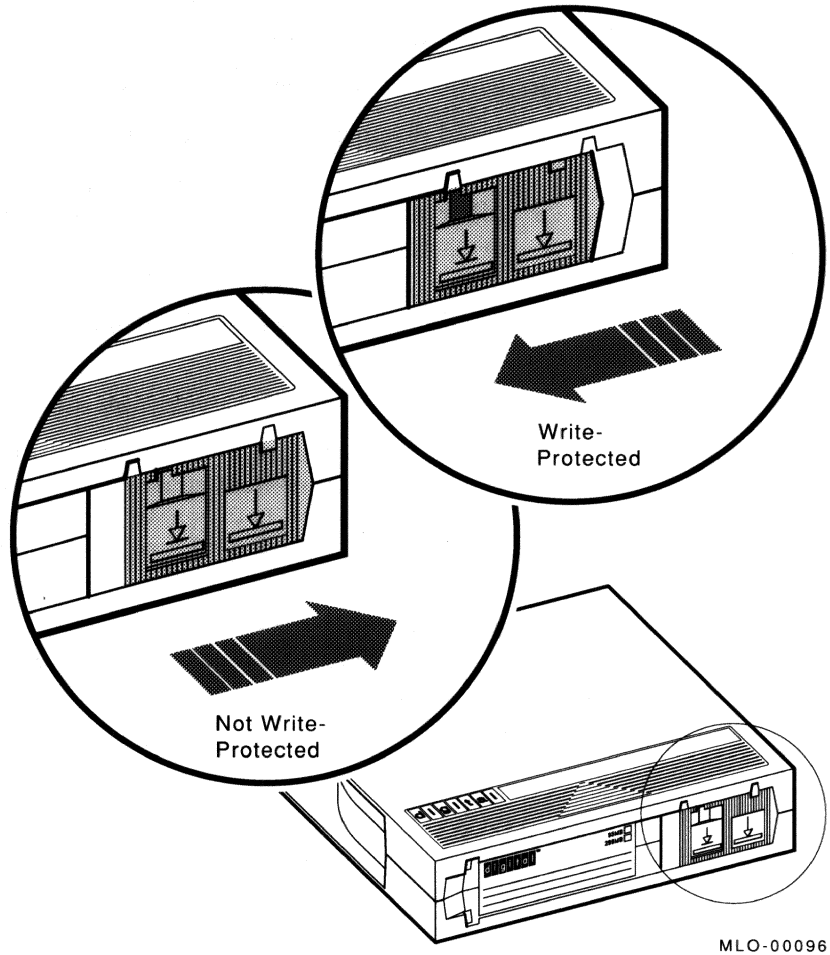
Writing to and Protecting Tape Cartridges

Write-protecting a tape prevents accidental erasure of information. The tape drive can read information on the tape regardless of the position of the write-protect switch. However, the tape drive cannot write data to a write-protected tape.

Write-Protecting a Tape When you use a tape to install software, set the write-protect switch on the front of the cartridge to the write-protect position.

To write protect a tape, slide the write-protect switch left toward the label until it locks in place (Figure 12–16). An orange rectangle appears when the write-protect switch locks in the write-protect position.

Figure 12–16 Write-Protecting a Tape



If you move the write-protect switch to the right during operation, the software does not recognize that the tape is no longer write-protected. You must unload the tape and then reload it before the software recognizes the cartridge as write-enabled.

Similarly, if you move the write-protect switch to the left during operation, the tape is not write-protected until the current command executes.

Writing to a Tape When you use a tape to make a backup copy or to write out data, set the write-protect switch to enable writing to the tape.

To enable writing, slide the switch to the right, away from the label, until the switch locks in place.

Handling and Storing Tape Cartridges

Take the following precautions when handling and storing tapes:

- Never touch the exposed surface of the tape.
- Avoid dropping the tape cartridge. The impact can damage the cartridge.
- Allow new tape cartridges to come to room temperature before using them.
- Write on the identification label before sliding it into the slot on the tape cartridge. Do not put the label anywhere else on the cartridge.
- Store tape cartridges away from dust in their plastic covers.
- Keep tape cartridges out of direct sunlight and away from heaters and other heat sources. Store tape cartridges at an even temperature between 10°C and 40°C (50°F and 104°F). Store cartridges where the relative humidity is between 20% and 80%.
- Keep tape cartridges away from magnets and equipment that generates magnetic fields, such as motors, transformers, and video monitors and terminals.
- Keep cartridges away from x-ray equipment.

Inserting a Tape Cartridge

The TK50Z expansion box has two primary controls: the cartridge release handle and the load/unload button. The cartridge release handle allows cartridges to be inserted, locked into position, and removed. The load/unload button controls winding and rewinding of the tape. The in (on) position of the load/unload button is for loading, or winding, tape cartridges. The out (off) position is for unloading, or rewinding, tape cartridges.

The TK50Z uses TK50K or TK52K (CompacTape) tape cartridges. For information on tape cartridges, see Using Tape Cartridges.

Make sure the load/unload button is in the out (unload) position.

The red load/unload button comes on for approximately 4 seconds during the tape drive automatic power-up test.

When the red light goes off and the green light comes on, it is safe to move the cartridge release handle.

If a cartridge is new, the tape drive performs a calibration sequence that takes approximately 40 seconds. The green light flashes rapidly and irregularly during calibration.

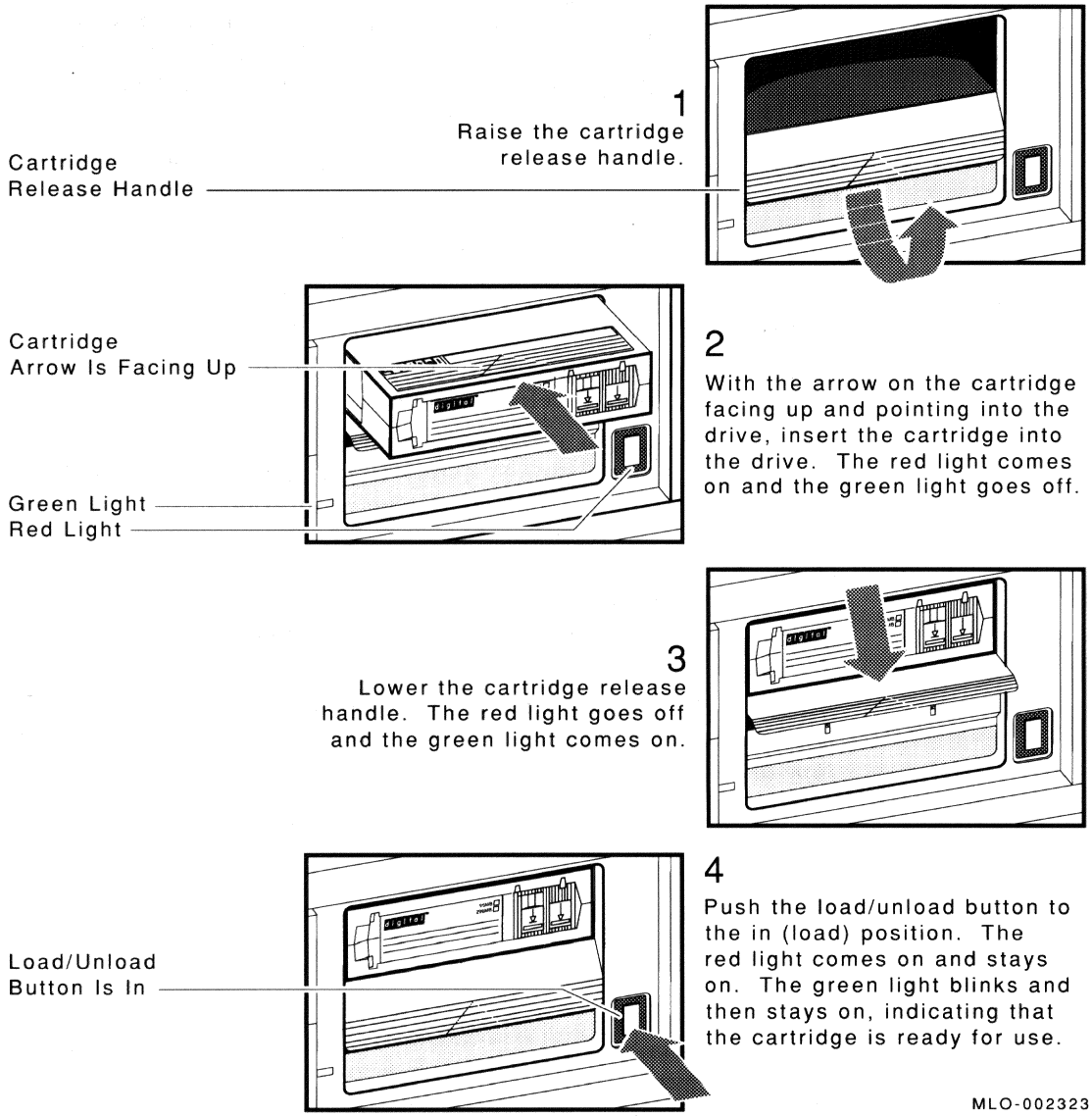
Caution *Do not move the cartridge release handle unless the red light is off and the green light is on.*

Do not move the cartridge release handle while either light is flashing.

If the red light flashes rapidly at any time, press the load/unload button four times. If the problem persists, do not attempt to use the tape drive or remove the cartridge.

Figure 12–17 shows how to insert a tape cartridge.

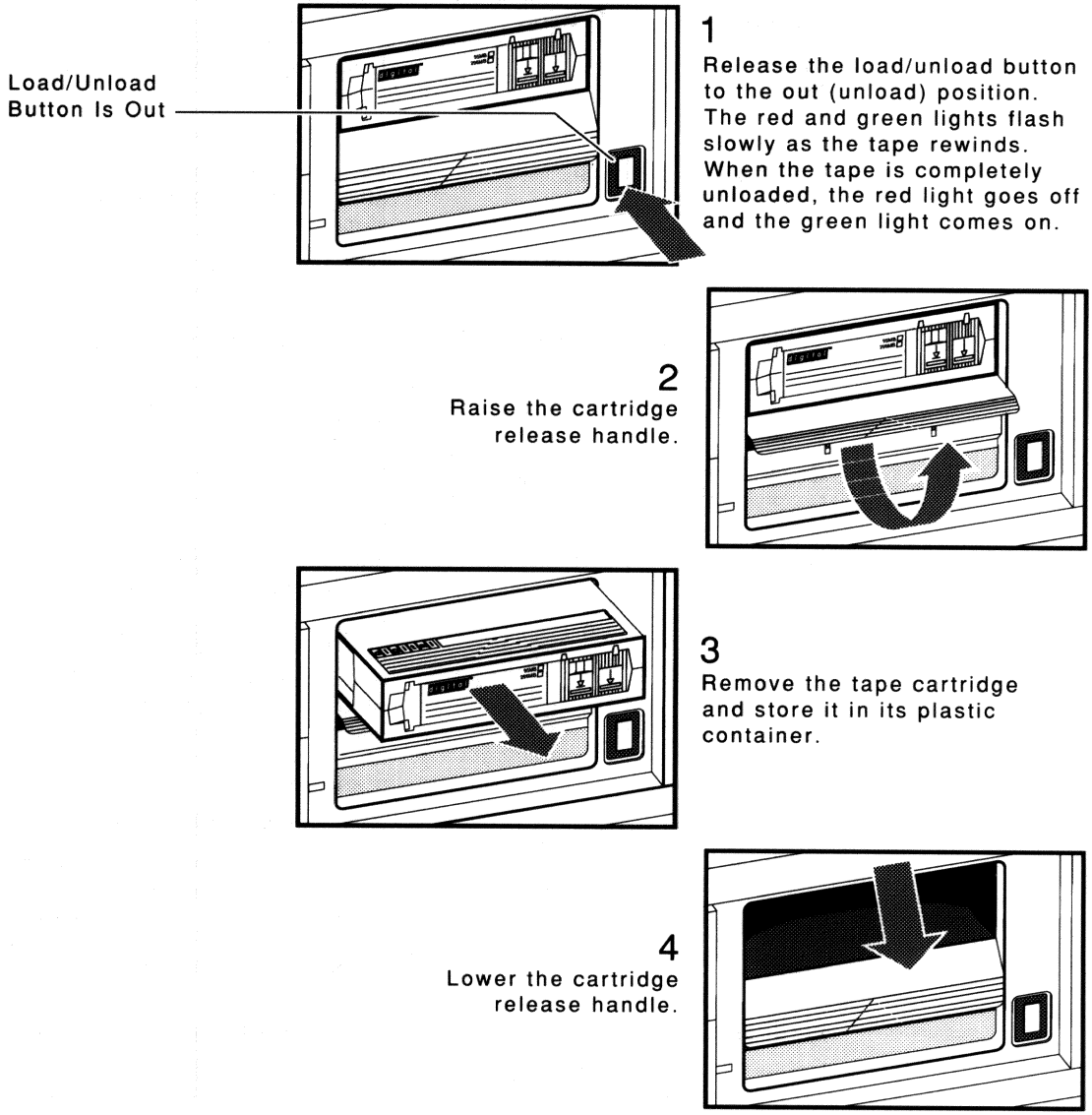
Figure 12–17 Inserting a Tape Cartridge into the TK50Z



Removing a Tape Cartridge

Figure 12–18 shows how to unload and remove a tape cartridge.

Figure 12–18 Removing a Tape Cartridge from the TK50Z



Using TK50Z Controls and Lights

Table 12–2 summarizes the function of TK50Z controls.

Table 12–2 Using TK50Z Controls

Control	Position	Function
Load/unload button	In	Loads tape (10 to 15 seconds).
	Out	Rewinds and unloads tape.
Cartridge release handle	Up	Ready to insert or remove tape after rewinding and unloading stops.
	Down	Locks tape in operating position.

Table 12–3 summarizes the function of TK50Z indicator lights.

Table 12–3 Understanding TK50Z Lights

Green Light	Red Light	Function
Off	Off	No power to tape drive.
On	Off	Safe to move cartridge release handle. Power is present.
Off	On	Do not move cartridge release handle. One of following conditions is in effect: power-up test is occurring; cartridge is inserted but handle is still up; tape is loading or unloading; tape is stopped.
On	On	Tape loaded successfully.
Flashing	On	Tape is in motion (except rewind). Read/write commands are being processed. Irregular fast flashing of green light means tape calibration is occurring. (First use of tape.)
Flashing slowly	Flashing slowly	Tape is rewinding.
Off	Flashing rapidly	Tape or drive fault exists.

Testing Expansion Boxes

After installing an expansion box, see Chapter 11 to run the configuration display and then run the system exerciser.

13

Adding Options

This chapter describes the hardware and software options available for your VAXstation 3100.

VAXpc for VMS Overview

VAXpc for VMS is a DECwindows software application program that allows your VAX/VMS workstation to have the features of an IBM Personal Computer AT. Essentially, you have a PC clone on your workstation without installing any additional hardware. You can run standalone DOS-based PC applications that do not require special hardware, or protected mode memory.

PC Hardware Environment

The VAXpc software creates an emulated (imitated) PC hardware environment. This includes:

- Two virtual hard disks containing all the standard DOS operating system software.[1]
- Two virtual diskettes and a physical diskette service, if you have a diskette drive on your system.
- An IBM Personal Computer AT enhanced keyboard.
- A two-button Microsoft mouse for DOS mouse applications.
- LPT emulation—LPT is the DOS device name for parallel printers. DOS printer devices can be attached to either a VAX/VMS queue or a spooled device. Queues and spooled devices put printing requests in a waiting line and print the files one after the other.

[1] A virtual disk is a file on a VAX/VMS disk that you can access as a DOS drive. You use the virtual disk space as if it were an MS-DOS disk.

- COM port emulation—COM ports are the DOS device names for modems that can be attached to the COM port on a workstation.

In addition, you can use the VAX/VMS Setup utility to change your hardware environment.

What VAXpc Can Do

VAXpc features a graphic user interface that provides access to the operating system that runs DOS applications.

With VAXpc you can:

- Execute DOS commands
- Install and run standard DOS applications
- Copy files between VMS and DOS using the PCDisk utility
- Cut and paste text from one application to another

DECwindows and VAXpc

VAXpc features DECwindows management to size and move windows. Because VAXpc is a DECwindows application, you can use it on any system that supports DECwindows. You control window applications with the mouse and the keyboard and use window features, such as pull-down menus, dialog boxes, and icons.

With DECwindows and VAXpc, you can display several applications at once. For example, you can:

- Open a VAXpc window and run a DOS spreadsheet application
- Leave that window open while you use the VAX/VMS Mail utility from another window
- Open an additional VAXpc window and run a DOS database application

For more information about using VAXpc, see the *VAXpc for VMS Guide*. The *VAXpc for VMS User's Guide* is available online with the Desktop-VMS Bookreader application.

Hard Disk Drives

A hard disk drive stores information on a nonremovable disk. Internal hard disks available for the VAXstation 3100 are the RZ22 and RZ23. One or two hard disks can be installed inside the system unit. Contact your Digital sales representative to add an RZ22 or RZ23 disk drive to your system unit. The RZ55 hard disk is available in an expansion box. Table 13–1 lists the hard disks available for your system.

Table 13–1 Hard Disk Drives

Disk Type	Storage Available	Location
RZ22	55.5 MB	Integral
RZ23	104 MB	Integral
RZ55	332 MB	Expansion box

Printers

Table 13–2 lists the printers available for the VAXstation 3100 system.

Table 13–2 Printers

Printer	Description
LN03	Desktop laser printer
LN03 PLUS	Enhanced LN03; prints text and graphics
LN03R ScriptPrinter	Nonimpact page printer; prints PostScript text and graphics
LA100	Desktop dot matrix printing terminal
LA75 Companion Printer	Desktop dot matrix printer; sixel graphics
LPS20 PrintServer	Networked PostScript printer
LPS40 PrintServer	Networked PostScript printer
LJ250/252 Companion Color Printer	Desktop dot matrix color, serial (LJ250) or parallel (LJ252) printer

Connecting a Printer

When you order a printer, you must also order a serial line cable to connect a printer to your system.

To connect a printer:

1 Use the documentation that shipped with the printer to:

- Unpack and set up the printer
- Set the **baud rate** on your printer to 4800 baud before connecting it to your VAXstation 3100

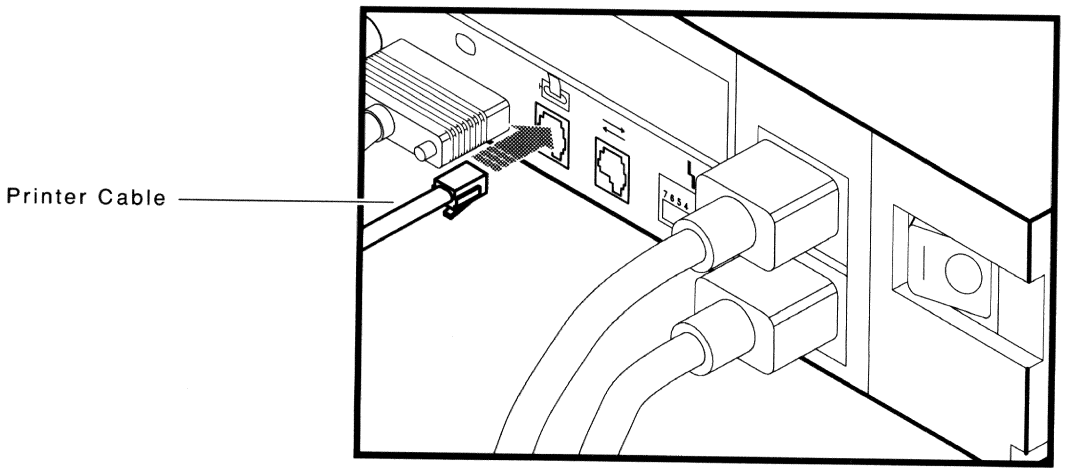
2 Make sure that the printer and all equipment, including expansion boxes and the system unit, are off.

3 Attach one end of the printer cable to the back of the printer. (Check the documentation that shipped with the printer.)

4 Attach the serial line cable to the other end of the printer cable.

5 Attach the free end of the serial line cable to the printer port on the back of the system unit, as shown in Figure 13–1.

Figure 13–1 Connecting a Printer



Modems

Table 13–3 lists the modems available for the VAXstation 3100. You need to order a DEC 423 serial line cable and a 25-pin D-sub/DECconnect passive adapter to connect a modem to your system.

The communications port on the back of the system unit comes set at 1200 baud. Refer to your modem documentation for the correct baud needed for your modem.

Table 13–3 Modems

Modem	Description
DF242 Scholar Plus	300, 1200, and 2400 bps (bits per second) full duplex asynchronous
DF224	300, 1200, and 2400 bps full-duplex asynchronous
DF212	300, 600, and 1200 bps full-duplex asynchronous
DF112	300 and 1200 bps full-duplex asynchronous
DF03	300 and 1200 bps full-duplex asynchronous

Connecting a Modem

To connect your modem:

1 Make sure that the modem and other equipment, including the system unit, are off.

2 Follow the directions that come with your modem to set it up.

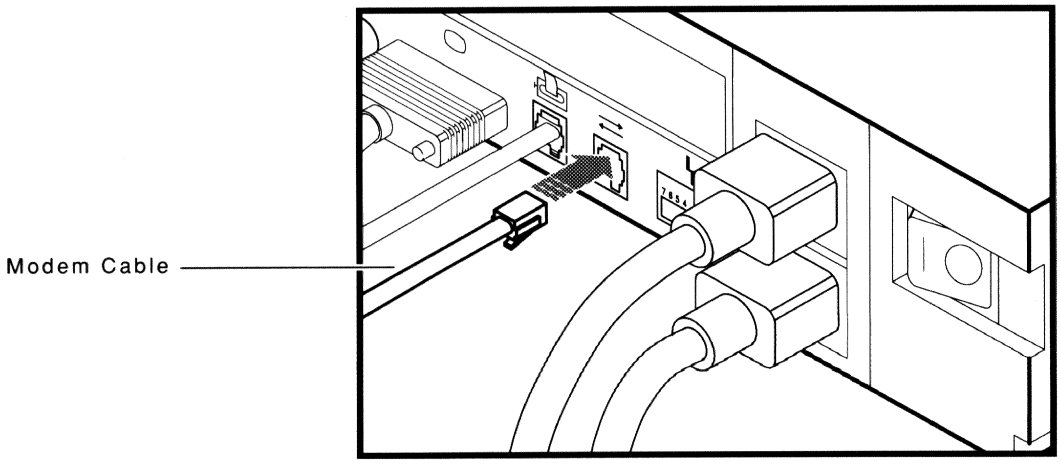
3 Use your modem guide to clear the Force DSR attribute on your modem. (By clearing the Force DSR attribute, your system will recognize the loss of modem connection, should this occur.)

4 Attach the 25-pin D-sub/DECconnect passive adapter to the back of the modem.

5 Attach one end of the DEC 423 serial line cable to the 25-pin D-sub/DECconnect passive adapter.

6 Attach the free end of the serial line cable to the communications port on the back of the system unit, as shown in Figure 13–2.

Figure 13–2 Connecting a Modem



Tablet

The tablet with the puck or stylus may be used as a pointing device instead of the mouse for menu selection, graphics entry, and pointer control. The VSXXX–AB tablet system consists of a digitizing tablet, a 4-button **puck**, a 2-button **stylus**, and a 1.5 meter (5 foot) power/signal cable.

To connect your tablet, follow the directions for connecting a mouse in Chapter 2.

Monitors

Several monitors are available for the VAXstation 3100. Contact your Digital sales representative for more information.

Cable Option

If you need to place your system unit away from your monitor, order a long monitor cable.

To connect a long monitor cable to your monitor, follow the directions in your monitor guide. You can connect the keyboard and mouse either to the monitor cable as shown in the monitor book or to the back of the system unit as shown in Chapter 2.

Color Option

To add color to your system, you can order an 8-plane graphics coprocessor and color monitor.

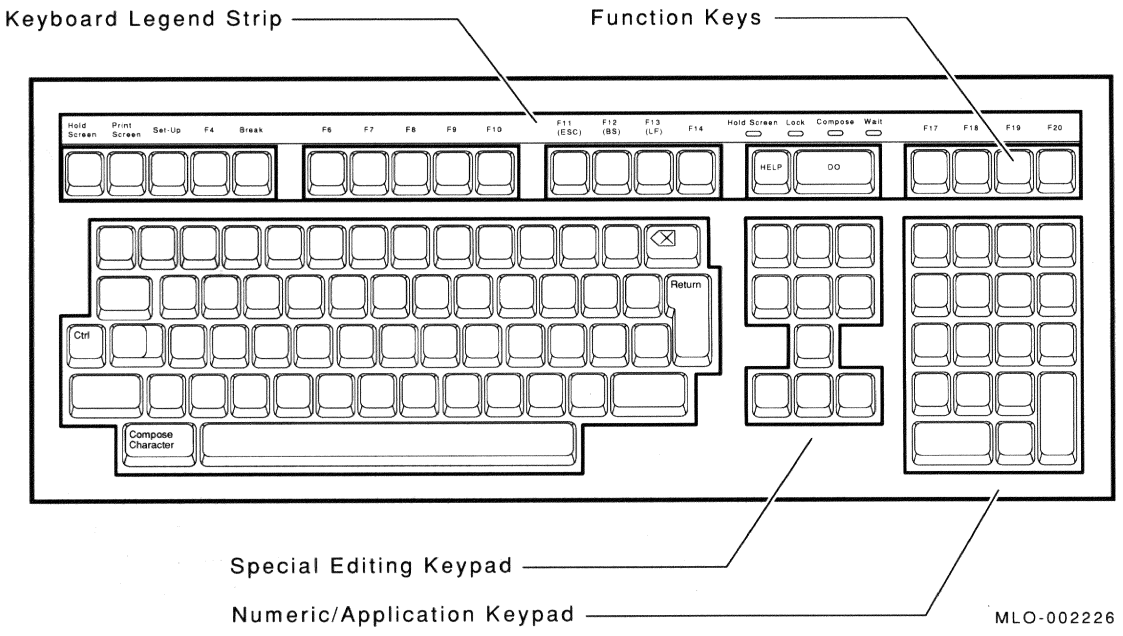
The 8-plane graphics coprocessor provides your system with a **resolution** of 1024 by 864 **pixels** and displays up to 256 colors from a palette of 16.7 million. Such a palette allows three-dimensional shading.

A

Keyboard

Your keyboard has some special keys that differ from the keys on a typewriter. Figure A–1 illustrates a typical keyboard. See Chapter 4 for some of the ways to use your keyboard with Desktop-VMS software. For instructions on creating compose characters such as ©, see the discussion of DECterm in the online version of the *VMS DECwindows Desktop Applications Guide*.

Figure A–1 Keyboard



Function Keys

At the top of the keyboard is a row of function keys. These keys provide multiple functions; descriptions of some of these functions can be found on the keyboard legend strip directly above the keys.

Note *The specific functions of many keys on the VAXstation 3100 keyboard depend largely on the application used with the system. Always refer to the documentation that comes with your application for a complete explanation of how to use the keyboard.*

Indicator Lights

The four green indicator lights at the top of the keyboard tell you some things about the keyboard.

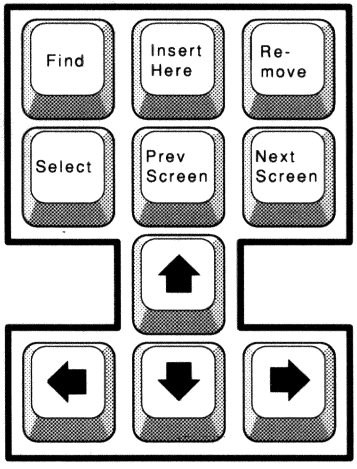
- The Hold Screen light means the Hold Screen key (F1, the leftmost function key) has been pressed while running applications that support the hold function, such as the Digital VT200 or VT300 series terminal emulators. The Hold Screen key "freezes" information as it scrolls by so that you can read it. To resume scrolling, press the Hold Screen key again.

- The Lock light means the Lock key has been pressed, and the alphabet is all uppercase. Pressing the Lock key again unshifts the keyboard and turns the Lock light off.
- The Compose light indicates that the system is waiting for you to enter several keys to compose an alternate character. To use the Compose Character key, press the Compose Character key, and then type one or more characters to create a new character.
- The Wait light lets you know that the computer is processing your task or that you must wait before you can enter another command.

Special Editing Keypad

With most applications, the keys on the special editing keypad, in Figure A–2, let you move the cursor with ease, although they do not move the mouse pointer in DECwindows. They also perform editing and screen control functions in many applications.

Figure A–2 Editing Keypad

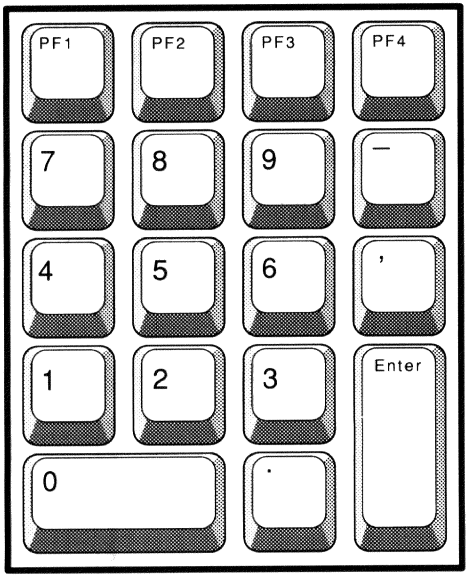


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Numeric/Application Keypad

The keys on the numeric/application keypad, shown in Figure A–3, can perform a variety of functions. Typical applications deal with text editing and numeric entry. The precise key functions depend on the application you are using and the keyboard you ordered.

Figure A–3 Numeric/Application Keypad



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B

FileView Task Messages

Chapter 7 described how to customize FileView by adding your own verbs to FileView menus. Your verbs can invoke simple DCL commands, for example, SHOW USERS, or command files that execute any number of commands. You can do more, however, to make your verbs behave just like FileView's built-in verbs by incorporating FileView task messages into your command files. For example, you can direct your verbs to display corresponding dialog boxes at appropriate events.

This appendix describes these task messages and how to use them to make your command files interact and share information with FileView. By including these task messages in your command files, you can make your new verbs appear better integrated with FileView. A sample command file, showing how these task messages are used, is also included.

Using FileView Task Messages in Command Files

FileView's built-in verbs invoke command files to execute a series of commands. Each command file uses task messages to pass information between FileView and the VMS subprocesses used to process tasks. This information includes which files are currently selected in the file list and the status of the current task. The task messages are also responsible for instructing FileView to display a corresponding dialog box or error message.

These task messages consist of text strings sent on I/O channels called VUE$INPUT and VUE$OUTPUT. Subprocesses write messages to VUE$OUTPUT, which FileView reads. For some message types, FileView responds by writing messages to VUE$INPUT, which the subprocess reads. For each task message, FileView defines a DCL symbol that command files can use to send

the message. When DCL encounters this symbol in a command file, it writes the message flag and any parameters you specify to VUE$OUTPUT. The VUE$INPUT and VUE$OUTPUT channels are already opened in the subprocess when your command file is invoked. You need not be concerned with opening or closing them.

You do not need to open SYS$INPUT and SYS$OUTPUT channels in your command files. Specifically, your command files can prompt you by including the DCL commands INQUIRE if necessary, or can run programs that perform terminal I/O. When FileView detects that text has been written to SYS$OUTPUT, it responds by assigning and displaying a Task Output box for the task, which behaves like a terminal.

Note the following guidelines when using FileView task messages in your command files:

- The maximum length of any task message is 255 characters.
- If the task message includes a single parameter with no spaces, such as a symbol name or a number, do not enclose it in quotation marks ("). If the parameter is a text string, such as message text, enclose the string in quotation marks. For task messages that include two parameters, enclose both in one set of quotation marks; do not enclose each parameter individually in quotation marks. VUE$INQUIRE, which includes two parameters that can contain spaces, is an exception to this rule. In this case, enclose each parameter individually in quotation marks, and enclose them together within quotation marks.

FileView Task Messages

VUE$READ

VUE$READ is the mechanism used for receiving a value that FileView returns as a result of a previous message you sent. It reads the next record from VUE$INPUT into a symbol you specify. For example, VUE$READ would be used to read the file name returned after a VUE$GET_NEXT_SELECTION message is sent.

DCL format: VUE$READ *symbol*

Example: VUE$READ next_selection

VUE$GET_NEXT_SELECTION

The VUE$GET_NEXT_SELECTION message requests that FileView return the name of the next selected file in the current view. VUE$GET_NEXT_SELECTION can be used iteratively to get the name of each file that was selected when the task began.

After the last file name is returned, FileView returns an empty string. Follow VUE$GET_NEXT_SELECTION with VUE$READ to allow the subprocess to receive the returned file name.

DCL format: VUE$GET_NEXT_SELECTION

VUE$GET_ALL_SELECTIONS

The VUE$GET_ALL_SELECTIONS message requests that FileView return the names of all selected files in the current view as a list whose components are separated by commas. Follow VUE$GET_ALL_SELECTIONS with VUE$READ to allow the subprocess to receive the returned file name list.

DCL format: VUE$GET_ALL_SELECTIONS

VUE$GET_SELECTION_COUNT

The VUE$GET_SELECTION_COUNT message requests that FileView return the number of selected files in the current view. Follow VUE$GET_SELECTION_COUNT with VUE$READ to allow the subprocess to receive the returned count.

DCL format: VUE$GET_SELECTION_COUNT

VUE$SET_SYMBOL

The VUE$SET_SYMBOL message requests that FileView store a value for the specified symbol in order to reuse it later. This mechanism allows FileView tasks, which are run as subprocesses, to share the same value for a symbol, or preserve a symbol across invocations of the same verb. Defining a DCL symbol in your command file does not have the same effect, because it can be run in a different subprocess the next time the command file is invoked.

DCL format: VUE$SET_SYMBOL *symbol value*

Example: VUE$SET_SYMBOL "MY_LIBRARY WORK:[JONES.LIBRARY]"

VUE$GET_SYMBOL

The VUE$GET_SYMBOL message requests that FileView return the value of the specified symbol previously set by VUE$SET_SYMBOL. Follow VUE$GET_SYMBOL with VUE$READ to allow the subprocess to receive the returned value.

VUE$GET_SYMBOL is also how to query the special DCL symbol VUE$SHOW_HIDDEN_DIALOGS. Many built-in FileView commands allow you to hide the associated dialog box by highlighting the Hide this Dialog toggle button in the command's dialog box. You can then force the box to appear by choosing

the command while pressing and holding the Shift key. If you began the FileView task while pressing and holding the Shift key, VUE$GET_SYMBOL returns "TRUE" for the value of VUE$SHOW_HIDDEN_DIALOGS. This allows your command files to provide a similar hide-this-dialog feature that can be overridden when you choose the command from a menu while pressing the Shift key.

DCL format: VUE$GET_SYMBOL *symbol*

Example: VUE$GET_SYMBOL MY_LIBRARY

VUE$INQUIRE

The VUE$INQUIRE message requests that FileView display a dialog box prompting you for input text. The message includes the prompt to be used, as well as the initial value to be placed in the text entry field. When you click the OK button in the dialog box, the text is returned to the subprocess in VUE$INPUT. If you click on the Cancel button in the dialog box, a null string is returned. Follow VUE$INQUIRE with VUE$READ to allow the subprocess to receive the returned text string.

Because the prompt parameter can contain spaces, be sure to enclose both the prompt parameter and the initial text string in quotation marks.

DCL format: VUE$INQUIRE *prompt initial text*

Example: VUE$INQUIRE """Show file:"" ""''current_default'"""

VUE$INQUIRE_SYMBOL

The VUE$INQUIRE_SYMBOL message requests that FileView display a dialog box prompting you for input text. The message includes the prompt to be used and a symbol name. The symbol is translated by FileView, and the current value is used as the initial value in the text entry field. When you click on the OK button in the dialog box, the symbol is redefined using the text you entered, and the text is returned to the subprocess in VUE$INPUT. If you click on the Cancel button in the dialog box, a null string is returned. Follow VUE$INQUIRE_SYMBOL with VUE$READ to allow the subprocess to receive the returned text string.

DCL format: VUE$INQUIRE_SYMBOL *symbol prompt*

Example: VUE$INQUIRE_SYMBOL "MY_LIBRARY Library:"

VUE$SET_TASK_LABEL

The VUE$SET_TASK_LABEL message requests that FileView change the label for this task in the Work in Progress dialog box and in the Task Output box, if one exists.

DCL format: VUE$SET_TASK_LABEL *label*

Example: VUE$SET_TASK_LABEL "Copying ''current_file'"

VUE$SET_DONE_LABEL

The VUE$SET_DONE_LABEL message requests that FileView change the label for this task to the specified text when the task is complete. This message will have no effect until the task completes.

DCL format: VUE$SET_DONE_LABEL *label*

Example: VUE$SET_DONE_LABEL "Library build complete"

VUE$HIGHLIGHT_UPDATE

The VUE$HIGHLIGHT_UPDATE message requests that FileView highlight the Apply button in the FileView window by changing its label from Apply to Update. (The Update button is used to remind you that there might have been a change to the files in the current file list.) When you click on the Update button, the label returns to Apply.

DCL format: VUE$HIGHLIGHT_UPDATE

VUE$UPDATE_FILEVIEW

The VUE$UPDATE_FILEVIEW message requests that FileView perform an automatic updating of the FileView window, as if you had pressed the Apply button. Use this task message with caution because it can disrupt any interaction in progress, such as extending a file selection.

DCL format: VUE$UPDATE_FILEVIEW

VUE$SET_ERROR_STATUS

The VUE$SET_ERROR_STATUS message requests that FileView set the "Error" flag in the Work in Progress dialog box entry for the current task.

DCL format: VUE$SET_ERROR_STATUS

VUE$POPUP

The VUE$POPUP message instructs FileView to pop up the Task Output box for this task, if it is not already displayed. The Task Output box does not take input focus when it appears. Note that the Task Output box pops up automatically when output is

written to SYS$OUTPUT. You can use this task message to force the box to appear sooner.

DCL format: VUE$POPUP

VUE$POPUP_FOCUS

The VUE$POPUP_FOCUS message instructs FileView to pop up the Task Output box for this task, if it is not already displayed. The Task Output box takes input focus when it appears. Though the Task Output box pops up automatically when output is written to SYS$OUTPUT, it does not normally take input focus.

DCL format: VUE$POPUP_FOCUS

VUE$POPDOWN

The VUE$POPDOWN message instructs FileView to pop down the Task Output box for this task, if it is displayed.

DCL format: VUE$POPDOWN

VUE$SUPPRESS_OUTPUT_POPUP

The VUE$SUPPRESS_OUTPUT_POPUP message requests that FileView not perform the normal automatic popping up of a Task Output box when the task produces terminal output. You can use this task message for graphical applications that are expected to produce output only in case of errors.

DCL format: VUE$SUPPRESS_OUTPUT_POPUP

VUE$POPUP_PROGRESS_BOX

The VUE$POPUP_PROGRESS_BOX message requests that FileView pop up the Work in Progress dialog box, if it is not already displayed. It allows an optional time value, representing a number of seconds, to be specified. If this task message is included, the box is displayed only for the specified number of seconds and then is automatically dismissed, unless some other entry prevents it. Also, the task status is shown as "Starting" in the Work in Progress dialog box if the timer is included.

You can use this task message to provide feedback that a task is starting, before the task produces any visible results. If a time value is not included, the Work in Progress dialog box is automatically dismissed when the current task completes, unless another entry prevents it.

DCL format: VUE$POPUP_PROGRESS_BOX *optional time*

Example: VUE$POPUP_PROGRESS_BOX 10

VUE$POPUP_MESSAGE

The VUE$POPUP_MESSAGE message requests that FileView pop up a message box containing the specified text. The box also contains an Acknowledge button, which allows you to dismiss the box. You can separate the text on multiple lines by including the line feed (ASCII 10) character.

DCL format: VUE$POPUP_MESSAGE *message*

Example: VUE$POPUP_MESSAGE "Library build is complete."

VUE$POPUP_CONFIRM

The VUE$POPUP_CONFIRM message requests that FileView pop up a confirmation box containing the specified text. The box contains two command buttons labeled Yes and No, which allow you to respond appropriately. FileView then returns either "YES" or "NO" in VUE$INPUT. Follow VUE$POPUP_CONFIRM with VUE$READ to allow the subprocess to receive the returned text string. You can separate the text on multiple lines by including the line feed (ASCII 10) character.

DCL format: VUE$POPUP_CONFIRM *message*

Example: VUE$POPUP_CONFIRM "File was not found. Continue?"

VUE$POPUP_HELP

The VUE$POPUP_HELP message requests that FileView pop up a Help dialog box displaying help text from the specified library on the specified topic. If FileView cannot open the file, or if the topic is not found, an error message dialog box is displayed.

DCL format: VUE$POPUP_HELP *library topic*

Example: VUE$POPUP_HELP "SYS$HELP:DECW$SESSION.HLB Overview"

VUE$EXIT_COMMAND_LOOP

The VUE$EXIT_COMMAND_LOOP message notifies FileView that the command procedure is about to exit the normal DCL command loop by executing a DCL command STOP. If a command procedure executes a DCL command STOP without first sending a VUE$EXIT_COMMAND_LOOP message, the subprocess will not be properly reused. The combination of VUE$EXIT_COMMAND_LOOP and STOP is used only to obtain a Task Output window in which you can interact directly with the DCL command line.

DCL format: VUE$EXIT_COMMAND_LOOP

Creating a FileView Command File

The following sample command file illustrates how to include FileView task messages in a command file. You can define a FileView verb Create Library, add it to the FileView Files menu, and associate it with this command file to create a library in which you can store frequently used modules of code or text.

```
$!+
$! This FileView command file will prompt the user for a library name,
$! create the library, and insert all currently selected files
$! into it.
$!
$! If an error occurs, go to the handler, which displays Error status.
$!
$ on warning then goto error_occurred
$!
$! First, get the number of selected files. If none, pop up a message box,
$! then exit.
$!
$ vue$get_selection_count
$ vue$read element_count
$ if element_count .ne. 0 then goto get_library_name
$ vue$popup_message "You must select files first!"
$ exit
$!
$! Get the library name. Use a symbol so that this name can be
$! remembered across invocations of this verb. If the library already
$! exists, prompt for confirmation that it should be used.
$!
$get_library_name:
$ vue$inquire_symbol "my_library_name  Library name:"
$ vue$read my_library_name
$ vue$popup_progress_box
$ if "''f$search(my_library_name)'" .eqs. "" then goto create_library
$ vue$popup_confirm "Library already exists. Create new version?"
$ vue$read response
$ if "''response'" .eqs. "NO" then goto file_loop
$!
$! Create a new library. Set the task label indicating action, and
$! highlight the Apply button showing a new file has been created.
$!
$create_library:
$ vue$set_task_label "Creating library ''my_library_name'"
$ library/create 'my_library_name
$ vue$highlight_update
$!
$! Get the list of selected files, and insert each into the library.
$!
$file_loop:
$ vue$get_next_selection
$ vue$read insert_file
$ if "''insert_file'" .eqs. "" then goto task_exit
$ vue$set_task_label "Inserting ''f$parse(insert_file,,,"NAME")'"
```

```
$ library 'my_library_name 'insert_file
$ goto file_loop
$!
$error_occurred:
$ vue$set_error_status
$!
$! Exit from the command procedure
$!
$task_exit:
$ exit
```

C

DECwindows System Messages

This appendix describes messages that may appear when you are starting a session, working with the Session Manager and FileView, or running applications on remote systems.

Many of the messages appear in dialog boxes with an Acknowledge button. Click on Acknowledge to make the dialog box and the message disappear before you proceed.

For each message, the text of the message appears in *italic* and is followed by an explanation of why the message occurred and, where applicable, what you should do to correct the problem.

An item in a message that appears in single quotation marks (for example, 'filename') represents an item that may vary in different occurrences of the message.

DECwindows applications run as one or more VMS **processes** or **subprocesses**. Some system messages report insufficient process quotas. Process quotas determine the number or size of system resources that you and your processes are authorized to use. This information is stored as your privilege classification.

An error occurred in task communication. Tasks may fail to complete properly.

Note that a VMS error message is displayed beneath this DECwindows message.

Context: Performing FileView tasks

Explanation: An error occurred in communication between FileView and one of the task subprocesses. The task may not complete properly.

Remedy: You may continue, but the quotas used by this task will not be available until you exit from FileView.

Client is not authorized to access server

Context: Running an application on a remote system

Explanation: You are trying to run an application on a system on which you are not an authorized user.

Remedy: Authorize yourself to run applications on the other system by following the procedure outlined in Running Applications Across the Network.

Decw-e-cnxabort, connection aborted

Context: Running an application on a remote system

Explanation: While you tried to run a program from DCL, the server on the other end of the line aborted, or the network link was broken.

Remedy: Wait for the connection to be reestablished before you try to run the program again.

Error opening system defaults file. Using factory defaults.

Context: Using the Session Manager

Explanation: There were problems reading both local and system default resource files. There should always be a set of system resource files in the directory pointed to by the logical name DECW$SYSTEM_DEFAULTS. If these files have been deleted or are damaged, the Session Manager uses its own defaults.

Remedy: Examine the system resource files and determine why the Session Manager cannot access them.

Error writing resource file

Note that this message is followed by the resource file name.

Context: Using the Session Manager

Explanation: The Session Manager could not save the Customize settings.

Remedy: Use the DCL command DIRECTORY/FULL to check the version limits on files in your SYS$LOGIN directory and ensure that there are no problems accessing this directory. This

error could also be related to disk quotas set up by your system manager.

FileView stopped

Note that a VMS error message is displayed beneath this DECwindows message.

Context: Using the Session Manager

Explanation: FileView has been terminated abnormally, for the reason stated in the VMS error message. Because FileView executes your SYLOGIN.COM and LOGIN.COM files, this problem could be related to errors in one of these files.

Remedy: Check your SYLOGIN.COM and LOGIN.COM files for errors. Do not place commands in SYLOGIN.COM or LOGIN.COM that assume all INTERACTIVE processes can accommodate DCL terminal commands.

The default directory is not a valid VMS directory specification. It contains a logical name which cannot be translated because the limit of 10 translations was exceeded.

Context: Updating FileView

Explanation: The directory specification contains a logical name that cannot be translated without exceeding the maximum number of levels to which the system performs logical name translations.

Remedy: Correct the directory specification and try the operation again.

The default directory is not a valid VMS directory specification. It is a rooted directory, but it is not concealed. Logical names for rooted directories must have the Conceal attribute.

Context: Updating FileView

Explanation: The directory specified in the Default field is a rooted directory that is not concealed.

Remedy: Correct the Default field and try the operation again.

Logical name definition failed.

Context: Using FileView's Logical Names dialog box

Explanation: The logical name definition failed for an unspecified reason.

No additional tasks can be started. Task will execute when another task completes. Check 'quotaname' quota.

Context: Performing FileView tasks

Explanation: No additional subprocesses can be created, because the specified quota is insufficient.

Remedy: The requested task will run when a currently running task completes.

No file type can be entered because the text field is empty. Enter a file type and try again.

Context: Using FileView's File Types dialog box

Explanation: You clicked on the Enter button without first specifying a file type in the File Types text entry field.

Remedy: Specify a file type and click on the Enter button.

No file type definition can be removed because there is no file type selected. Select a file type and try again.

Context: Using FileView's File Types dialog box

Explanation: You clicked on the Delete button without first selecting a file type in the File Types list box.

Remedy: Select a file type in the list and click on the Delete button.

No menu definition can be removed because there is no menu selected. Select a menu and try again.

Context: Using FileView's Verbs and Menus dialog box Updating FileView

Explanation: You clicked on the Delete button to remove a menu from the Menu Names list box without first selecting a menu in the list box.

Remedy: Select a menu in the list and click on the Delete button.

No menu name can be entered because the text field is empty. Type a menu name and try again.

Context: Using FileView's Verbs and Menus dialog box

Explanation: You clicked on the Enter button to add a name to the Menu Names list box, but the text field was empty.

Remedy: Type a menu name in the text field and click on the Enter button again.

No tasks can be started. Check 'quotaname' quota.

Context: Performing FileView tasks

Explanation: No task subprocesses can be created, because the specified quota is insufficient.

Remedy: Exit from FileView and check the quota. Raise your quota limit or see your system manager.

No verb can be added to the menu because there is no verb selected. Select a verb and try again.

Context: Using FileView's Verbs and Menus dialog box

Explanation: You clicked the Add button to add a verb to a menu without first selecting a verb in the Verb Names list box.

Remedy: Select a verb in the list and click on the Add button.

No verb can be added to the menu because there is no verb selected. Select a verb and try again.

Context: Using FileView's File Types dialog box

Explanation: You clicked on the Add button to add a verb to a menu without first selecting a verb from the Verb Names list box.

Remedy: Select a verb in the list and click on the Add button.

No verb definition can be removed because there is no verb selected. Select a verb and try again.

Context: Using FileView's Verbs and Menus dialog box

Explanation: You clicked on the Delete button to remove a verb from the Verb Names list box without first selecting a verb in the list.

Remedy: Select a verb in the list and click on the Delete button.

No verb name can be entered because the text field is empty. Type a verb name and try again.

Context: Using FileView's Verbs and Menus dialog box

Explanation: You clicked on the Enter button to add a verb to the Verb Names list box, but you didn't supply a verb in the text field.

Remedy: Type a verb name in the text field and click on the Enter button.

Only one Customize operation can be performed at a time.

Context: Customizing FileView

Explanation: Only a single customization operation can be performed at a time.

Remedy: Complete the current operation before beginning a new one.

Problem report

Context: Starting a session

Note that a VMS error message is displayed beneath this DECwindows message.

Explanation: Your attempt to log in was unsuccessful, for the reason stated in the VMS error message. The most likely VMS error messages to occur with this message are as follows:

- Licensing—Logging in through the Session Manager counts as one licensed login. If you have logged in to your workstation through the DCL command SET HOST, you may have exceeded the limit of logged in users as specified by your VMS license. To log in through the Session Manager, log out of one of your other terminal sessions so that the limit of the VMS license is not exceeded.
- User authorization failure—The user name or password you entered does not match an authorized user for this system. You may have made a typing mistake. Try entering your user name and password again. If you are not logged in, see your system manager.

Task Status terminal connection lost.

Context: Performing FileView tasks

Explanation: An error occurred in communication with a task subprocess. The task may not complete properly, but you may continue working with FileView.

Task terminated abnormally.

Context: Performing FileView tasks

Explanation: A task subprocess was abnormally terminated. The task it was processing may have been partially completed, but you may continue working with FileView.

The default directory is not a valid VMS directory specification.

Context: Updating FileView

Explanation: The VMS directory specification is invalid.

Remedy: Correct the directory specification and try the operation again.

The default directory is not a valid VMS directory specification. A node name is not allowed.

Context: Updating FileView

Explanation: A node name cannot appear in the default directory specification.

Remedy: Correct the directory specification and try the operation again.

The default directory is not a valid VMS directory specification. Check for a misplaced colon (:).

Context: Updating FileView

Explanation: A colon is incorrectly placed in the directory specification.

Remedy: Correct the directory specification and try the operation again.

The default directory is not a valid VMS directory specification. Check for a misplaced open bracket ([).

Context: Updating FileView

Explanation: An open bracket is incorrectly placed in the VMS directory specification.

Remedy: Correct the directory specification and try the operation again.

The default directory is not a valid VMS directory specification. There is an unrecognized character.

Context: Updating FileView

Explanation: The VMS directory specification contains an unrecognized character.

Remedy: Correct the directory specification and try the operation again.

The DCL command cannot be changed because there is no verb selected. Select a verb and try again.

Context: Using FileView's Verbs and Menus dialog box

Explanation: You clicked on the Enter button to change a verb command definition without first selecting a verb in the Verb Names list box.

Remedy: Select a verb in the list and click on the Enter button.

The DCL command cannot be changed because the text field is empty. Type a command and try again.

Context: Using FileView's Verbs and Menus dialog box

Explanation: You clicked on the Enter button to change the verb's command definition, but the DCL Command text entry field was empty.

Remedy: Type a command in the DCL Command text entry field and click on the Enter button.

The double-click verb cannot be changed because there is no file type selected. Select a file type and try again.

Context: Using FileView's File Types dialog box

Explanation: You clicked on the Change button to change the double-click verb without first selecting a file type from the File Types list box.

Remedy: Select a file type and click on the Change button.

The double-click verb cannot be changed because there is no verb selected. Select a verb and try again.

Context: Using FileView's File Types dialog box

Explanation: You clicked on the Change button to change the double-click verb without first selecting a verb from the Verb Names list box.

Remedy: Select a verb in the list and click on the Change button.

The menu cannot be changed because there is no menu entry selected. Select a menu entry and try again.

Context: Using FileView's Verbs and Menus dialog box

Explanation: You clicked on the Up, Down, or Remove buttons without first selecting an entry in the Verbs in Menu list box.

Remedy: Select an entry in the Verbs in Menu list box and click on the Up, Down, or Remove buttons.

The menu cannot be changed because there is no menu entry selected. Select a menu entry and try again.

Context: Using FileView's File Types dialog box

Explanation: You clicked on the Up, Down, or Remove buttons without first selecting an entry from the Popup Menu list box.

Remedy: Select an entry from the list and click on the Up, Down, or Remove buttons.

The menu entries cannot be changed because there is no menu selected. Select a menu and try again.

Context: Using FileView's Verbs and Menus dialog box

Explanation: You clicked on the Up, Down, Add, or Remove buttons to modify the Verbs in Menu list without first selecting a menu in the Menu Names list box.

Explanation: Select a menu in the Menu Names list and click on the Up, Down, Add, or Remove buttons.

The menu entries cannot be changed because there is no file type selected. Select a file type and try again.

Context: Using FileView's File Types dialog box

Explanation: You clicked on the Add button to add a verb to a pop-up menu without first selecting a file type in the File Types list box.

Remedy: Select a file type from the File Types list box and click on the Add button.

The privileges necessary to define the name are not enabled.

Context: Using FileView's Logical Names dialog box

Explanation: You do not have sufficient privileges to add the logical name to the selected logical name table.

Remedy: Use the Privileges dialog box to enable more privileges or see your system manager.

The selected file type cannot be removed because it has a public definition.

Context: Using FileView's File Types dialog box

Explanation: You cannot delete a file type that has a publicly defined pop-up menu or double-click verb.

The selected library could not be read.

Context: Performing FileView tasks

Explanation: The help library specified in a VUE$POPUP_ HELP task message could not be opened.

Remedy: Check the command file which issued the message to ensure the help library name is correct.

The selected menu cannot be removed because it has a public definition. To remove a menu from the menu bar, select the 'Menu Bar...' dialog box from the 'Control' menu.

Context: Using FileView's Verbs and Menus dialog box

Explanation: You cannot remove a menu from the Menu Names list box if that menu has a public definition.

Remedy: To remove a menu from your menu bar, choose the Menu Bar... menu item from the Control menu. In the Menu Bar dialog box, click on the menu you want to remove.

The selected verb cannot be removed because it has a public definition. To remove an entry from a menu, first select a menu. Then select a menu entry and click the 'Remove' button.

Context: Using FileView's Verbs and Menus dialog box

Explanation: You cannot remove a verb from the Verb Names list if that verb has a public definition.

Remedy: To remove a verb from a menu, select the menu from the Menu Names list, select the verb from the Verbs in Menu list, and click on the Remove button.

The selected verb is already in the menu.

Context: Using FileView's File Types dialog box

Explanation: You clicked on the Add button to add a verb to a menu in which the verb already appears.

The selected verb is already in the menu.

Context: Using FileView's File Types dialog box

Explanation: You tried to add a verb to the pop-up menu, but it is already in the menu.

The specified logical name already exists and cannot be redefined.

Context: Using FileView's Logical Names dialog box

Explanation: You tried to define a logical name that already exists in the selected logical name table.

The specified logical name definition is not valid.

Context: Using FileView's Logical Names dialog box

Explanation: The logical name definition you supplied is not valid.

Remedy: Respecify the logical name definition, making sure it is valid, and click on the Define button.

The specified logical name is not valid.

Context: Using FileView's Logical Names dialog box

Explanation: You tried to define an invalid logical name.

Remedy: Respecify the logical name, making sure it is valid, and click on the Define button.

The specified logical name table does not exist.

Context: Using FileView's Logical Names dialog box

Explanation: You specified a logical name table that does not exist.

Remedy: You may have incorrectly specified the logical name table; if so, respecify the logical name table correctly and try the operation again.

There is no command defined for the double-click verb 'verbname' for the 'filetype' file type.

Context: Using verbs in FileView

Explanation: The default verb for the file on which you have double clicked has no command definition.

Remedy: Provide a definition for the verb in the Verbs and Menus dialog box.

There is no command defined for the 'verbname' verb.

Context: Using verbs in FileView

Explanation: The selected verb has no command definition.

Remedy: Provide a definition for the verb in the Verbs and Menus dialog box.

There is no double-click verb defined for the 'filetype' file type.

Context: Using verbs in FileView

Explanation: You have double clicked on a file whose file type has no default double-click verb definition.

Remedy: Provide a double-click verb for the file type in the File Types dialog box.

Unrecognized FileView task message.

Context: Performing FileView tasks

Explanation: A communication error occurred between FileView and one of the task subprocesses because an unrecognized message was sent by the task.

Remedy: If the task was running a user-written command file, check the task message it uses.

Your profile file was not updated because there is no double-click verb or pop-up menu defined for the 'filetype' file type. Either delete the file type definition, change the double-click verb, or add a verb to the pop-up menu.

Context: Using FileView's File Types dialog box

Explanation: No double-click verb or pop-up menu has been defined for the file type just added. As a result, your customization file was not updated.

Remedy: Delete the file type definition, change the double-click verb, or add a verb to the pop-up menu.

Your profile was not updated because there are no verbs defined for the 'menuname' menu. Either delete the menu definition, or add some verbs to the menu. Then try again.

Context: Using FileView's Verbs and Menus dialog box

Explanation: Your customization file was not updated because you defined a menu without adding any verbs to it.

Remedy: Add some verbs to the menu or delete the menu definition before you click on OK or Apply.

Your profile was not updated because there is no DCL command defined for the 'verbname' verb. Either delete the verb definition, or type a command and click the Change button. Then try again.

Context: Using FileView's Verbs and Menus dialog box

Explanation: Your customization file was not updated because you added a verb without providing a command definition for it.

Remedy: Type a command and click on the Change button or delete the menu definition before you click on OK or Apply.

D

Hardware Specifications

- For VAXstation 3100 Model 30 system dimensions, see Table D–1.
- For VAXstation 3100 Model 30 system specifications, see Table D–2.
- For VAXstation 3100 Model 30 system storage conditions, see Table D–3.
- For VAXstation 3100 Model 30 operating and nonoperating conditions, see Table D–4.
- For VAXstation 3100 Model 30 system electrical specifications, see Table D–5.
- For RZ22 and RZ23 hard disk drive specifications, see Table D–6.
- For RX23 diskette drive specifications, see Table D–7.
- For RZ55 hard disk drive dimensions, see Table D–8.
- For RZ55 hard disk drive specifications, see Table D–9.
- For RZ55 hard disk drive environmental specifications, see Table D–10.

Table D–1 System Unit Dimensions (Diskless System)

Weight	Height	Width	Depth
7.7 kg	10.3 cm	46.2 cm	40 cm
(17 lb)	(4 in)	(18.12 in)	(15.5 in)

Table D–2 System Specifications

Processor	KA42–AA 90 ns CPU and 32 KB cache
DRAM memory	8 MB on board
ROM memory	256 KB
Optional coprocessor	8-plane graphics coprocessor
Optional hard disks	One or two 55.5 MB integral hard disks, one or two 104 MB integral hard disks, and 332 MB hard disk expansion box
Optional expansion boxes	RZ55, TK50Z, and RRD40
Monitor	Options include 38 cm (15 in) monochrome or color, 1024-by-864-pixel; 48 cm (19 in) monochrome or color, 1024-by-864-pixel
	For hardware specifications, see monitor guide.
Interfaces	1 SCSI/ST506 or 1 SCSI/SCSI port, 1 ThinWire Ethernet port, 1 standard Ethernet port and serial lines

Table D–3 System Storage Conditions

Temperature range	5°C to 50°C (41°F to 122°F)
Relative humidity	10% to 95% (noncondensing)
Altitude	0 to 2400 m (0 to 8000 ft)
Maximum wet bulb temperature	32°C (90°F)
Minimum dew point	2°C (36°F)

Table D–4 System Operating and Nonoperating Conditions

Operating Conditions	
Temperature range	10°C to 40°C (50°F to 104°F)
Temperature change rate	11°C/hr (20°F/hr) maximum
Relative humidity	10% to 90% (noncondensing, no diskette)
Altitude	2400 m (8000 ft)
Maximum wet bulb temperature	28°C (82°F)
Minimum dew point	2°C (36°F)

Nonoperating Conditions	
Temperature range	–40°C to 66°C (–40°F to –151°F)
Relative humidity	95% @ 66°C (may condense)
Altitude	4900 m (16,000 ft)
Maximum wet bulb temperature	28°C (82°F)
Minimum dew point	2°C (36°F)

Table D–5 System Electrical Specifications

Input voltage	Automatically adjusting AC input from 120 VAC to 240 VAC
Frequency range	47 to 60 Hz

Table D–6 RZ22/23 Hard Disk Drive Specifications

Physical Dimensions	RZ22	RZ23
Weight	.780 kg (1.72 lb)	.826 kg (1.82 lb)
Height	41.28 mm (1.625 in)	41.28 mm (1.625 in)
Width	101.6 mm (4.00 in)	101.6 mm (4.00 in)
Depth	146.05 mm (5.75 in)	146.05 mm (5.75 in)

Formatted Storage Capacity	RZ22	RZ23
Per drive	55.5 MB	104 MB
Per surface	13 MB	13 MB
Bytes per track	16,896	16,896
Bytes per block	512	512
Blocks per track	33	33
Blocks per drive	102,432	204,864
Spare blocks per track	1	1
Spare blocks per drive	3104	6208

Performance	RZ22	RZ23
Transfer rate to/from media	1.25 MB/sec	1.25 MB/sec
Transfer rate to/from buffer	1.25 MB/sec	1.25 MB/sec
Seek time track to track	$\leq$ 8 msec	$\leq$ 8 msec
Seek time average	$\leq$ 25 msec	$\leq$ 25 msec
Seek time maximum (full stroke)	$\leq$ 45 msec	$\leq$ 45 msec
Average latency	8.4 msec	8.4 msec
Rotational speed	3575 RPM $\pm$0.1%	3575 RPM $\pm$0.1%
Start time (maximum)	20 sec	20 sec
Stop time (maximum)	20 sec	20 sec
Interleave	1:1	1:1

Environmental Specifications	Operating	Nonoperating
Ambient temperature	10°C to 60°C (50°F to 110°F)	–40°C to 66°C (–40°F to 150°F)
Relative humidity	8% to 80%	8% to 95% (packaged)
Altitude	–1000 ft to 10,000 ft (–304 m to 3048 m)	–1000 ft to 40,000 ft (–304 m to 12,192 m)
Maximum wet bulb (noncondensing)	25.6°C (78°F)	46°C (115°F)
Heat dissipation	8 W (typical) (27.36 Btu/hr) 9 W max. (30.8 Btu/hr)	—
Temperature gradient	11°C/hr (20°F/hr)	20° C/hr (36° F/hr)

Table D–7 RX23 Diskette Drive Specifications

Subject	Description
Diskette size	9 cm (3.5 in)
Diskettes/diskette drive	1
Data capacity	1.2 MB (RX23K)
Track density	135 TPI
Storage capacity (high density)	600 KB

Table D–8 RZ55 Hard Disk Drive Dimensions

Weight	Height	Width	Depth
13.2 kg	14 cm	33 cm	29 cm
(29 lb)	(5.5 in)	(12.75 in)	(11.25 in)

Table D–9 RZ55 Hard Disk Drive Specifications

Subject	Description
Formatted capacity per drive	332.30 MB
Formatted capacity per surface	2.48 MB
Formatted capacity per track	18,432
Formatted capacity per block	512 bytes
Formatted blocks per track	36
Formatted blocks per drive	649,040
Formatted capacity spare blocks per cylinder	8
Formatted capacity spare blocks per drive	10300 MB
Transfer rate to and from media	1.25 MB/sec
Performance bus asynchronous mode	1.50 MB/sec
Performance bus synchronous mode	4 MB/sec
Performance seek time track to track	$\leq$ 4 milliseconds
Performance seek time average	$\leq$ 16 milliseconds
Performance seek time maximum	$\leq$ 35 milliseconds
Average rotational latency	8.3 milliseconds
Rotational speed	3600 RPM
Start time	20 seconds maximum
Stop time	20 seconds maximum
Interleave	1:1
Bus latency	600 microseconds
Input current	2.4 Amps @ 100–120 VAC
Frequency	50–60 Hz
Power	160 Watts

Table D–10 RZ55 Hard Disk Drive Environmental Specifications

	Operating	Nonoperating
Ambient temperature	10°C to 50°C (50°F to 122°F)	–40°C to 66°C (–40°F to 150°F)
Relative humidity	8% to 80% (noncondensing)	8% to 95%
Altitude	–300 m to 4600 m (–1000 ft to 15,000 ft)	–300 m to 12,200 m (–1000 ft to 40,000 ft)
Maximum wet bulb	25.6°C (46° F)	46°C (82.8°F)

Glossary

accelerator

A shortcut that allows you to work more quickly by eliminating steps needed to invoke a command. Accelerators include key bindings or pointing-device-button bindings, pop-up menus, and double clicks.

account

A key to the system for each user. All users have accounts that identify them by account name to the system. When you enter your account, you log in by identifying your account name and password. The account informs the operating system where your files are and what kinds of access to other files and system resources you should be given.

active insertion point

An insertion point, indicated by a blinking cursor, that is ready to accept user input.

active window

The window that is ready to accept input from the keyboard (that is, that currently has *input focus*).

application program

A program, such as a financial spreadsheet program, that performs an end-user task.

application title

The part of the window that identifies the window and the primary file, if any, associated with an application. The application title is located to the right of the shrink-to-icon button.

architecture

The internal configuration of a computer (processor) including its registers, instruction set, and input/output structure.

ASCII

American Standard Code for Information Interchange. A set of 7- or 8-bit binary numbers representing the alphabet, punctuation, numerals, and other special symbols used in text representation and communications protocol.

background

The default contents of a window.

backup

A procedure that allows you to make copies of information to be retained in the event of a computer failure.

bad blocks

A damaged block on a disk that the system cannot access. Blocks become damaged from wear or abuse.

batch queue

A series of tasks that the computer processes in a certain order, without user interaction.

baud rate

The speed at which signals are serially transmitted along a communications line. One baud equals 1 bit per second.

binary

A number system that uses two digits: 0 and 1. They are represented in system circuitry by two voltage levels, and programs are executed in binary form.

bit

A binary digit; the smallest unit of information in a binary system of notation, designated as a 0 or a 1.

block

A standard unit of storage space on a disk or tape surface; 512 bytes. Although a drive writes data to the disk or tape 1 byte at a time, a block is the smallest amount of space on a disk or tape that the system can access.

boot

To bring a device or system to a defined state where it can operate on its own.

bootable medium

A fixed disk, an optical disk, or magnetic tape cartridge containing Desktop-VMS software that can be loaded into memory and executed.

boot device

The device on which the operating system is loaded. This device is the management center and major resource provider for a local area VAXcluster.

BOT

Beginning of tape. See **drive leader**.

bus

A channel (a set of wires) along which communication signals in a computer system travel.

button

An on-screen control that allows you to choose actions or operations and set states.

byte

A group of 8 binary digits (bits). A byte is one-quarter of a VAX system longword.

cable

A sheathed group of electrical conductors.

caddy

The holder for the compact disc.

cancel

To remove a modal dialog box without applying changes.

cartridge leader

A plastic leader at the beginning of magnetic tape.

CD

See **compact disc**.

central processing unit (CPU)

The part of the system that controls the interpretation and execution of instructions.

checksum

A number you enter when installing Digital software to identify your license for the software.

choose

To pick an operation by clicking on a control or dragging to a menu item.

click

To press and release a mouse button.

client

An application program connected to the server.

client

Hardware or software that obtains a specific set of services from a server.

clip

To restrict drawing to a specified area of a window.

clipboard

The storage area (buffer) for the most recently cut or copied information (text or graphics).

clip region

A region to which screen output is restricted.

close

To remove a window associated with an application.

cluster

A group of computers networked together that share disk storage, application programs, and other computer resources. Also called a VAXcluster.

cluster group number

A number that identifies a cluster on a network. Each cluster on a network has a differenct cluster group number.

cluster password

A password specified during software installation. The password ensures the integrity of each cluster on the same Ethernet that accidentally use identical group numbers.

command

A request you make to the operating system to perfom a specific function. For example, a request to run a program.

command box

A subdivision of the main window within which you can enter commands and receive messages in response to those commands.

command item

A choice on a menu that initiates an action or operation directly, without calling a dialog box or submenu.

communications line

A cable along which electrical signals are transmitted. Devices or systems that are connected by a communications line can share information and resources.

compact disc

A flat circular plate on which read-only optical data is stored. A laser optical reader, also called a compact disc, retrieves this information.

computer system

A combination of system hardware, software, and external devices that performs operations and tasks.

configuration

The layout of hardware in a computer system.

connection

The network path between a client and server.

connector

A BNC-style connector that connects a section of ThinWire cable to a T-connector, to a system, or to a barrel connector.

console

A device through which an operator communicates with the computer.

console mode

The state in which the computer is controlled from the console terminal. Your system can be put in console mode by pressing the halt button on the rear panel of the system unit. Console mode is indicated by the console prompt (>>>) on the monitor screen. The other mode the system can operate in is program mode. (See **program mode**.)

console prompt

A prompt used for communication between the user and the computer.

control

A screen object that allows you to provide input to applications.

controller

A system component, usually a printed circuit board, that regulates the operation of one or more peripheral devices.

control panel

A subregion or dialog box containing controls often used during a work session. The control panel can remain on the screen during a work session.

CPU

See **central processing unit**.

cursor

A blinking line or figure on the screen that indicates where the next character you type will appear.

daisy-chain

To link computers or expansion boxes sequentially.

daisy-chain

To link computers or devices sequentially.

data

A formal representation of information suitable for communication, interpretation, and processing by humans or computers.

data transmission

The movement of data in the form of electrical signals along a communications line.

debug

To detect, locate, and correct errors (bugs) in hardware or software.

DECconnect

Digital's simple, cost-effective cabling system for extending Ethernet and terminal interconnections into offices and work areas.

DECconnect faceplate

A wall receptacle that provides a single network connection for your workstation.

DECnet

Digital networking software that runs on nodes in both local and wide area networks.

default

A value or setting that in most cases is normal or expected.

default push button

The default option that provides you with the most reasonable and least destructive response to a dialog box query. The default push button is selected when you press the Return key.

device

The general name for any unit connected to the system that is capable of receiving, storing, or transmitting data. (See **input/output (I/O) device** and **controller**.)

device name

The name by which a device or controller is identified in the system.

diagnostics

Programs, located in read-only memory, that detect and identify abnormal system hardware operation. See **read-only memory**.

dialog box

A special window that is displayed in response to your action. Usually, you must take an appropriate action (as indicated by the alternatives presented in the dialog box) to continue application activity.

dim

To give an object a faded appearance, indicating that the object is inactive or disabled.

direct manipulation

A way of interacting with the computer that allows you to use a windowing system and a mouse to communicate with the computer.

directory

A file that catalogs a set of files by name and location.

disable

To make inaccessible to the user.

disc

See **compact disc**.

disk

A flat circular plate with a coating on which data is magnetically stored in concentric circles (tracks). A fixed disk resides permanently inside a disk drive, while a diskette is removable.

disk drive

A device that holds a disk. The drive contains mechanical components that spin the disk and move the read/write heads that store and read information on the surface of the disk.

disk server

A hardware system designed to provide operating system and data storage for other users.

diskette

A flexible disk contained in a square jacket. Diskettes can be inserted and removed from diskette drives.

diskette drive

A disk drive that only reads or writes on removable diskettes.

diskless system

A VAXstation 3100 Model 30 system that has no storage capacity of its own.

dismiss

To remove a modeless dialog box.

dismount

An operation that relinquishes control of a disk or tape drive that was previously mounted and under the control of a specific process.

display

The connection between a client and server.

display screen

See **monitor**.

double click

To press and release a mouse button twice quickly, without moving the mouse.

down-line load

To send a copy of a system image or other file over a communications line to the memory of a target node.

drag

To press and hold a mouse button, move the mouse, and then release the button when the pointer is in the desired position.

drive leader

A plastic leader inside the TZ30 tape drive. The cartridge leader on the magnetic tape and the drive leader on the tape drive mate. The drive leader draws the magnetic tape out of the tape cartridge and onto a take-up reel inside the drive. As the tape is wound onto the take-up reel, it passes the magnetic read and write heads.

error message

A message displayed by a system to indicate a mistake or malfunction.

Ethernet

A type of local area network based on Carrier Sense Multiple Access with Collision Detection (CSMA/CD). A communications concept for local communication networks that use coaxial cable.

exit

To leave an application, automatically saving the file.

exposure

A report that the server has made either a window or part of a window visible on the screen.

extended selection

An existing selection that has been altered by pressing and holding the Shift key in conjunction with MB1.

file

A collection of related information treated by the system as a single unit.

format

See **initialize**.

graphics

Computer output of drawings, charts, and graphs.

graphics coprocessor

A special-purpose CPU, with its own set of commands, data formats, and an instruction counter, which executes a sequence of display instructions to create a drawing or graph on the display device.

graphics exposure

A report by the server that part of the source for a copy operation is unavailable.

ground

A voltage reference point in a system that has a zero voltage potential.

handle

A rectangular symbol on the border of a screen object that appears when that object is selected for operations such as moving, sizing, copying, or deleting.

hard disk

A hard disk resides permanently inside a disk drive. Compare to diskette.

hardware

The physical equipment—mechanical and electrical—that makes up a system. Compare to **software**.

hardware Ethernet address

The unique Ethernet physical address associated with a particular Ethernet communications controller.

head

The part of a fixed disk drive, diskette drive, or tape drive that reads, records, and erases data. Also called read/write head.

help menu

Allows you to access a help facility associated with a specific application.

help pointer

The pointer used with DECwindows help.

horizontal pane pointer

The pointer used to reposition a vertical boundary between panes by moving the boundary left or right.

host

The system on which the client is operating.

host system

The primary or controlling computer in a multiple computer network.

hotspot

The point within the pointer that corresponds to the coordinate location of the pointing device.

housing

The plastic case in which a compact disc sits.

icon box

A special window that contains icons representing the applications available to you.

icons

Graphical representations of applications or objects. Icons appear on your screen in the icon box.

inactive insertion point

An insertion point, indicated by a dimmed cursor, associated with text in an inactive window.

inactive pointer

The pointer that appears in regions of the application window that the application has rendered temporarily inactive, as when waiting for your input to a dialog box.

inactive window

A window that is not ready to accept input from the keyboard.

index window

A window attached to the scroll bar that offers a guide to the material to be displayed on the screen when the mouse button is released.

indicator

A symbol that designates the status of a radio or toggle button, or a radio or toggle item.

initialize

To prepare a new disk or diskette for use. Initializing erases any files stored on the disk or diskette.

input

Power, energy, or data entered into a device or system in order to produce a result or output.

input/output (I/O) device

A piece of equipment that accepts data for transmission to (input) and from (output) the system. For example, a terminal.

input device

A keyboard, mouse, tablet, track-ball, button, key, or other source of input to the workstation.

input focus

The ability to accept your input from the keyboard.

insertion point

The point on the screen where data will be inserted using the keyboard, the clipboard, or functions for creating graphic objects.

interactive

A method of communicating with the computer. In an interactive session, you enter a command at the keyboard and the system executes the command and responds with a prompt character for another command.

interface

(1) An electronic circuit board that links an external device to a computer. (2) A device or piece of software that allows the components of the system to communicate with each other.

kilobyte (K)

When referring to memory or secondary storage capacity, 1024 bytes.

label

An inactive symbol or text that identifies a control.

link

A communication path between two nodes. A physical link is the electrical connection between two nodes. A logical link implies that two nodes are able to communicate whether or not they have a direct physical link.

list box

A dialog box component that displays a list of options, such as available files, from which you can select one or more options. List boxes include scroll bars to allow you to move through lists that are too big to display in the dialog box.

load

To copy software (usually from a peripheral device) to memory. Also, to place a disk in a disk drive or a tape in a tape drive.

load device

The drive that holds the distribution media during software installation.

local area network (LAN)

A high-speed communications network that covers a limited geographical area, such as a section of a building, an entire building, or a cluster of buildings. It is a privately owned communication network whose speed is upward of 1 megabit per second.

local area VAXcluster

A group of two or more computers connected by an Ethernet cable or computer-interconnect. In a LAVc, one computer (called a boot server) serves the other computers (called satellite nodes), and starts the other computers and manages the resources that they share.

logical link

A state by which two nodes are able to communicate by means of software whether or not they have a direct physical link.

log in

Identify oneself to the operating system. When you log in, you type an account name and password. If the name and password match an account on the system, you are allowed access to that account.

magnetic tape

A tape made of plastic and coated with magnetic oxide, and used to store data. Also called magtape.

main window

A single window that is the starting point for all your interaction with an application.

megabyte (MB)

A unit of measure equal to 1,000 kilobytes or 1,048,576 bytes.

memory

The area of the system that electrically stores instructions and data, often temporarily.

memory module

A printed circuit board that contains additional memory for the system.

menu

A list from which you can choose one or more items.

menu bar

A horizontal subdivision of a window that contains the names of pull-down menus.

menu item

A choice on any type of menu, including pop-up menus, pull-down menus, and submenus.

menu name

The title of a menu listed in the menu bar.

MIPS

Millions of instructions per second. A measure of processor performance.

modem

A device that converts computer signals to signals that can be sent over a telephone line.

module

A printed circuit board that contains electrical components and electrically conductive pathways between components. A module stores data or memory or controls the functions of a device.

monitor

A video device that displays data.

mount

To make a disk or tape drive available to the system. The system is alerted to expect data from the drive.

mouse

A pointing device that, when moved across any surface, causes a corresponding movement of the pointer. A mouse can have one or more buttons.

MS-DOS

An operating system produced by Microsoft Corporation.

name

An active symbol or text that identifies a control or menu.

network coordinator (network manager)

The person who manages the network, assigns unique node names and addresses for each system on the network, and provides administrative assistance to network users.

node

A computer, workstation, or peripheral device that is connected to a network, and can communicate with other members of the network.

object

An entity on the screen, such as a button, control, graphic, icon, menu, pointer, text, and so on.

object selection

Selection of graphic screen entities, such as pictures.

object text insertion pointer

The pointer that specifies the point where text can be entered.

online documentation

The concept of reading books and manuals directly on the screen of your monitor. Online books and manuals are stored on the system, and include all text and illustrations found in printed manuals. Faster access time and cross-referencing are two advantages of online documentation.

operating system

A collection of system programs that controls the operation of the system and allows the user access to data files, input/output devices, and applications programs. The Desktop-VMS software performs such tasks as assigning memory to programs and data, processing requests, and scheduling jobs. VMS and ULTRIX operating systems are available for the VAXstation 3100 and VAXserver 3400 systems.

option box

A control within a dialog box, consisting of a label and an active region, that shows the available options and the current option selected.

option menu

Control that consists of a label and an active area that shows the current option selected. Clicking on the active area produces a pop-up menu.

output

Data that has been processed by the computer.

output device

A device that accepts data from the system. A printer is an example of an output device.

owner name

The full name of a person who has an account on the system (the account owner). The owner name allows you to identify the account owner; however, your Desktop-VMS system does not use the owner name for validation purposes (see **user name**).

password

A unique string of characters and/or numbers that identifies you to the computer.

pending delete

A state in which selected text will disappear when you press a key; the selected text is replaced with keyboard input.

peripheral device

A device that provides the CPU with additional memory storage or communication capability. Examples are disk and diskette drives, video terminals, and printers.

physical link

The electrical connection between two network nodes.

pixel

A picture element. A location on the monitor screen that can be selectively turned on or off. The basic unit of a graphic display.

plotter

A device to construct visual representations of data by an automatic pen or pencil. Plotters can also receive plotting coordinates from digital computers.

pointer

An on-screen symbol that specifies position by reflecting the motion of the mouse. The pointer shape indicates the type of operation being performed.

pointer shape

The form of the pointer. Different pointer shapes indicate the type or state of the operation the user has chosen.

pointer speed

The relationship between the distance that you move the mouse and the distance that the pointer moves on the screen.

pointing device

A terminal input device that allows you to make a selection from a menu or to draw graphics. See **mouse** and **tablet**.

pointing device

The hardware used to control pointer position on the screen. See also **mouse, puck, stylus, tablet**.

pop-up menu

A context-sensitive menu that appears at the current pointer position when you press the mouse button defined for this function.

port

The name of the socket at the back of the computer to which a terminal, printer, or other communication device is connected.

power-up sequence (power up)

A series of ordered events that occur when you supply power by turning on the system.

pre-fill

The first text entry field in a dialog box that is filled with the current selection.

primary selector

The pointing device button that initiates actions, such as menu manipulation and selection or cut and paste operations.

print queue

A group of items waiting to be printed by a printer. The arrangement of items determines the processing priority.

privileged account

An account that allows a user complete access to systemwide operations.

process

A program currently using memory and running on the system.

program

The sequence of instructions the system uses to perform a task. (See **software**.)

program mode

The state in which the computer is controlled by the operating system. After the operating system is installed, the system will always operate in program mode, unless you put it into console mode. (See **console mode**.)

prompt

A brief message printed or displayed by a program or an operating system, asking the user to provide input.

public device

A disk drive, tape drive, or other device available to computers that are not directly connected to it. In a VAXcluster, computers access public devices across a local area network.

puck

A palm-sized device that slides on a tablet's surface and together function as a pointing device. (See **pointing device** and **tablet**.)

pull-down menu

A menu that is displayed when you press a mouse button when the pointer is positioned on a menu name in the menu bar.

push button

A control consisting of a rectangular box and a label that indicates the command to be performed.

push-to-back button

A button within the window title bar that allows you to move the window to the back of the window stack.

queue

A list of items or tasks to be processed in a certain order. See **batch queue** and **print queue**.

quit

To leave an application. You will be prompted as to whether or not to save changes to a file.

random-access memory (RAM)

Memory that can be both read and written into and can randomly access any one location during normal operations. The type of memory the system uses to store the instructions of programs currently being run.

read-only memory (ROM)

Memory that cannot be modified. The system can use the data contained in ROM but cannot change it.

region

An area of a window.

resize button

A control used to resize a window.

resize pointer

The pointer used for resizing operations.

resolution

A measure of the precision or sharpness of a graphic image. Often a function of the number of pixels on a screen.

restore

To recover files or software that has been backed up, copying the material from the backup medium (such as a tape or diskette) to the medium you normally use.

ROM

See **read-only memory (ROM)**.

run

A single continuous execution of a program (noun). To execute a program (verb).

runtime

The amount of computing time a program requires to be carried out.

satellite node

A node that is booted remotely from the system disk on the boot server. A computer system that obtains a specific set of services from a server system. Contrast **server node**.

save set

A kit for installing a program. It includes one or more files to be processed into a form that can be executed on the computer.

scale

Control that allows you to enter a numerical value by adjusting a pointer to a specific position along a line.

scroll bar

A subregion that allows you to move through a block of information that is too big to be displayed at one time.

scroll region

A scroll bar component in which the slider moves. The relationship between the size of the slider and the size of the scroll region corresponds to the relationship between the size of the material displayed and the size of the file.

SCSI

See **Small Computer System Interface**.

section

A single length of ThinWire Ethernet cable terminated at each end with a connector.

segment

A length of cable made up of one or more cable sections connected with barrel connectors or T-connectors.

select

To designate information, either text or graphics, that will be the object of a subsequent operation or operations.

selection

Text or graphics that will be the object of a subsequent operation or operations.

selection hierarchy

Multiple clicks of MB1 used to select successively larger (or smaller) text regions.

select pointer

The pointer used for selection operations.

server

Hardware or software that provides a specific set of services to a satellite or client.

server node

In a VAXcluster or a work group, a computer that is used to start the satellite nodes and to manage their use of common resources.

shift click

To position the pointer where you want the action to occur, and then press and hold the Shift key while clicking MB1.

shrink-to-icon button

A control that shrinks a window to an icon.

size

To define the size of screen objects.

slider

A scroll bar component used to move a window over information that is too big to be displayed at one time. The relationship between the size of the slider and the size of the scroll region corresponds to the relationship between the size of the material displayed and the size of the file.

Small Computer System Interface (SCSI)

An interface designed for connecting disks and other peripheral devices to computer systems. SCSI is defined by an American National Standards Institute (ANSI) standard and is used by many computer and peripheral vendors throughout the industry.

software

Programs executed by the system to perform a chosen or required function. Compare **hardware**.

standalone workstation

A workstation that starts and operates alone without being connected to another computer.

standard dialog box

Any specific-purpose dialog box supplied with the DECwindows Toolkit.

standard Ethernet network

An Ethernet network connected with standard Ethernet cable. Compare **ThinWire Ethernet network**.

standard menu

Any specific-purpose menu supplied with the DECwindows Toolkit.

status region

A region that provides you with information about the state of the operating system or application.

stepping arrow

A scroll bar component used to move a window incrementally through information that is too big to be displayed at one time.

storage medium

A device, such as a diskette or tape, capable of recording information.

store

To enter data into a storage device, such as a disk, or into memory.

stylus

A pointing device used with a tablet. Moving the stylus across the tablet causes a corresponding movement of the pointer. The tip of the stylus usually functions as a button; the barrel of the stylus can have one or more additional buttons.

submenu

A menu, associated with a pull-down or pop-up menu, that is displayed in response to dragging the pointer over a submenu icon. The availability of a submenu is shown on a menu by a submenu icon. See also **pop-up menu, pull-down menu, submenu icon**.

submenu icon

A symbol, associated with a menu item, that signifies the availability of a submenu. Dragging the pointer over the icon causes the submenu to appear.

subregion

A subdivision of a region. Applications can divide regions into multiple subregions.

system

A combination of hardware, software, and peripheral devices that performs specific processing operations.

system disk

The disk that stores the operating system, and which starts the system and allows it to run properly.

system image

The image that is read into memory from disk when the system is started up (booted).

system management tasks

Tasks performed by an assigned person to operate and maintain the system. That person is usually the system manager.

system manager account

A privileged account that the system manager logs into. When you install the Desktop-VMS software, a single system manager account is set.

tablet

An absolute-positioning input device composed of a flat-surfaced digitizing tablet, a puck, and a stylus. The tablet is a drawing surface. The puck and stylus are pointing devices that move the cursor on the monitor screen, draw graphics, and make selections from the menu.

tabular selection

Selection of a unit within a table or form.

tape drive

A device that contains mechanical components and holds, turns, reads, and writes on magnetic tape.

T-connector

Connector used to join ThinWire Ethernet cable sections. The connector also has a connector that is attached directly to a system.

terminal

An input/output device that lets you communicate with the system. Terminals are divided into two categories: video and hard-copy.

terminator

A connector used on one or both ends of an Ethernet segment that provides the 50-ohm termination resistance needed for the cable.

text cursor

A block or line, usually blinking, displayed on a CRT screen to indicate where the next character you enter will appear.

text-entry field

A dialog box control that allows you to enter text in a structured area.

text insertion cursor

A block-shaped cursor that shows where text will be entered in a window. This cursor indicates that text will be entered in insert mode.

text insertion pointer

The pointer that specifies the point where text can be entered.

text overstrike cursor

A cursor shaped like an I-beam or a capital I that shows where text will be entered in a window. This cursor indicates that text will be entered in overstrike mode.

ThinWire connector

The connector on the rear of the system unit to which the ThinWire Ethernet cable is attached.

ThinWire Ethernet network

A Digital trademark used to describe Ethernet products used for local distribution of data.

title bar

A horizontal bar in a window that identifies the application and contains window management controls.

toggle button

An on-screen control consisting of a button name with an indicator next to it. Toggle buttons allow you to choose one of two alternate states.

toggle indicator

A square, which is part of a toggle button or toggle item, that designates which buttons or items have been chosen.

toggle item

An item on a menu, consisting of a name and an indicator designating each item chosen. A menu can include more than one toggle item.

transceiver

A device that provides a single physical connection between standard Ethernet and Ethernet communication equipment.

triple click

To position the pointer where you want the action to occur, and then press and release a mouse button three times quickly without moving the mouse.

user account

An account that has limited access to system resources. The system manager creates user accounts and can determine the types of privileges each one has.

VAXcluster

A group of two or computers connected by an Ethernet cable. In a VAXcluster, one computer serves the other computers: it is required to start the other computers, and manages the resources that they share.

wait pointer

The pointer used to indicate that work is in progress.

window

An area on your monitor screen in which you can start, run, and view a separate process. Windowing is supported by both VMS and ULTRIX workstation software.

window

An area on the screen in which you can interact with an application.

word

The largest number of bits (16) that the system can handle in an operation. The system can also handle longwords (that is, two words or 32 bits).

work region

A subdivision of a window or subwindow in which you perform most application tasks.

workstation

A single-user system that offers high-performance, high-resolution graphics, and can function in a network environment.

X Window System

A windowing system architecture that allows the execution and display of applications to be independent. Specific components of the architecture control the display of applications. Different components determine how applications run. Since its introduction by MIT, the X Window System has become an industry standard.

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