ULTRIX
Worksystem Software

digital

DECwindows Desktop Applications Guide

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This guide describes how to use DECwindows Desktop Applications.

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About This Guide

Purpose of This Guide

This guide describes the UWS DECwindows Desktop Applications.

Who Should Use This Guide

This guide is intended for all ULTRIX DECwindows users. This guide assumes the user has read the *DECwindows User's Guide* to become familiar with DECwindows terms and the techniques for manipulating windows. In addition, the user should have some experience using the DECwindows Session Manager and User Executive applications.

Structure of This Guide

This guide includes the following chapters:

- Chapter 1 —Using the Calculator
- Chapter 2 —Using the Calendar
- Chapter 3 —Using the Cardfiler
- Chapter 6 —Using the CDA Viewer
- Chapter 4 —Using the Clock
- Chapter 5 —Using DECterm
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- Chapter 8 —Using the Notepad Editor
- Chapter 9 —Using Paint
- Chapter 10—Using the PostScript Previewer

- Chapter 11—Using the Puzzle

- Appendix A—Composing Characters

- Appendix B—National Replacement Character Sets

Related Documentation

You may wish to have the following manuals at hand:

- *DECwindows User's Guide*

- *DECterm Text Programming Manual*

- *DECterm Graphics Programming Manual*

Conventions

mouse	The term *mouse* refers to any pointing device, such as a mouse, a puck, or a stylus.
MB1, MB2, and MB3	MB1 indicates the left mouse button. MB2 indicates the middle mouse button. MB3 indicates the right mouse button. (The buttons can be redefined by the user.)
blue-green ink	Indicates information that you enter from the keyboard or a screen object that you must choose or click on.
boldface text	Represents the introduction of a new term
Return	A key name is shown enclosed to indicate that you press a key on the keyboard.
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.
. . .	A vertical ellipsis indicates the omission of items from a code example or command format; the items are omitted because they are not important to the topic being discussed.

1

Using the Calculator

The Calculator performs simple arithmetic functions—addition, subtraction, multiplication, division—and computes percentages and square roots. In addition, the Calculator performs trigonometric and inverse trigonometric functions, generates random numbers, and performs other more advanced operations.

Unlike a handheld calculator, it has two displays. The top display is the accumulator, which shows the number being entered or the current result, and the bottom display is the memory.

This chapter describes how to:

- Start the Calculator
- Enter data
- Perform arithmetic functions
- Use the memory
- Transfer data to or from the clipboard
- Exit from the Calculator

Starting the Calculator

To start the Calculator, choose Calculator from the Session Manager Applications menu or enter the following command in a DECterm window:

```
% dxcalc &
```

A small calculator is displayed on your screen. You can move and change the size of the Calculator window as you wish.

Calculator			
File **Edit**			**Help**

0.

digital | 0.

| MC | MR | M+ | M− |

| deg | x! | 1/x | Rnd |

| Inv | sin | cos | tan |
| log | ln | √ | y^x |

C	7 8 9	/ ±
	4 5 6	* %
CE	1 2 3	−
	0 . π	+ =
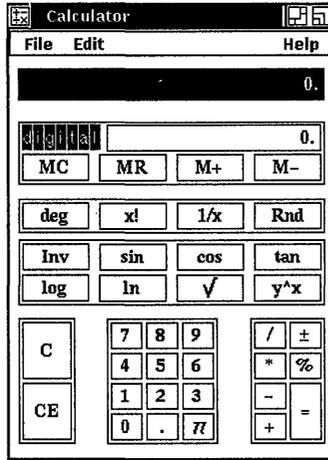
Operating the Calculator

You can use the Calculator with either the mouse or the keyboard. With the mouse, point to the appropriate button and click MB1. With the keyboard, enter the numbers 0 to 9 from the main keyboard or the keypad. Press the Shift key to enter the arithmetic functions (+, -, *, /, %, =) on the main keyboard. From the keypad, pressing the following keys produces the corresponding functions:

Press . . .	To Produce . . .
PF1	/
PF2	$\sqrt{a,b}$
PF3	*
PF4	%
comma key	+
Enter or Do	=
F17	MC
F18	MR
F19	M+
F20	M−

Accumulator

Memory

Clear Memory

Calculator

File   Edit   Help

0.

digital   0.

MC   MR   M+   M–

deg   x!   1/x   Rnd

Inv   sin   cos   tan

log   ln   √   y^x

C   7 8 9   / ±
        4 5 6   * %
CE   1 2 3   – =
        0 . π   +

Subtract Contents of
Accumulator from Memory

Add Contents of
Accumulator to Memory

Clear Accumulator

Add Contents of
Memory to Accumulator

Clear Last Entry
from Accumulator

Clear Sign of
Accumulator

When you enter data into the accumulator, notice that the
Calculator uses a decimal point to distinguish between random
digits and an operand. See what happens as you enter the
following data:

1   Enter 1134. Notice that no decimal point appears in the
    accumulator.

2   Enter a plus sign (+). The Calculator inserts a decimal point
    after the digits 1134 to signify the completion of an operand.

Depending on the contents of the accumulator, you can use one of
the following methods to correct mistakes in computation:

■   Press the Delete key to erase the last digits entered in the
    accumulator.

■   Click on the CE button to void the last operand entered.

■   Choose Undo from the Edit menu to reverse the last operation,
    for example, to restore the last operand or to remove the
    previous paste operation.

Performing Arithmetic Functions

The Calculator displays numbers in the range of plus or minus 999,999,999. It performs all calculations in left to right order and treats operators with equal importance.

For example, to evaluate the equation 6 + 5 * 3:

1 Find the sum of 6 + 5.

Calculator displays an 11.

2 Find the product of 11 * 3.

The result is 33.

Also note the way the Calculator computes percentages. For example, to determine 6 percent of 195:

1 Enter 195.

The Calculator displays the digits in the accumulator.

2 Enter * and the Calculator inserts a decimal point.

3 Enter 6.

The number 6 is displayed in the accumulator.

4 Enter %.

The result, 11.7, is displayed in the accumulator.

Storing Values in Memory

Use the memory display to store results and values for later computation. The figure in memory starts out as zero. You can add the contents of the accumulator to memory or subtract the contents of the accumulator from memory, using the M+ and M- buttons respectively. To enter the contents of memory into the accumulator, click on the MR button. Clear the contents of memory with the MC button.

Performing Special Functions

The Calculator performs trigonometric and inverse trigonometric functions as well as other special functions.

The special function keys are as follows:

Key	Description
deg	Degree key. Selects the units for angular measurement. By default, the Calculator is in the degree mode. Clicking on the deg key once places the Calculator in the radian mode. This is indicated by the key label "rad". Clicking on the key again places the Calculator into gradian mode. This is indicated by the key label "grad". The angular mode has no effect on the Calculator unless trigonometric functions are being used.
x!	Factorial key. Calculates the factorial $(x)(x-1)(x-2)...(2)(1)$ of the value x in the display for integers $0 \leq x \leq 69.0! = 1$ by definition.
1/x	Reciprocal key. Divides the displayed value x into 1. The value x cannot equal be to 0.
Rnd	Random number generator key. Generates a random number between 1 and the integer of the display. It does not generate negative numbers or numbers less than 1.
Inv	Inversion key. By default, the Calculator performs non-inverted trigonometric functions. When you click on the inversion key, the Calculator performs inverted trigonometric functions.
sin	Sine key. Instructs the Calculator to find the sine of the displayed value.
cos	Cosine key. Instructs the Calculator to find the cosine of the displayed value.
tan	Instructs the Calculator to find the tangent of the displayed value.
log	Common logarithm key. Calculates the common logarithm (base 10) of the number x in the display. $x > 0$.
ln	Natural logarithm key. Calculates the natural logarithm (base e) of the number x in the display. $x > 0$.
square root	Square root key. Calculates the square root of the number x in the display. The x value cannot be negative.
y^x	Raises the displayed value y to the xth power. Order of entry is y y^x x. The y value cannot be negative, but both x and y can be fractional.

Copying Text with the Calculator

Edit
Undo Alt/Z
Copy Alt/C
Paste Alt/V
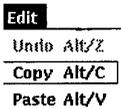
You can copy numbers from other applications into the Calculator's accumulator and from the Calculator accumulator or memory into another application.

Use the Copy menu item from the Edit menu to transfer data from the active display in the Calculator window to another application window. For example:

1   Click on the accumulator display.

2 Enter a number into the accumulator.

3 Choose Copy from the Edit menu. Or, for greater speed, press and hold MB2 to display a pop-up menu and choose Copy menu item.

Now you can paste the data from the clipboard to another application window.

Use the Paste menu item from the Edit menu to copy data from the clipboard. This data can be copied directly from another window, or it can be the result of an equation copied from another window. Calculator treats the contents of a paste operation just as if you typed in the data from the keyboard yourself.
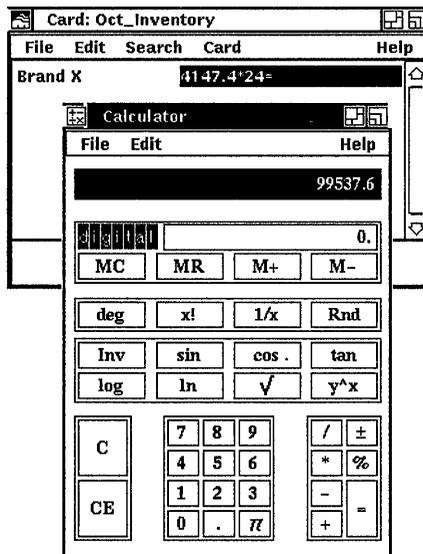
Exiting from the Calculator
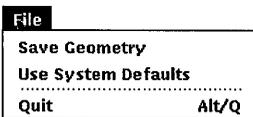
If you modified the screen placement and size of the Calculator during your session and would like to save those settings, choose Save Geometry from the File menu before exiting. The next time you start the Calculator, it will have the size and placement you specified..

To restore the default size and placement of the Calculator, choose Use System Defaults from the File menu.

To exit from the Calculator, choose Quit from the File menu.

2

Using the Calendar

The Calendar combines the functions of a desktop calendar and an appointment book to help you keep track of your meetings and plan your time. The Calendar lets you look at a year or month display, or review your scheduled appointments a day at a time.

You can also create several different calendars to use for specific purposes. For example, you could create one calendar to keep track of your personal enagagements and another calendar to be used by a group of people to schedule conference room reservations.

This chapter describes how to:

- Start the Calendar
- Move around the Calendar
- Create and delete entries
- Set alarms and repeat entries
- Move entries
- Use the Calendar's clock
- Mark special days
- Print part of a calendar
- Work with multiple calendars
- Create, rename, and delete a calendar
- Customize a calendar
- Exit from the Calendar

Starting the Calendar

To start the Calendar, choose Calendar from the Session Manager Applications menu or enter the following command in a DECterm window:
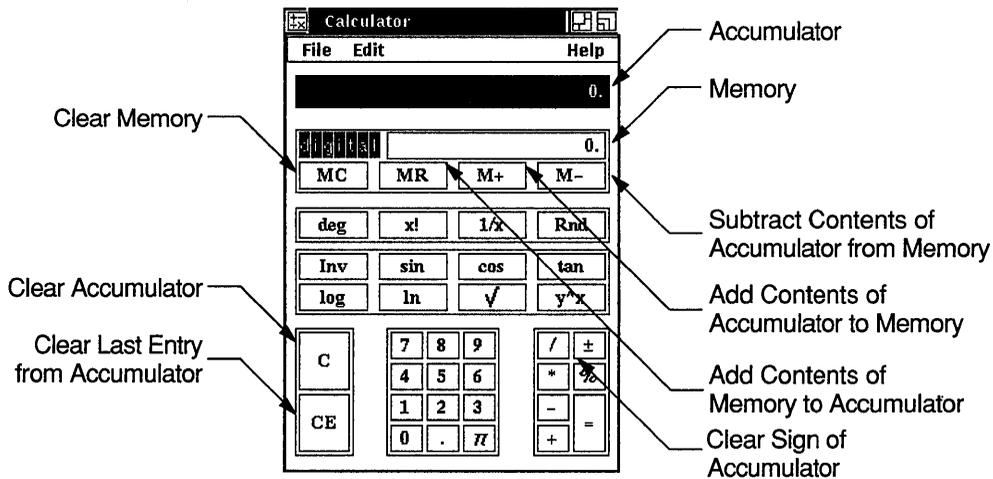
```
% dxcalendar&
```

The month display appears on your screen.

The month display shows the current month and year, with the days in the month arranged by week in rows. The current day has a box around it.

Moving Around Calendar
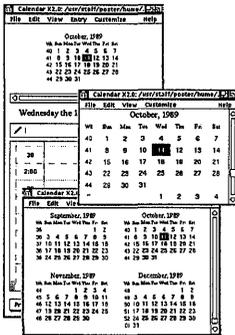
Calendar has three main displays: the month display, the day display, and the year display, which looks like 12 small month displays set out in a 4 by 3 matrix.

Scroll bars let you move backwards and forwards within a display, for example, to look at a future or a previous month when you are in a month display.

To move from one type of display to another, double click on the appropriate item in the current display. For example, double clicking on one of the days visible in the month display opens the day display for that day. Alternately, double clicking on a month in the year display opens the display for that month.

From the View menu, you can choose the Selected, Today, Day, Month, and Year menu items. Choosing the Today menu item displays the current day. To choose the Selected, Day, Month, and Year menu items, you must first select a day.

Creating an Entry

By double clicking on a particular day, you can open a display that shows timeslots from 8:00 a.m. to 5:30 p.m.

```
┌─────────────────────────────────────────────┐
│ [10] Calendar X2.0:                    [回][回] │
├─────────────────────────────────────────────┤
│ File   Edit   View   Entry   Customize   Help │
│                                               │
│        October, 1989           November, 1989 │
│   Wk Sun Mon Tue Wed Thu Fri Sat   Wk Sun Mon Tue Wed Thu Fri Sat │
│   40  1  2  3  4  5  6  7   44         1  2  3  4 │
│   41  8  9 [10] 11 12 13 14  45  5  6  7  8  9 10 11 │
│   42 15 16 17 18 19 20 21   46 12 13 14 15 16 17 18 │
│   43 22 23 24 25 26 27 28   47 19 20 21 22 23 24 25 │
│   44 29 30 31               48 26 27 28 29 30 │
│                                               │
│  ◁ ▭▭▭▭▭▭▭▭▭▭▭▭▭▭▭▭▭▭ ▬▬▬▬ ▭▭▭  ▷ │
│                                               │
│        Tuesday the 10th of October, 1989      │
│   ┌───────────────────────────────────────┐   │
│   │ ✎ │                                   │   │
│   └───────────────────────────────────────┘   │
│   ┌─────────────────────────────────────┬─┐  │
│   │   12:00                              │△│  │
│   │                                      │ │  │
│   │    30                                │ │  │
│   │                                      │ │  │
│   │   1:00                               │ │  │
│   │                                      │ │  │
│   │    30                                │ │  │
│   │                                      │ │  │
│   │   2:00                               │ │  │
│   │                                      │ │  │
│   │    30                                │ │  │
│   │                                      │ │  │
│   │   3:00                               │ │  │
│   │                                      │ │  │
│   │    30                                │▽│  │
│   └─────────────────────────────────────┴─┘  │
│   ┌────────────┐ ┌──────────┐ ┌───────────┐  │
│   │ Previous Day│ │ 2:28pm   │ │ Next Day  │  │
│   └────────────┘ └──────────┘ └───────────┘  │
└─────────────────────────────────────────────┘
```

Use the scroll bars to display timeslots earlier or later than the times shown. You can type entries, such as an appointment, directly into the timeslots. Or, by using the timeslot editor, you can type longer entries, activate alarms to remind you of appointments, and cause messages to repeat at regular intervals.

To record a short entry directly into a day display:

1 Display the day in which you want to make the entry.

2 Click (and drag to resize, if necessary) on the desired time in the day display.

3 Enter the text in the timeslot.

4 Click on the time again.

When a day has at least one entry in it, its day number changes from a normal font (nn) to an italic font (*nn*) wherever it is displayed. You can then distinguish between days containing appointments and free days in the month and year displays.

To create a longer entry using the entry editor:

1 Click on the desired timeslot in the day display.

2 Choose Edit... from the Entry menu or double click on the desired timeslot.

The entry editor is displayed:
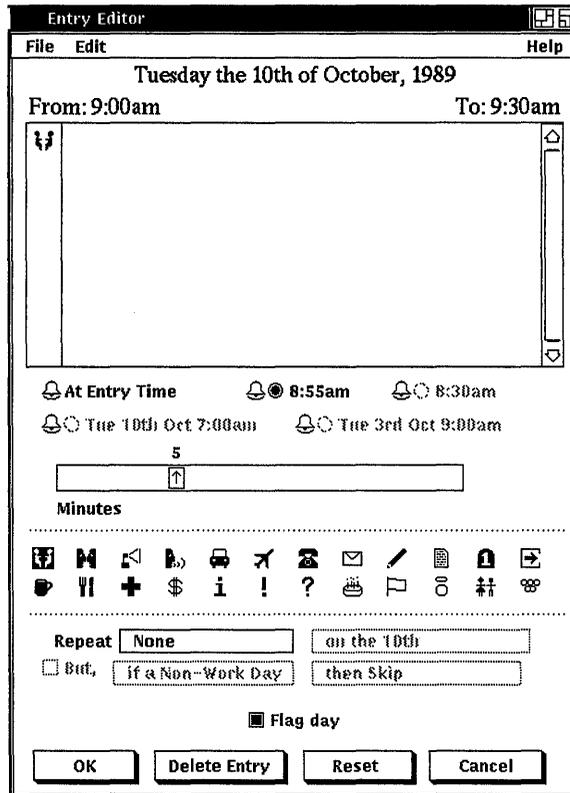
3 Enter the text and adjust the alarms and repeat intervals as required (see Setting Alarms and Making Repeat Entries).

The entry editor uses standard DECwindows editing commands.

4 Click on any icon that you want to associate with your entry.

These icons are symbols that can represent the contents of the entry, thus serving as a reminder for you. Calendar attaches no particular meaning to them.

The icons you select will appear in the **handle** of your entry. The handle is the area of an entry between the timeslot and the vertical resize bar.

5 Click on the OK button to confirm the entry and to dismiss the entry editor.

If you exit the editor without having entered any text, or if you delete all the text describing a previous entry, the timeslot remains unscheduled.

Changing the Size of a Timeslot

To change the size of a timeslot, press MB1 on the time you want to use as a starting point and drag the top edge of the timeslot up, or the bottom edge of the timeslot down. The timeslot is redrawn to the new size.

You can use this method to reduce or expand the time allocated for an entry. If you reduce the size of a timeslot, some text may no longer fit in the display, but it is not lost. The text reappears if you expand the timeslot again.

Setting Alarms

Normally, Calendar rings an alarm and displays a message five minutes before, and again at the time you specify.

The timeslot editor lets you modify the way the Calendar sets alarms. You can set alarms to ring at one or all of the following times:
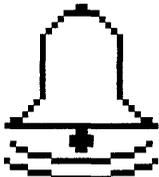
- At the time of the sceduled appointment (on by default)

- One to sixty minutes before the time you specified for the entry

- One to twenty-four hours before the time you specified for the entry

To set one or more alarms:

1 Click on the desired timeslot in the day display.

2 Choose Edit... from the Entry menu. The timeslot editor is displayed.

3 Write the entry if you have not already done so.

4 Click on the toggle button to set an alarm.

By default, alarms ring five minutes before the entry time and at the entry time.

5 Move the arrow in the scale to adjust to the time you want.

6 Click on the OK button to save the settings and to dismiss the timeslot editor.

You can also set alarms to ring at any of the following times by displaying the repeat options menu and choosing the desired option:

Daily
Weekly
Biweekly
Monthly
Bimonthly
Quarterly
Annually
Biannually
Triannually

When you choose an option, you can further customize when the alarm will ring. By enabling the But option and displaying the corresponding option menus, you can cause the alarms to skip or move forward or backward according to whether or not the day in question is a work day.

To modify the default intervals for all alarms, choose Alarms... from the Customize menu and make the desired changes in the Alarms dialog box. When you change the defaults, you can save them for future Calendar sessions. To save your settings, choose the Save Settings menu item from the Customize menu. To restore the default settings, choose Use Defaults from the Customize menu. To restore settings to the previous settings (other than default), choose Restore Settings from the Customize menu.

Deleting an Entry

To remove or clear the contents of a timeslot:

Entry

Edit...
Close
Delete...
Reset

1   Click on the timeslot in the day display that contains the entry you want to delete.

2   Choose Edit... from the Entry menu. The timeslot editor is displayed.

3   Click on the Delete Entry button.

    A dialog box is displayed, asking you to confirm that you want to delete the entry.

4   Click on Yes to confirm that you want to delete the entry.

Making Repeat Entries

Often, entries in a calendar are regular events. The Calendar makes it easy to schedule these events by allowing you to specify the time interval at which the entry should be repeated.

You can repeat an entry at the following intervals:

■   None

■   Daily

■   Weekly

■   Every two weeks

■   Every four weeks

These settings are made from the timeslot editor. To set a repeat interval for an entry:

1   Click on the timeslot in the day display that has the first occurrence of the entry.

2   Choose Edit... from the Entry menu. The timeslot editor is displayed.

3   Write the entry if you have not already done so.

4   Choose the repeat interval you want by clicking on the appropriate option button.

    You can choose only one repeat interval at a time. The preset option is None.

5   Click on the OK button to save the settings and to dismiss the timeslot editor.

If you change or delete an entry that is repeated, a dialog box is displayed, asking if you want to make the change or deletion in just this instance, from this point on, or every time, including past instances.

Moving an Entry from One Timeslot to Another

You can copy or move the entire contents of an entry, or just a piece of text, to another timeslot. If you select the time, then any alarms or repeat intervals associated with the entry are transferred, along with the text, to the new timeslot. Selecting just the text from the timeslot transfers just the text.

To move an entry from one timeslot to another:

1   Display the day that has the timeslot you want to move.

2   To select the entire entry from a timeslot, click on the handle.

    The handle is the area in an entry between the time and the vertical resize bar. By pressing and dragging MB1 in the handle, you can move an entry up and down through the day display to the desired timeslot.

    To copy just a piece of text, select it by clicking and dragging the pointer over the portion of text you want.

3   Choose Cut or Copy from the Edit menu.

    If you want the entry to remain in the original timeslot, choose the Copy menu item. If you want to delete the entry from the original timeslot, use the Cut menu item.

4   If you are moving the entry to a different day, display the new day.

5   Click on the time to which you want to move or copy the entry or text.

6   Choose Paste from the Edit menu to insert the entry or text in the new location.

If you are moving the whole entry (time and text) and want to move it to the same time on a different day, you do not have to display the new day. After selecting the desired day in the month display, choose the Paste menu item from the Edit menu. This causes the entry to be inserted on that day, at the same time.

Creating Overlapping Entries
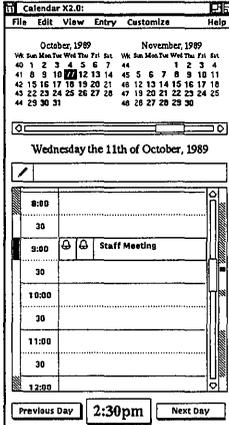
You can create an entry at a time partially or completely occupied by an existing entry. To create overlapping entries, Press MB1 and drag on the timeslot as if there were no overlap. Calendar opens a new entry for you at the specified time. You can overlap as many entries as you like.

Normally, overlapping entries are stacked so that the left side of each entry is always visible. To cause Calendar to stack overlapping entries so that the first line of each entry is visible, choose Day View... from the Customize menu to display the Day View dialog box. Then, choose Show text from the Stacking option menu. With Show text enabled, even if you have two entries starting at the same time, Calendar leaves a gap to display at least some of the text assoicated with the hidden entry.

Clicking on the handle of the entry that is overlapped makes it pop to the front.

Entering Day Notes

Information which is specific to a particular day, but not to a particular time, can be entered in a day note. Day notes are identical to ordinary calendar entries, except that they are not associated with a particular time. They are useful for denoting occasions like birthdays.

To enter a brief day note, click on the entry box below the date in the day display. The day note becomes highlighted, indicating that you can enter text in the text area. To complete your entry, click on the day note. The highlighting dispappears.

To enter a longer day note, double click on the day note to display the entry editor. You can enter text, modify an existing entry, or adjust the alarm settings and repeat intervals.

Using the Clock in the Day Display

| 2:56pm |

The Clock provides a digital display of the current time. In addition to showing the current time, the clock allows the current Day view to autoscroll. The clock has no border when it is autoscrolling.

To start autoscrolling, click on the clock. The timeslots visible in the Day view adjust, so that the current time is within the first timeslot. This process continues: as a timeslot passes, it is scrolled off the top of the window. Thus, the view is kept as up to date as possible. This is convenient if you significantly reduce

the size of the day display, because it keeps the most immediate timeslots in view.

The clock performs this function only for the current day. If the Day view is not the current day, clicking on the clock first causes the displayed day to be replaced by the current day. Autoscrolling then takes place as usual.

To stop this automatic scrolling, move the timeslot by any other method, such as adjusting the scroll bar. Autoscrolling is turned off at the end of the day.

If you are making an entry in a timeslot when it is due to be scrolled, it does not disappear. The scroll mechanism waits until the next interval is over and then catches up.

The Show AM/PM customizing option allows you to choose between a 12-hour and 24-hour clock. Whichever clock you choose is reflected by all Calendar-displayed times and clocks.

Marking Special Days

You can mark days of particular importance, such as major project milestones, holidays, or birthdays. Marking particular days alters the display font so that those days can be distinguished from other days in the various Calendar displays.

To mark a day:

1   Select the desired day from any of the Calendar displays.

2   Pull down the Edit menu and drag the pointer to the submenu icon next to the Mark menu item to view the submenu.

Edit
Cut
Copy
Paste
Clear
Select All
Mark

Default
Work Day
Non-Work Day
Normal
Special
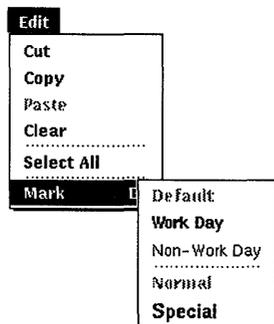
The menu item currently in use for the selected day is dimmed in the submenu.

3 Choose the desired menu item from the Mark submenu:

Choose	To Produce
Work Day	Bold font
Nonwork Day	Standard Calendar font
Special	Bold, larger font; on color workstations, displayed in red font
Default	The standard Calendar font the day had before it was previously marked with Work Day, Nonwork Day, or Special menu item.

The day is now marked in the specified manner.

Sending and Receiving Calendar Entries Through Mail

You can send and receive calendar entries through electronic mail. To send an entry, display both the calendar entry and a DECwindows Mail Create-Send window on your workstation screen. Use MB3 to select the entry from the Calendar. The entry is automatically pasted in the Mail Send window.

To receive an entry through DECwindows Mail, open the Day View and click on the desired timeslot. Use MB3 to select the text from an existing mail message. The entry is automatically pasted into the Calendar at the timeslot you selected.

Printing a Part of a Calendar

You can print a timeslot entry or all of the entries in a day or a week by copying the entry or entries to a printable file.

To print a part of a Calendar display:

File
Open...
Open in New...
Include...
Close
Name As...
Delete...
Print...
Exit
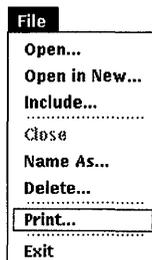
1 Display the day that relates to the entry or entries you want printed.

For example, if you are printing a timeslot, display the day that contains the timeslot. If you are printing the entries in a day, display the day itself; to print the entries in a week, display a day that falls in that week. You can also select the day or week number you want to print, from any display in which it appears.

2 Click on the time, day number, or week number, as appropriate.

3 Choose Print... from the File menu.

Calendar displays a dialog box.
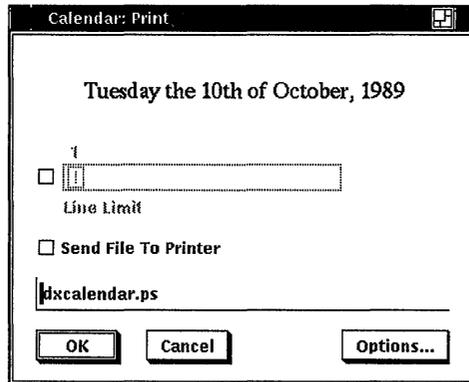
The dialog box shows the time period you have selected and provides a default name for the file to be sent to the printer. It also lets you limit the number of lines you want printed for each entry by clicking on the Limit Lines Per Entry option and moving the arrow in the scale to set the desired limit.

4   The default file name **dxcalendar.ps** is displayed. Change the name provided by the dialog box, if you want, and then confirm your request by clicking on the OK button.

The requested section (timeslot, day, or week) is copied to the named file. You are now ready to send the file to the printer.

Working with Multiple Calendars
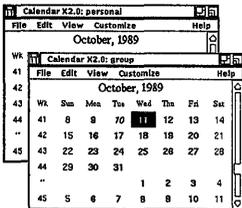
You can create, open, save, print, and delete calendars. You can create different calendars to use for specific purposes. For example, you could designate some calendars for your personal use and other calendars for use by a group.

You can use the Open... menu item from the Calendar's File menu to open a calendar, even if you do not have privileges to modify it. This makes it possible to use a calendar for informal sharing of information. For example, a group secretary can create a calendar for events of group-wide interest, so that everyone on a team can see when group activities are going on. Only one person at a time can write in this calendar, and the calendar cannot be read while it is being modified. If no one is modifying the file, an unlimited number of people can read it simultaneously.

Creating a New Calendar

To create a new calendar:

1   Choose Open... from the File menu. Calendar displays a
    dialog box.

```
┌─────────────────────────────────┐
│ File Filter                     │
│ ▎dwc*                           │
│ ─────────────────────────────── │
│ Files in                        │
│        ┌─┐ ┌──────────┐         │
│      ▲ │△│ │  Filter  │         │
│        │ │ └──────────┘         │
│        │ │ ┌──────────┐         │
│        │ │ │    OK    │         │
│        │ │ └──────────┘         │
│        │ │ ┌──────────┐         │
│        │ │ │  Cancel  │         │
│        │ │ └──────────┘         │
│        │ │                      │
│      ▼ │▽│                      │
│ ┌──────────┐                    │
│ │◁▢ ▷ ▢│                        │
│ └──────────┘                    │
│ Selection                       │
│                                 │
└─────────────────────────────────┘
```
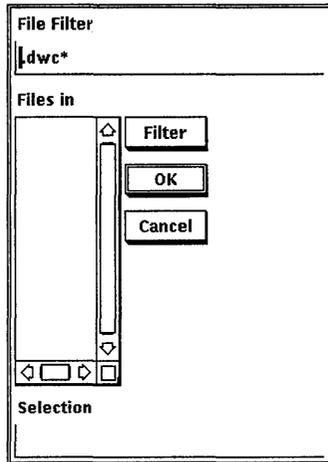
2   Type a unique file name for the new calendar in the Selection
    text entry field and click on the OK button. By default,
    Calendar adds the file extension **.dwc** to calendar file names.

    A dialog box is displayed, asking if the calendar currently
    being displayed should be removed before displaying the
    new calendar, or if you want to keep both calendars on the
    screen at the same time. Click on Replace to display the new
    calendar in place of the old calendar. Click on New to display
    both Calendars simultaneously.

3   Calendar asks if you want to create a new file. Click on Yes to
    create a new calendar.

By default, the new calendar is presented in a month display
containing the current day.

The calendar file name can always be changed again (see
Renaming an Existing Calendar).

Opening an Existing Calendar

To open an existing calendar:

1   Choose Open... from the File menu.

    Calendar displays a dialog box that prompts you for the name
    of the calendar you want to open. The file list box lists the
    names of any calendar files in the current directory; that is,
    files that have the extension **.dwc**.

2   Select the file name you want to view and click on OK.

    If you want to open a calendar file that is not listed, type the
    name of that file in the Selection text entry field and click on
    the OK button. Or, use the File Filter text entry field to list a
    subset of files that you can then select from. For example, to
    list all files in another directory with the file extension **.dwc**,
    type the complete directory specification, **/jones/staff/*.dwc**, in
    the File Filter text entry field and click on the Filter button.
    Then, double click on the file name of the calendar you want
    to open.

    A dialog box is displayed, asking if the calendar currently
    being displayed should be removed before displaying the new
    calendar, or if you want to keep both calendars on the screen
    at the same time. Click on New or Remove to make your
    choice.

    If you specify the name of a calendar that you are not allowed
    to read, the Open operation fails and a message box is
    displayed, explaining the cause of the failure.

3   The calendar is opened.

Renaming an Existing Calendar

To rename the current calendar, choose Name As... from the File
menu.

A dialog box is displayed:
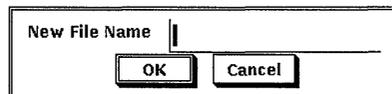
```
New File Name  |
              [  OK  ]  [ Cancel ]
```

Type in the new calendar name. Calendar adds the file extension
.dwc to calendar file names by default. You can rename only those
calendars in which you are allowed to write.

Closing a Calendar

Choose Close from the File menu to close the current calendar.

Deleting a Calendar

Choose Delete... from the File menu to delete a calendar. Calendar displays a dialog box, asking whether you really want to delete the calendar. If you do not have sufficient privileges to delete the specified calendar, an error message is displayed.

Customizing a Calendar

Customize
General...
Day View...
Icon box...
Alarms...
Save Settings
Restore Settings
Use Defaults

Use the Customize menu to customize the appearance and behavior of your calendar. With the Customize menu, you can change the appearance and behavior of many of Calendar's displays, including the:

- General Settings

- Day View Settings

- Icon Box Settings

- Alarm Settings

Use the Save Settings menu item to save your customized settings from one session to the next. The size and placement of all windows are also saved.

Use the Restore Settings menu item to cancel any unsaved changes you make and restore the current saved settings of all customization options.

In dialog boxes, shaded buttons indicate the current settings. Click on a button or its label to change the setting. Click on the Apply button to apply your changes without closing the dialog box. Click on the OK button to apply your changes and close the dialog box.

Customizing the General Display

Customize
General...
Day View...
Icon box...
Alarms...
Save Settings
Restore Settings
Use Defaults

Choose General... from the Customize menu. Calendar displays the General dialog box.

```
┌──────────────────────────────────────────────────────────────┐
│ General                                                   [⊞] │
├──────────────────────────────────────────────────────────────┤
│ Work Week         ■ Show Week Numbers  │  ■ Show AM/PM         │
│ □ Sunday             4                 │  □ 'Live' Scrolling   │
│ ■ Monday          ┌─────────────────┐  │                      │
│ ■ Tuesday         │⤒                │  │  □ Right to Left      │
│ ■ Wednesday       Date for Week No. 1  │  □ Fill Blank Days    │
│ ■ Thursday        ┌──────────┐         │                      │
│ ■ Friday          │ January  │         │  ■ Print Blank Days   │
│ □ Saturday        └──────────┘         │                      │
│                   ....................  ■ Box Current Day      │
│ First Day of Week  First View ┌ Month ┐│                      │
│ ┌──────────┐                  └───────┘│  ┌──────────────────┐ │
│ │ Sunday   │      □ Start Iconized    │  │Don't Mark Past Days│ │
│ └──────────┘                          │  └──────────────────┘ │
│                                                                │
│        ┌──── OK ────┐ ┌ Apply ┐ ┌ Reset ┐ ┌ Cancel ┐          │
└──────────────────────────────────────────────────────────────┘
```
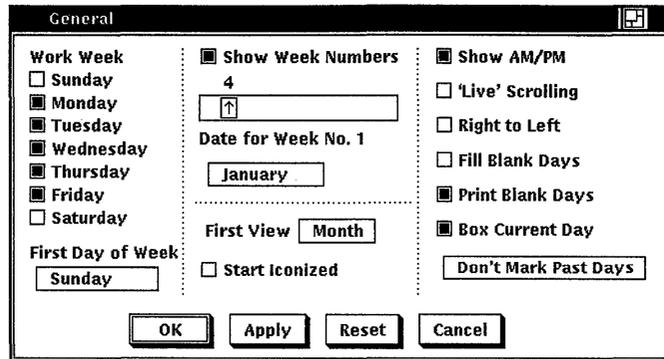
From the General Settings dialog box, you can modify any of the following calendar features:

Work Week
Normally, Calendar designates Monday through Friday as the work week, as indicated by the shaded toggle buttons immediately to the left of the days. You can change the settings by clicking on the days you want to use for your work week.

First Day of Week
Unless you specify otherwise, the first day of the week is Sunday, as indicated by a shaded option button. You can designate another day as the first day of the week by clicking on it.

Show Week Numbers
Unless you specify otherwise, the leftmost column in every month display lists the number of each week, starting with the first week of January as week number one. You can disable this feature by turning off the Show Week Numbers option.

Date for Week No. 1
In every month display, the leftmost column lists the number of each week. This is in effect as long as the Include Week Numbers option is turned on. By default, weeks are numbered starting with the first week of January as week number one. The following weeks are numbered accordingly, ending with the last week in December as number 52.

The Date for Week No. 1 option enables you to set the week you want to designate as the first week of the year by choosing the desired month and moving the arrow in the scale to the desired date. For example, if your fiscal year starts the first week of July and you want to designate that week as the first week of the year,

choose July from the list of months and choose a date number that falls in the first week of July. To ensure that the date you choose falls in the first full week of the month, you may want to choose a date such as July 6.

The date January 4 is the preset option, which ensures that the first full week in January is used as the first week of the year.

First View
When you start Calendar, the month display appears on your screen by default. You can click on Year Display or Day Display to choose either of those options to be the first display you see when you start Calendar.

Start Iconized
Normally, when you start Calendar you see a display of the current month. By turning on the Start Iconized option, you can cause Calendar to start as an icon.

Show AM/PM
By default, Calendar has a 12-hour time system that uses AM and PM in its day display to differentiate timeslots. If you disable the Show AM/PM option, Calendar uses a 24-hour time system in its day display–for example, 1 p.m. becomes 13:00, and so on.

'Live' Scrolling
Normally, when you move the slider on the scroll bars in the day, month, and year displays, the displays don't move until after you have moved the slider. When you enable this option, the displays change dynamically when you move the slider.

Right to Left
Normally, timeslots appear on the left side of the day view and the vertical scroll bar appears in the right side.

You can reverse the position of these elements, including the timebars, by enabling the Right to Left option.

Fill Blank Days
Unless you specify otherwise, Calendar leaves the days not filled by the current month blank. When you turn on the Fill Blank Days in Month Display option, Calendar fills the blank days at the beginning and end of the current month with the dates of the preceding and following months.

Print Blank Days
Normally, when you print out a week from your calendar, all days are printed out whether or not you have entries in them.

You can disable the Print Blank Days option by clicking on it, which causes only those days that have entries in them to be printed out.

Box Current Day

Normally, Calendar boxes the current day in the day display. You can disable this feature by clicking on it.

Don't Mark Past Days

Normally, Calendar does not distinguish past days from future days. You can direct calendar to cross out or strike out past days by choosing the appropriate option from the Don't Mark Past Days options menu.

Customizing the Day Display

You can customize the day display by choosing Day View... from the Customize menu.

Calendar displays the Day View dialog box.
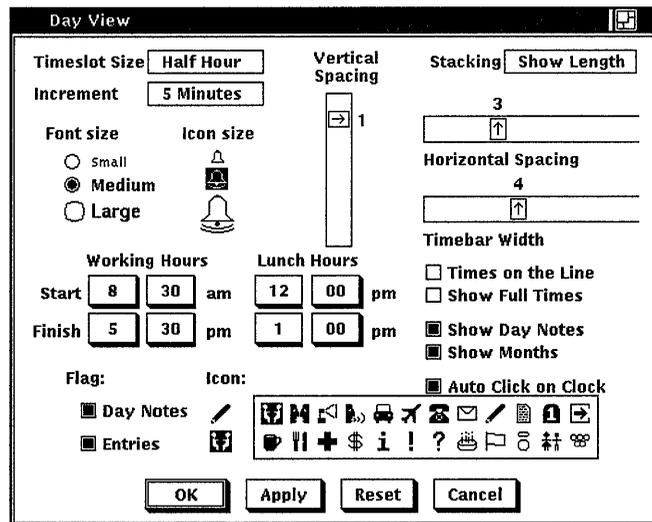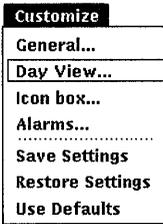
Use this dialog box to modify any of the following day display features:

Day Display: Timeslot Size

By default, the day display has timeslots broken up into 30 minute intervals. You can choose 1 hour, 15 minute or 5 minutes intervals instead.

Increment

The resize bar lets you create a Calendar entry that is larger or smaller than the timeslot size. Normally, the resize bar expands or contracts a timeslot in 5-minute increments.

Change this increment by choosing a different option from the Increment option menu.

The resize bar time increment is always smaller than the timeslot size. For example, if your timeslot size is 30 minutes, the Hour option on the Increment option menu is dimmed since you can only resize the entry in increments smaller than or equal to the timeslot itself.

Font Size

Normally, Calendar uses a medium font size for timeslots and entries. You can change the font size by clicking on one of the font size option buttons.

Icon Size

Normally, Calendar displays medium-sized icons in the handles of Calendar entries. You can change the icon size by clicking on one of the Icon size options.

Working Hours

Calendar uses the preset options 8:30 a.m. to 5:30 p.m. for working hours, which determine the timeslots it uses in the day display. You can change these values by clicking on the appropriate box to set the time you want.

Lunch Hours

Normally, Calendar uses 12:00 p.m. to 1:00 p.m. for lunch hours. You can change these values by clicking on the appropriate box to set the time you want.

Flag

Normally, when you create a day note or entry, the corresponding day is **flagged**. This means that the font of the specified day is changed in the month view to make it stand out.

Disable this flagging by clicking on the corresponding button.

Icon
Normally, the meeting icon appears in the handle of a Calendar entry. The pencil icon is normally associated with the day note.

With this option, you define the default icon that will be applied when you create a new entry. This option also allows you to define the default icon to be used when you create Daynotes. You can later override these defaults using the associated entry editor.

You can associate multiple icons with a particular entry by using the entry editor. For more information, see Creating an Entry.

Vertical Spacing
This option lets you set the relative height of the timeslots—the greater the value, the more the white space. Larger values tend to be more readable, smaller values allow more timeslots to be displayed in the same space.

To modify the timeslot height, press and drag MB1 to move the arrow in the scale to the desired value.

Horizontal Spacing
This option lets you adjust the width of the timeslots.

To midify the timeslot width, press and drag MB1 to move the arrow in the scale to the desired value.

Timebar Width
This option controls the thickness of the two timebars. A greater value will produce thicker timebars. A value of 0 will remove them completely.

Stacking
Normally, overlapping entries are stacked so that the left side of each entry is always visible. This is the effect of the Show Length option in the Stacking option menu.

To cause Calendar to stack overlapping entries so that the first line of each entry is visible, choose Show Text from the Stacking option menu. When Show Text is enabled, Calendar leaves a gap to display some of the text associated with a hidden entry.

Calendar does not save any changes you make to the stacking order for a given set of entries.

Times on the Line
Normally, the starting time of a timeslot is centered between the top and bottom lines of the timeslot.

You can cause the starting time of a timeslot to be centered in the top line of the timeslot by enabling the Times on the Line option.

Show Full Times

Normally, timeslots that are not on the full hour are displayed as the number of minutes after the full hour. For example, the timeslot for 2:00 would be displayed as 2:00, but the timeslot for 2:30 would be displayed as 30.

To cause Calendar to display the hour as well as the minutes for a timeslot, enable the Show Full Times option. This would cause 2:30 to be displayed as 2:30.

Show Day Notes

Normally, the day note entry box appears below the date in the day display.

To remove the day note entry box, disable the Show Day Notes option by clicking on it. Old day notes are not deleted if you disable day notes; they just are not visible.

Show Months

Unless you specify otherwise, Calendar displays the current and next month at the top of a day display. You can disable this option by turning off the Show Months option.

Autoclick on Clock

The standard Calendar requires you to start autoscrolling by clicking on the clock when you display the Day View. By setting the autoclick option on, autoscrolling will happen automatically when you first open the day view.

Customizing Calendar Icons

You can customize the Calendar icon that appears in the DECwindows Icon box by choosing Icon Box... from the Customize menu.

Calendar displays the Icon Box dialog box.
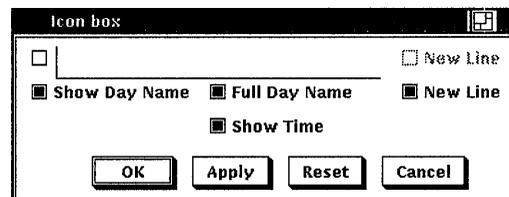
The text entry field in the upper left corner of the dialog box lets you enter text that appear on the top line of the icon box.

In addition to entering text, you can modify the following Calendar icon features:

New Line
Use the two New Line buttons to customize the layout of the Calendar icon.

Enabling the top New Line button causes the text you type into the text entry field to appear on the top line in the icon box.

Enabling the second New Line button causes the time of day to appear on a line below the day of the week. Disable this option by clicking on the shaded toggle button.

Show Day Name
Normally, the day of the week appears in the icon. You can disable this option by clicking on the shaded toggle button.

Full Day Name
Normally, the day of the week that appears in the icon is in an unabbreviated form. You can cause day names to be abbreviated by disabling this option.

Show Time
Normally, the time appears in the icon. You can disable this option by clicking on the shaded toggle button.

Saving Customized Features

To save your customized features, choose Save Settings from the Customize menu. This causes your new settings to be used whenever you start a Calendar session. The size and placement of all displays are also saved.

To restore your settings to the currently saved defaults, drag the pointer to the submenu icon next to the Customize menu item, and release MB1 over the Restore Settings menu item.

To restore your settings to the system defaults, drag the pointer to the submenu icon next to the Customize menu item, and release MB1 over the Use Defaults menu item.

```
Customize
  General...
  Day View...
  Icon box...
  Alarms...
  Save Settings
  Restore Settings
  Use Defaults
```
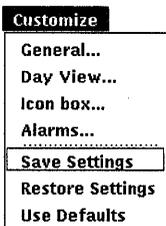
Changing the Shape of a Display

You can change the size of any Calendar display by using the window's size button. If you resize the display to be smaller than the elements inside it, Calendar will try to rearrange the elements to fit the new size, but some of the elements may not be visible. For example, if you resize the year display so that is only big enough to display eight months, Calendar will display only the next 8 months.

To save the size settings from one session to the next, use the Save Settings menu item on the Customize menu.

Exiting from the Calendar

File

| Open... |
| Open in New... |
| Include... |
| Close |
| Name As... |
| Delete... |
| Print... |
| Exit |

To exit from Calendar and close all open calendars, choose the Exit menu item from the File menu.

3

Using the Cardfiler

The Cardfiler lets you create an electronic box of index cards. This electronic file box is called a **card file**. Card files contain **cards**, which can hold any kind of information you like, such as names, addresses, and telephone numbers. For example, you could have a card file called Food filled with cards that contain recipes and names of restaurants.

By organizing your index cards into sets (card files), you can keep one group of cards separate from another group, for example, your business cards and your personal cards.

This chapter describes how to:

- Start the Cardfiler
- Create and add cards to a card file
- View topics in a card file
- Search a card file for text
- Edit a card
- Incorporate graphics
- Open an existing card file
- Save a card file
- Merge two card files
- Exit from the Cardfiler

Starting the Cardfiler

To start the Cardfiler, choose Cardfiler from the Session Manager Applications menu, or enter the following command in a DECterm window:

```
% dxcardfiler &
```

The Cardfiler displays an empty card file in the Cardfiler window. Initially, the card file is empty, but it fills up with index topics as you add cards.

Cardfiler: untitled
File   Search   Card   Help
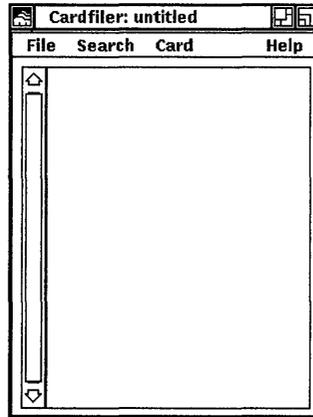
Opening a Card File

You can either create a card file and then add cards to it, or you can create cards and then save them into a card file. For example, you can create a card file called "Clients" and then fill it with cards that contain names and telephone numbers of your business clients. To create a new card file or open an existing one:

1   Choose Open... from the File menu.

Cardfiler displays a dialog box.

Cardfiler: Open

File filter

*.card

Files in

Filter

OK

Cancel
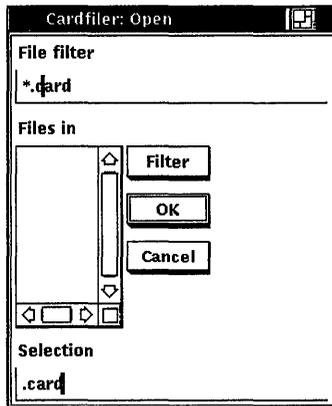
Selection

.card

2 To create a new card file, click on the Selection text field and enter the name of the card file you want to create, for example, Clients. By default, Cardfiler adds the extension **.card** to card file names.

Click on OK. Cardfiler displays a message telling you the file was not found and that a new file is being opened. Click on the Acknowledged button to dismiss this message.

To open an existing card file, select the name of the file you want to open.

Use the scroll bars to view a complete list of your card files. The card file name you select is displayed in the text field.

The new card file is displayed.

If you try to open another card file without first saving any changes you made to the current file, a dialog box is displayed, asking whether you want to save your changes. Click on the Yes button to save your changes. Click on the No button to discard your changes.

Adding a Card

You start a file of index cards by adding a card. As you add cards, they are sorted alphabetically according to the topic you type in the card's index field. By displaying the topic of each index card, the card file window lists the contents of the card file. To add a card:

1 Choose Create Card... from the Card menu.

The Cardfiler displays a blank index card in the Card window. The dialog box prompts you to type the topic of the new index card.

```
Create Card                                      [⊞]
I
Index for this card
        [  OK  ]                    [ Cancel ]
```
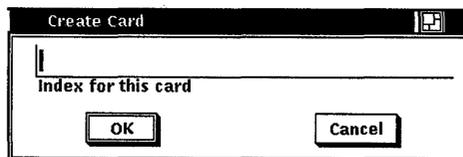
2 Enter the new topic under which you want the card filed.

3 Press ⟨Return⟩ or click on the OK button.

The text you just typed is added to the title bar at the top of the Card window and to the contents of the Cardfiler window. You can add information to the new card.

4 Type any information belonging on the index card, for example, an address.

Type the text as you want it to appear, using the Return key, space bar, and Tab key to format it. Cards can contain up to 4000 characters and up to 64K bytes of graphics.

5 When you are finished with the index card, choose Close menu from the file menu.

The Card window is closed and the contents of the index card are added to your card file.

You can open another index card in the card file without closing the current card. When you choose the Create Card... menu item from the Card menu in the Cardfiler window, the Cardfiler automatically saves any changes you made to the current index card and returns it to the card file before it opens a new card in the file.

If you create a series of cards before you have created the card file in which you want to place them, you can save them into a new cardfile.

To save cards into a new card file:

1 From the empty, untitled card file you see when you start the Cardfiler, create your cards.

2 Choose either Save or Save As... from the File menu. Cardfiler displays a dialog box.

3   In the Selection text field, enter the name of the card file you want to put your cards in.

For example, if you created a series of cards about famous baseball players, you could create a card file called Baseball.

4   Click on OK.

The new card file name is displayed at the top of the Cardfiler window with a list of all the index cards in that card file.

Viewing the Contents of a Card File

Although you can look at only one index card at a time, you can easily switch from one card to another by selecting a card from the card file window. When your card file contains too many cards to list in a window at a time, you can use the scroll bar to move through the file. You can also search the contents of a card file for a given text string.

Opening an Existing Card

To display the contents of a card you have already created, select the card from the card file window by pointing to its index line and clicking MB1.

The card's index topic becomes shaded and the contents of the card are displayed in the Card window.

Scrolling Through a Card File

As you accumulate cards, they cannot be listed all at once in the card file window. The scroll bar along the left side of the card file lets you scroll through the list of the index cards in your file. To scroll through the list of index cards in your file, click and hold MB1 on the stepping arrow.

Finding Text

You can search a card file for any text string. The text can be a word, a number, or any other characters that you can type on your keyboard. Because the Cardfiler treats spaces as text, you can search for two or more words.

The Cardfiler searches either the index topics or the contents of the index cards.

To search the index topics in a card file for specific text:

1   Choose Search Index... from the Search menu in the card file window.
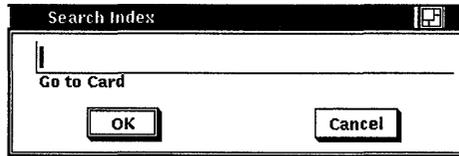
Cardfiler displays a dialog box.

```
┌─────────────────────────────────────────────┐
│ Search Index                         ▐▜▟▌    │
├─────────────────────────────────────────────┤
│ ▏                                            │
│ ─────────────────────────────────────────── │
│ Go to Card                                   │
│        ┌──────────┐      ┌──────────┐        │
│        │   OK     │      │  Cancel  │        │
│        └──────────┘      └──────────┘        │
└─────────────────────────────────────────────┘
```

2 Type the text string you want located.

3 Press ⎡Return⎤ or click on the OK button.

The Cardfiler searches the topics of all index cards in the file and displays the first card in your file containing the text string.

You can continue to search for a text string by choosing the Find Next menu item from the Search menu in the card file window. The Cardfiler continues to search the card file for the text and displays each card that contains the text in its index field.

To search the contents of each card in the file for specific text:

1 Choose Search Card... from the Search menu in the card file window.
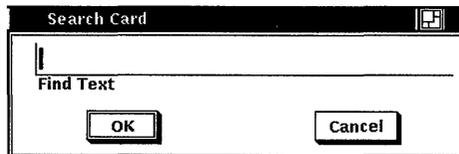
Cardfiler displays a dialog box.

```
┌─────────────────────────────────────────────┐
│ Search Card                          ▐▜▟▌    │
├─────────────────────────────────────────────┤
│ ▏                                            │
│ ─────────────────────────────────────────── │
│ Find Text                                    │
│        ┌──────────┐      ┌──────────┐        │
│        │   OK     │      │  Cancel  │        │
│        └──────────┘      └──────────┘        │
└─────────────────────────────────────────────┘
```

2 Type the text string you want located.

3 Press Return or click on the OK button.

The Cardfiler searches all index cards in the file and displays the first card in your file containing the text string.

You can continue to search for a text string by choosing the Find Next menu item from the Search menu in the card file window. The Cardfiler continues to search the card file for the text and displays each card that contains the text.

Editing a Card

The Cardfiler editing commands let you copy, delete, and rearrange text on an index card. If you decide you do not want to save your edits, Cardfiler can restore the card to its original state.

Renaming a Card

Card
Create Card... Alt/N
Duplicate
Rename...
Delete   Alt/D
Undelete
Next   Next
Previous   Prev
Restore

To change the topic of an index card, you modify the index line:

1 Select the card you want to rename from the card file window by pointing to it and clicking MB1.

2 Choose Rename... from the Card menu on the Card window.

3 Use the arrow keys to move the text cursor and the Delete key to erase unwanted text.

4 Type the new topic under which you want the card filed.

5 Click on the OK button.
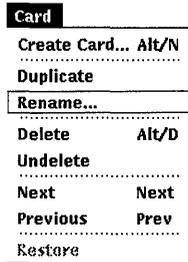
The card is renamed and remains open. If you want to close the card, choose the Close menu item from the card's File menu.

Moving the Text Cursor

When you create a new card, the text cursor appears in the upper left corner of the card window. When you open an existing card, the text cursor remains where it was when you last edited the card.

If you are creating a new card and want to move the text cursor, use the Return key or place the pointer where you want the text cursor and click MB1. You can use this method to move the text cursor on an existing card, or you can use the arrow keys to move the text cursor anywhere in the existing text (except to the index line).

Selecting Text

In order to delete, move, or copy text, you must first select that text. Select the text by pressing and holding MB1, dragging the pointer over the text, and releasing MB1. This highlights the selected text. The Cardfiler stores this text until you tell it what to do.

```
┌─────────────────────────────────────────┐
│ ▣  Card: Pike Place Market      ▣▣       │
├─────────────────────────────────────────┤
│  File   Edit   Search   Card       Help  │
├─────────────────────────────────────────┤
│ A must for any visitor. Pike Place Market is a  △│
│ bustling mix of fish and farmer's markets,      ║│
│ arts and craft shops, antique stores, cafes,    ║│
│ and street musicians. Make sure to have your    ║│
│ picture taken sitting on the large brass pig.   ║│
│ Take the Stewart St. exit off I-5 South, and    ║│
│ head down Stewart until you can't go any        ║│
│ further; that's Pike Place Market.              ▽│
│                                                  │
│        ┌──────────┐   ┌────────┐                │
│        │ Previous │   │  Next  │                │
│        └──────────┘   └────────┘                │
└─────────────────────────────────────────┘
```

Deleting Text

To delete small amounts of text on your card, use the Delete key. If you selected text for deletion, press any key to delete the highlighted text.

Moving Text

Because the Cardfiler saves the last text you selected and deleted, you can move text from one location to another on a card or between cards.

To move text on a card:

1   Select the text you want moved to another location on the card.

2   Choose Cut from the Edit menu.

3   Move the text cursor to where you want the deleted text inserted by using the Return and arrow keys or by positioning the pointer and clicking MB1.

4   Choose Paste from the Edit menu.

    The deleted text appears in the new location.

To move text from one card to another:

1   Select the text you want to move to another card.

2   Choose Cut from the Edit menu.

3   From the card file window, click on the card to which you want to move the text.

    The new card is opened.

4 Move the text cursor to where you want the deleted text inserted by using the Return and arrow keys or by positioning the pointer and clicking MB1.

5 Choose Paste from the Edit menu.

The selected text is inserted in the new location.

Copying Text

Because the Cardfiler keeps track of your selected text, you can copy text from one location to another on a card and between cards.

To copy text on a card:

1 Select the text you want copied to another location on the card.

2 Move the text cursor to where you want the selected text copied by using the Return and arrow keys or by positioning the pointer and clicking MB1.

3 Click MB2.

The selected text is copied to the new location.

To copy text from one card to another:

1 Select the text you want copied to another card.

2 Choose Copy from the Edit menu to store the copied text.

3 From the card file, click on the card to which you want to move the text.

The new card is opened.

4 Move the text cursor to where you want the selected text copied by using the Return and arrow keys or by positioning the pointer and clicking MB1.

5 Choose Paste from the Edit menu.

The text is copied to the new location.

Incorporating Graphics

You can add graphics, such as those you create with the Paint program, to Cardfiler index cards. The Cardfiler places a graphic at the top of a card, keeping the picture's original size, and relocates text to the remaining space.
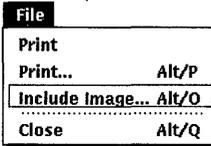
To incorporate a graphic that has been saved as a file into a card:

1 Open a card.

2 Choose Include Image... from the Card window's File menu.

Cardfiler displays a dialog box that lists all files in the current directory that have the file name extension DDIF. (DDIF files are created by the Paint application by default.)

3 Select one of the listed files, display a different set of files using the file filter, or type the name of the file you want in the Selection text entry field.

The graphic is displayed on your card. If it is larger than the current size of your index card, you can display the entire graphic by enlarging the card with the resize button.

To copy part or all of a graphic directly from the Paint application:

1 Display the graphic you want to use in the Paint application

2 Select the portion of the graphic you want to copy to your open card.

3 Choose Cut or Copy from Paint's Edit menu. Cut causes the graphic to disappear from the Paint window, whereas Copy simply makes a copy of it.

4 Give your open index card input focus by clicking on it. Choose Paste from the Edit menu.

The graphic is displayed on your card. If it larger than the current size of the card, you can display the entire graphic by enlarging the card with the resize button.

To erase a graphic from your card:

1 Select the graphic by clicking on it.

You can unselect a graphic by clicking in the text portion of the card.

2 Choose Clear from the Edit menu.

Cardfiler erases the graphic. You can restore it by immediately choosing Undo from the Edit menu.

File
Print
Print...   Alt/P
Include Image... Alt/O
Close   Alt/Q
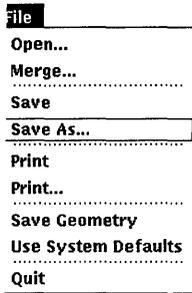
aving a Card File

Whether you create a new card file or make changes to an existing card file, such as adding or deleting a card or changing any information on a card, you need to save that card file when you are done working with it.

To save a new card file or change the name of an existing one:

1 Choose Save As... from the File menu in the card file window.

   Cardfiler displays a dialog box, prompting you for the name of the file.

```
┌─────────────────────────────────────┐
│  Cardfiler: Save As        [ ]       │
├─────────────────────────────────────┤
│ File filter                          │
│ *.card                               │
│                                      │
│ Files in                             │
│  ┌──────────┬─┐  ┌────────┐          │
│  │        △││  │ Filter │          │
│  │          │ │  └────────┘          │
│  │          │ │  ┌────────┐          │
│  │          │ │  │  OK    │          │
│  │          │ │  └────────┘          │
│  │          │ │  ┌────────┐          │
│  │          │ │  │ Cancel │          │
│  │        ▽│ │  └────────┘          │
│  ◁⊏⊐▷□                               │
│                                      │
│ Selection                            │
│ .card                                │
└─────────────────────────────────────┘
```
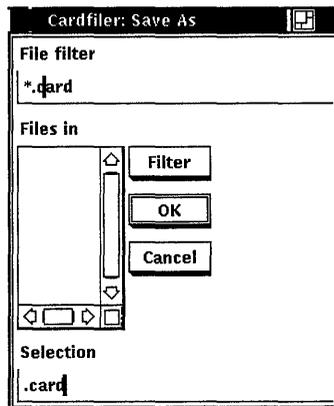
2 Using the Delete and arrow keys, delete any text in the Selection text field and type the name of file. The default file type for card file names is card.

   Give the file a name that you can easily recognize. For example, if the card file contains the numbers of your business associates in Rome, you might name the file **rome.card**. Giving the file name an extension of **.card** lets you recognize that this is a card file.

3 Press Return or click on the OK button.

   You are returned to the card file window. If you saved a new card file, notice that the name of the card file in the title bar has changed from untitled to **rome.card**. If you saved an existing card file, the card file name is replaced by **rome.card**.

To save the current card file, choose Save from the File menu in the card file window.

To save the current card file under a new file name:

1   Choose Save As... from the File menu in the card file window.

2   Using the Delete and arrow keys, delete any text in the text field and type the file's new name.

3   Press [Return] or click on the OK button.

You are returned to the card file window. Notice that the title bar contains the new card file name.

Merging Card Files

You can merge the contents of the current file with another file, resulting in a card file that combines and sorts the contents of both files. The card file whose contents were merged with the current card file remains unchanged.

1   Choose Merge... from the File menu on the card file window.

Cardfiler displays a dialog box.
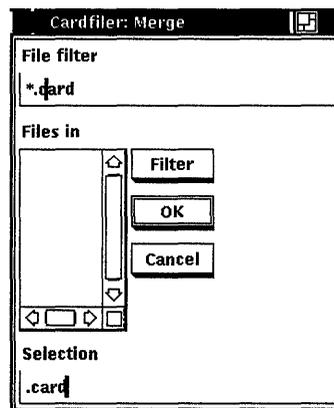
2   Select the name of the file you want to merge with the current file. Use the scroll bars to view a complete list of your files.

The file name you selected is displayed in the text field.

3   Press [Return] or click on the OK button.

The contents of the two card files are merged and sorted alphabetically.

Exiting from the Cardfiler

File

Open...
Merge...
Save
Save As...
Print
Print...
Save Geometry
Use System Defaults
Quit

If you changed the size or screen position of the Cardfiler and would like to save those settings, choose Save Geometry from the File menu before exiting. To restore the system default settings, choose Use System Defaults from the File menu.

To exit from the Cardfiler, choose Quit from the File menu in the card file window.

If you have not saved any changes or additions to the current file, Cardfiler displays a dialog box, asking whether you want to save your changes. Click on the Cancel button to return to the Cardfiler window.

Caution

! Do you want to save the current data before quitting?

Yes   No   Cancel
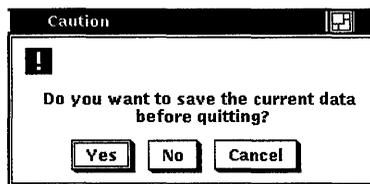
Click on the Yes button to save your changes and exit from the Cardfiler, or Click on the No button to exit from the Cardfiler without saving your changes. To return to the Cardfiler window, click on the Cancel button.

4

Using the Clock

The Clock displays the time (in analog or in 12- or 24-hour digital formats) and the date. You can change this display to suit your needs. You can also set the Clock's alarm to remind you of appointments.

This chapter describes how to:

- Start the Clock
- Customize the Clock display
- Set the alarm
- Exit from the Clock

Starting the Clock

To start the Clock, choose Clock from the Session Manager Applications menu, or enter the following command from a DECterm window:

```
% dxclock&
```

The Clock is displayed on your screen. You can move and change the size of the Clock as you wish.

Clock	
	Oct 11 Wed
	2:50 pm
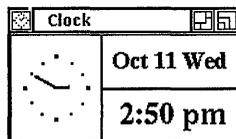
Changing the Clock Display

You can customize the Clock display to include any combination of the date and time areas.

To change the Clock display:

1 Place the pointer anywhere in the Clock display.

2 Press and hold MB2.

Clock displays a pop-up menu.
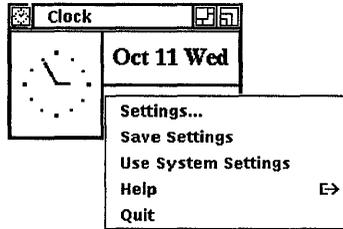
3 Choose the Settings... menu item.

Clock displays a dialog box.
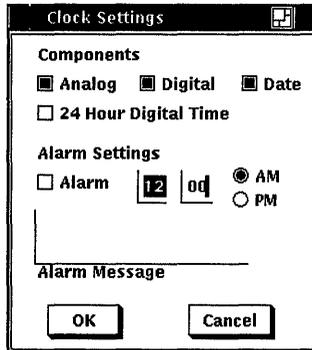
Shaded toggle buttons indicate the current settings. Click MB1 on a toggle button or its label to change the setting. For example, if you want only the analog clock displayed and the Analog, Digital, and Date toggle buttons are shaded, click on the Digital and Date toggle buttons to disable those settings. If you want the clock to display 24-hour digital (military) time, enable that setting by clicking on 24 Hour Digital Time.

Click on the OK button to save any changed settings. Click on the Cancel button to return to the date and time display without changing any settings.

You can also display the Settings... dialog box directly, without first displaying the pop-up menu by double-clicking MB1 anywhere on the Clock display.

To save your customized settings and the size and placement of the clock on the screen:

1   Make any desired changes to the size, position, and settings of the clock.

2   Click MB1 on the OK button.

3   Press and hold MB2 to display the pop-up menu.

4   Choose Save Settings.

    To restore the system defaults, choose Use System Settings from the pop-up menu.

Setting the Alarm

You can set the alarm to remind you of an appointment. To set the alarm from the Settings dialog box:

1   Click MB1 on the alarm toggle button to switch the alarm on.

2   Move to the hours field and type the hour at which you want the alarm to go off. You can either use a 12-hour clock, in which case you need to specify AM or PM, or you can use a 24-hour clock (military time).

    Use Delete to erase any number already entered or to correct typing mistakes.

3   Move to the minutes field and finish entering the time you want the alarm to go off.

4   If you are using a 12-hour clock, click on either the AM or PM option button.

5   To display a message on your screen when the alarm goes off, move to the alarm message field and type your message. Alarm messages may contain up to 200 characters.

6   Click on the OK button to save the settings. Click on the Cancel button to return to the date and time display without changing any settings.

When the alarm goes off, a box displays the alarm message on your screen. Click on the Acknowledged button to clear the alarm message from your screen.

Exiting from the Clock

Settings...
Save Settings
Use System Settings
Help   ⇨
Quit
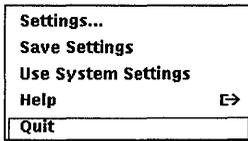
To exit from the Clock, choose the Quit menu item from the Clock's pop-up menu.

5

Using the CDA Viewer

The CDA Viewer lets you view DDIF (DIGITAL Document Interchange Format) files. DDIF is a standard format for the storage and interchange of compound documents as defined by Digital's Compound Document Architecture (CDA). Compound documents contain multiple elements, for example, text and graphics. DDIF files cannot be viewed in the same way as ordinary text files.

The CDA Viewer displays only DDIF files. If you specify a file that is not a DDIF file, for example, a text (ASCII) file, the file is converted to DDIF before it is displayed.

This chapter describes how to:

- Start the CDA Viewer
- Display DDIF files
- Change processing options
- Exit from the CDA Viewer

Starting the CDA Viewer

To start the CDA Viewer and view a file, choose CDA Viewer from the Session Manager Applications menu or enter the following command in a DECterm window:

```
% dxvdoc &
```

The CDA Viewer displays its main window and its Open file dialog box. The main window is where you view DDIF files.

File   Help

Open

File Filter

*.ddif

Files in

File Format   Filter

ddif

ddif   OK
dtif
text   Cancel

Options File...   Paper Size...

Open File

Page 0 of 0
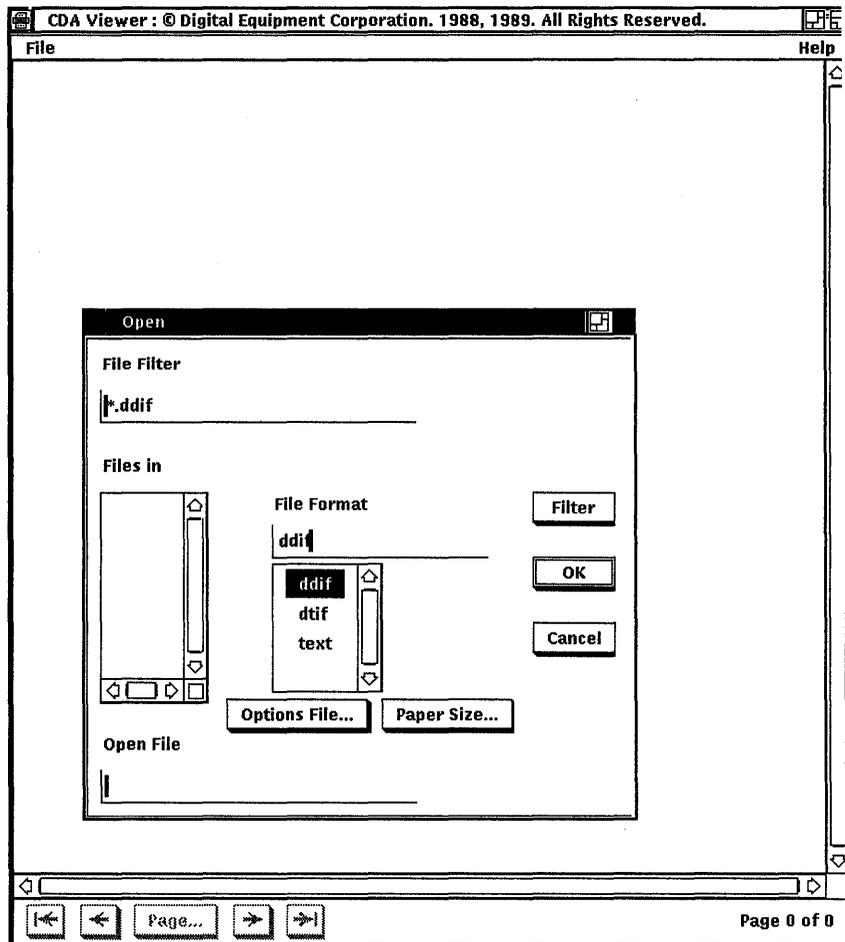
Viewing DDIF Files

When the Viewer starts, it displays the Open file dialog box that prompts you for the name of the file you want to view. The files list box lists the names of any DDIF files in the current directory.

To open and view a file in the CDA Viewer window, you must

1 In the File Format text field, type in the format of the file you want to view.

   Type TEXT if you want to view a TEXT file. Type DDIF if you want to view a DDIF file.

2 Double-click on the file name you want to view, and then click on the OK button.

The CDA Viewer displays the contents of the file you specified. The title bar contains the name of the file currently viewed.

If you want to view a DDIF or text file that is not listed, type the name of that file in the Open File text field and click on the OK button. Or, use the File Filter text entry field to list a subset of files that you can then select from. For example, to list all files in another directory with the file extension .ddif, type the complete directory specification, for example, **/jones/project/*.ddif**, in the File Filter text entry field and click on the Filter button. Then double click on the file name of the file you want to view.

To display information about the file you are currently viewing, choose Document Information... from the File menu. The CDA Viewer displays the product name, title, author, version, and date the file was created.

To display diagnostic information about the file you are viewing, such as warnings and errors that occurred while you were formatting the file, choose Diagnostic Information... from the File menu.

Changing Processing Options

See the UWS reference page dxvdoc(1X) for more information about processing options.

By means of an options file, you can change the way the CDA Viewer processes a file for viewing. You specify the options file, which contains the various options you want applied, by clicking on the Options File... button in the Open dialog box. The Options File dialog box is displayed.

Options File

Options File Filter

*.cda_options

Files in

Filter

OK

Cancel
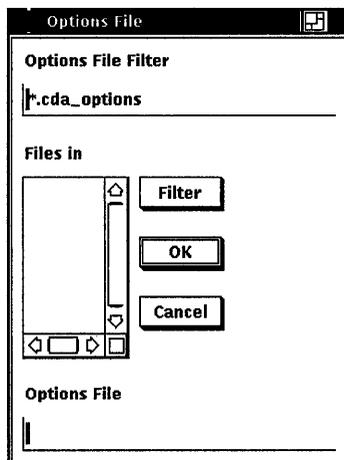
Options File

The Files list box lists the option files available in the current directory. Double click on the options file you want applied and then click on the OK button. These options will be used when the Viewer converts your file to DDIF format.

If you do not specify an options file, preset processing options are used.

Changing the Paper Size

In addition to setting different processing options, you can specify paper size formatting options for the next document that you open. To specify the paper size, click on the Paper Size... button in the Open dialog box. The Paper Size dialog box is displayed.
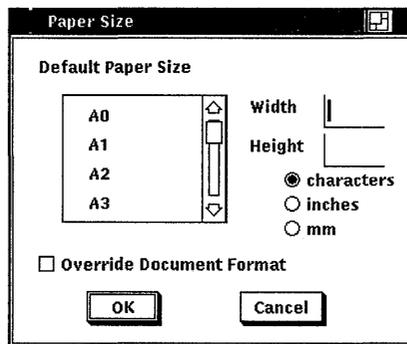
By default, the CDA Viewer formats a document according to the information stored in the file. If you want to look at a document and override the format information stored in the file, click on the Override Document Format toggle button. If you want to see what the document would look like specifying a default paper size, click on one of the paper sizes in the Paper Size list box, or enter a paper size of your own.

The processing options, paper size, and override format choice only apply to the next file you open. They do not immediately change the appearance of the document currently displayed. Click on the OK button to use these options for the next document that you open.

Closing a File

When you have finished viewing a file, close it by choosing the Close menu item from the File menu. This keeps the CDA Viewer active for you to open another file. If you open another file without closing the current one, the CDA Viewer closes the current file before opening the next one.

Exiting from the CDA Viewer

File
Open...
Document Information...
Diagnostic Information...
Close File
Quit
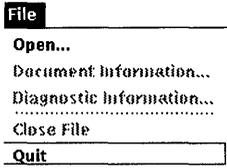
To exit from the CDA Viewer, choose the Quit menu item from the File menu. If you did not close the last file you viewed, the CDA Viewer closes it before exiting.

6

Using DECterm

DECterm is a VT300-series terminal emulator.

This chapter describes how to:

- Create a DECterm window
- Customize DECterm operating features
- Copy information
- Clear and resize DECterm windows
- Compose special characters
- Exit from DECterm

In addition to using these features, you can program DECterm text features and ReGIS and sixel graphics. See the *DECterm Text Programming Manual* and the *DECterm Graphics Programming Manual* for detailed information about using these features.

Creating a DECterm Window

To create a DECterm window, choose DECterm from the Session Manager Applications menu.

A DECterm window is displayed.

```
┌─────────────────────────────────────────────────────────────────────────┐
│ ▣  DECterm – Copyright © 1988, 1989 Digital Equipment Corporation. All Rights Reserved.  ▣▣ │
│ ├───────────────────────────────────────────────────────────────────────┤ │
│ │  Commands    Edit    Customize                                   Help  │ │
│ │                                                                        │ │
│ │                                                                        │ │
│ │                                                                        │ │
│ │                                                                        │ │
│ │                                                                        │ │
│ │                                                                        │ │
│ │                                                                        │ │
│ │                                                                        │ │
│ │                                                                        │ │
│ │                                                                        │ │
│ │                                                                        │ │
│ └────────────────────────────────────────────────────────────────────── │
└─────────────────────────────────────────────────────────────────────────┘
```
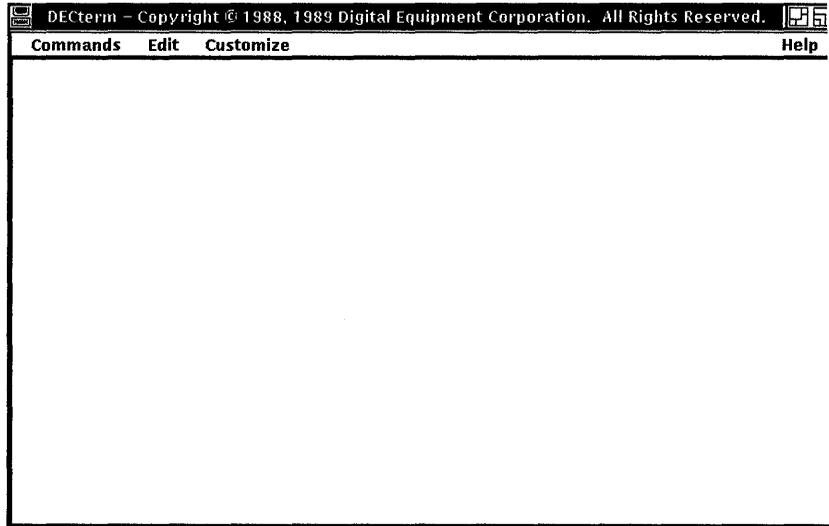
Give DECterm input focus by pointing to it and clicking MB1.

Customizing DECterm

```
┌──────────────────────┐
│  Customize           │
├──────────────────────┤
│ Window...            │
│ Display...           │
│ General...           │
│ Keyboard...          │
│ 7–Bit NRCS Selection...│
│ Graphics...          │
│ ....................  │
│ Use Last Saved Settings│
│ Use System Defaults  │
│ Use Saved Settings From...│
│ ....................  │
│ Save Current Settings │
│ Save Current Settings As...│
└──────────────────────┘
```

The DECterm customize menu lets you choose operating features for your DECterm window and lets you save those features. With the Customize menu, you can change:

- Window features, such as font used to display text, or the window size

- Display features, such as the shape of the cursor or whether scroll bars appear

- General features, such as your terminal type and character set

- Keyboard features, such as margin and warning bells or the behavior of certain keys (like ⟨⊠⟩)

- The 7-Bit National Replacement Character Set (NRCS) that corresponds to your keyboard

- Graphics features, such as as color map entries and color planes

Choosing an item from the Customize menu causes DECterm to display a dialog box. In all DECterm dialog boxes, shaded buttons indicate the current settings.

In DECterm dialog boxes:

- Click MB1 on a button or its label to change the setting.

- Click on the Apply button to view your changes without closing the dialog box.

- Click on the OK button to apply your changes and close the dialog box.

- Click on the Cancel button to cancel your changes.

Customizing a DECterm Window

Choose Window... from the Customize menu to change DECterm window features such as font or terminal size. DECterm displays a dialog box.

```
┌─────────────────────────────────────────────────────────────┐
│  DECterm:  Window                                       ⊞    │
├─────────────────────────────────────────────────────────────┤
│                                                               │
│  ☐ Auto Resize Terminal        Terminal Size                 │
│  ■ Auto Resize Window                                         │
│  ■ Terminal Driver Resize        24  Rows      80  Columns   │
│                                                               │
│  ○ Big Font                      24            80            │
│  ● Little Font                                                │
│                                  48            132           │
│  ○ Normal Font (80 Columns)                                  │
│  ○ Condensed Font (132 Columns)  72                          │
│  ● Normal/80, Condensed/132                                  │
│                                                               │
│  DECterm                                                     │
│  ─────────────────────────────                               │
│  Window Title                                                │
│                                                               │
│  DECterm                         ┌────┐ ┌───────┐ ┌────────┐│
│  ─────────────────────────────   │ OK │ │ Apply │ │ Cancel ││
│  Icon Name                       └────┘ └───────┘ └────────┘│
│                                                               │
└─────────────────────────────────────────────────────────────┘
```
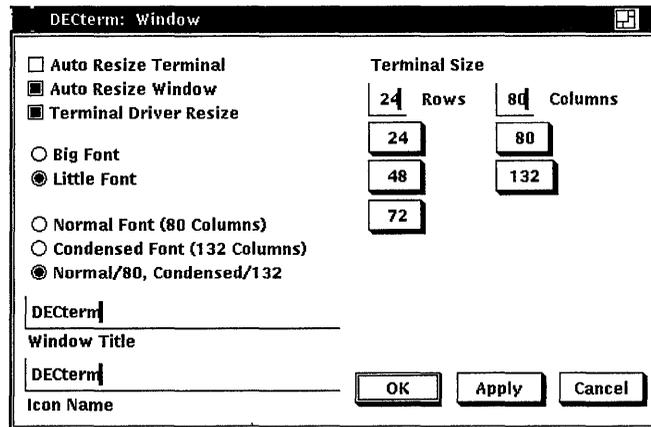
From the Window dialog box, you can customize the following features:

Auto Resize Terminal
Normally, changing the window size does not change the size of DECterm. Clicking on Auto Resize Terminal causes the size of DECterm to match the window size, if you resize the window.

Auto Resize Window
Normally, changing the size of DECterm (the number of rows and columns) automatically changes the window size. You disable this option by clicking on Auto Resize Window. When Auto Resize Window is disabled, a change in the size of DECterm does not result in a change in the window size. If DECterm is larger than the window, information may be outside the window boundary; this information is not displayed.

Terminal Driver Resize
Normally, when you modify the terminal driver, the terminal size also changes. Clicking on Terminal Driver Resize disables this option.

Big Font
Normally, DECterm displays a 14-point font (10-point font on 100 dots-per-inch systems). Clicking on the Big Font option causes DECterm to display an 18-point font.

Little Font
Normally, DECterm displays a 14-point font. Clicking on the Big Font option causes DECterm to display a larger font.

Normal Font (80 Columns)
Clicking on the Normal Font (80 Columns) option causes the 80 column font to be used, regardless of the number of columns. The default option is Normal Font/80, Condensed/132.

Condensed Font (132 Columns)
Clicking on the Condensed Font (132 Columns) option causes a condensed font to be used, regardless of the number of columns selected. The default font size is Normal/80, Condensed/132.

Normal/80, Condensed/132
The default font size is Normal/80, Condensed/132. This option causes the font size to adjust to match the terminal width. The Normal Font is used when there are 80 columns or less and the condensed font is used when there are more than 80 columns.

Window Title
Normally, the DECterm title appears in the title bar. You can change what appears in the title bar by entering text in this field.

Icon Name
Normally, the DECterm name appears in the icon. You can change what appears in the icon by entering text in this field.

Terminal Size
The default terminal size is 24 rows and 80 columns. You can change the terminal size by entering a number in the row or column field. You can also set the column and row to be any number from 1 to 132 by clicking on the text entry field, deleting any existing numbers, and entering the new settings.

Customizing a Display

Choose Display... from the Customize menu to modify display features such as the type of cursor or scroll bars. DECterm displays a dialog box.

```
┌─────────────────────────────────────────────────────────────┐
│  DECterm: Display                                        [⊞] │
├─────────────────────────────────────────────────────────────┤
│  ☐ Record Lines Off Top          ◉ Dark Text, Light Background│
│  ☐ Vertical Scroll Bar           ○ Light Text, Dark Background│
│  ☐ Horizontal Scroll Bar                                      │
│  ■ Vertical Cursor Coupling      ◉ No Status Display          │
│  ☐ Horizontal Cursor Coupling    ○ Host Status Display        │
│  ☐ Auto Wrap                                                  │
│  ■ Display Cursor                ◉ Block Cursor               │
│  ■ Cursor Blink                  ○ Underline Cursor           │
│                                                               │
│  Batch Scroll │100  Lines                                     │
│                                  ┌──────┐ ┌───────┐ ┌────────┐│
│  Record │ 500 Lines Off Top      │  OK  │ │ Apply │ │ Cancel ││
│                                  └──────┘ └───────┘ └────────┘│
└─────────────────────────────────────────────────────────────┘
```
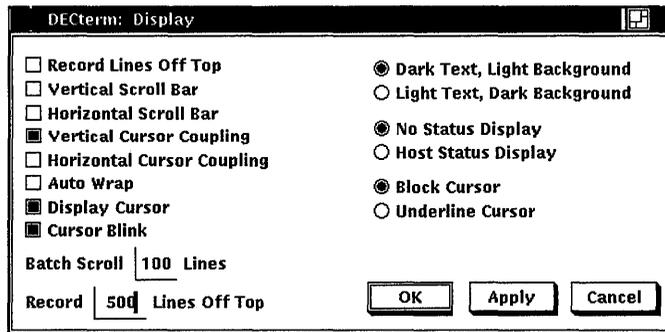
From the Display dialog box, you can customize the following features:

Record Lines Off Top
Normally, lines that are scrolled off the top of the DECterm window are saved. To view these lines, use the vertical scroll bar. Click on Record Lines Off Top to disable this option.

Vertical Scroll Bar
Normally, DECterm displays vertical scroll bars. Click on Vertical Scroll Bar to disable this option.

Horizontal Scroll Bar
Normally, DECterm does not display horizontal scroll bars. Click on Horizontal Scroll Bar to display a horizontal scroll bar at the bottom of your DECterm window.

Vertical Cursor Coupling
Normally, when you change the vertical size of a window or terminal, the cursor remains visible. For example, if the display contains 24 rows and you shrink it to 5 rows, the cursor remains visible; you can still enter text. Click on Vertical Cursor Coupling to disable this option.

Horizontal Cursor Coupling
Normally, when you change the horizontal size of the window or terminal (for example, from 132 columns to 80 columns), the cursor is not visible. Click on Horizontal Cursor Coupling to change this option.

Auto Wrap

Normally, when the cursor reaches the right margin of the window it stops. Subsequent characters you type will delete the existing character. Clicking on Auto Wrap causes the cursor to move, start a new line, and display new characters.

Display Cursor

Normally, DECterm displays a cursor. Click on Display Cursor to disable the cursor.

Cursor Blink

Normally, the DECterm cursor is a blinking cursor. Click on Cursor Blink to display a steady cursor.

Batch Scroll 0 Lines

Normally, you cannot scroll a specified number of lines. Entering a number in place of zero (0) increases the number of lines you can scroll to match the terminal size.

Record 500 Lines Off Top

Normally, you can save 500 lines that are scrolled off the top of your DECterm window (when the Record Lines Off Top option is enabled). Enter a number from 1 to 9999 to change the number of lines to be saved.

Dark Text, Light Background

Normally, DECterm displays dark text and a light screen background.

Light Text, Dark Background

Clicking on the Light Text, Dark Background option causes DECterm to display dark text and a light screen background.

No Status Display

Normally, you do not receive host status messages when you use DECterm to log onto a host system. Host status messages, when this option is enabled, appear on the bottom line of your terminal window display.

Host Status Display

Click on Host Status Display to receive host status messages. These messages appear on the bottom line of your terminal display. This option is available only on VT300-series terminals.

Block Cursor

Normally, the cursor displayed in your DECterm window is shaped like a block.
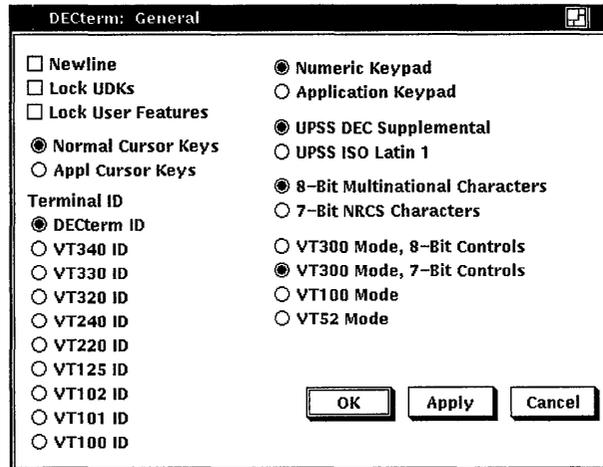
Underline Cursor

The default cursor shape for DECterm is a block. Click on the Underline Cursor option to get an underline cursor.

Customizing General Features

Choose General... from the Customize menu to change general features such as the type of terminal and character set. DECterm displays a dialog box.

```
┌─────────────────────────────────────────────────┐
│  DECterm: General                            ▣  │
├─────────────────────────────────────────────────┤
│                                                 │
│  ☐ Newline              ◉ Numeric Keypad        │
│  ☐ Lock UDKs            ○ Application Keypad     │
│  ☐ Lock User Features                           │
│                         ◉ UPSS DEC Supplemental │
│  ◉ Normal Cursor Keys   ○ UPSS ISO Latin 1      │
│  ○ Appl Cursor Keys                             │
│                         ◉ 8-Bit Multinational Characters │
│  Terminal ID            ○ 7-Bit NRCS Characters │
│  ◉ DECterm ID                                   │
│  ○ VT340 ID             ○ VT300 Mode, 8-Bit Controls │
│  ○ VT330 ID             ◉ VT300 Mode, 7-Bit Controls │
│  ○ VT320 ID             ○ VT100 Mode            │
│  ○ VT240 ID             ○ VT52 Mode             │
│  ○ VT220 ID                                     │
│  ○ VT125 ID                                     │
│  ○ VT102 ID              ┌────┐ ┌─────┐ ┌──────┐│
│  ○ VT101 ID              │ OK │ │Apply│ │Cancel││
│  ○ VT100 ID              └────┘ └─────┘ └──────┘│
│                                                 │
└─────────────────────────────────────────────────┘
```

From the General dialog box, you can set the following features:

Newline

Normally, when DECterm receives a line feed (LF), form feed (FF), or vertical tab (VT) character, the cursor moves to the first column of the next line. When you press the Return key, DECterm sends both a carriage return (CR) and line feed.

Click on Newline to disable this option. When disabled, if DECterm receives an LF, FF, or VT character, the cursor moves to the current column of the next line. When you press the Return key, DECterm sends only a carriage return.

Lock UDKs (User Defined Keys)

For detailed information about defining keys, see the DECterm Text Programming Manual.

Your keyboard contains keys you can define for your own use. Normally, the host system can change the function of the key you have defined back to the default. Clicking on Lock UDKs sets the user-defined keys so that the host system cannot change your definitions.

Lock User Features

DECterm lets you change the Auto Repeat option and the Foreground and Background Display option. The host system can override theses options unless you click on the Lock User Features option.

Normal Cursor Keys

By default, the Normal Cursor Keys option is on. This causes the arrow keys to move the cursor up, down, left, and right.

Appl Cursor Keys

By clicking on Application Cursor Keys, you can override the Normal Cursor Keys default to set the arrow keys to application-specific functions.

Terminal ID

You can let the host system know specific terminal operating attributes by clicking on a Terminal ID option. The default is DECterm ID.

You can choose the following terminal IDs:

DECterm ID	VT340 ID	VT330 ID	VT320 ID	VT240 ID
VT220 ID	VT125 ID	VT102 ID	VT101 ID	VT100 ID

Numeric Keypad

Normally, the Numeric Keypad option is set. This means that pressing a numeric key displays the character that appear on that key.

Application Keypad

Click on Application Keypad to cause user- or application-defined characters to be displayed.

UPSS DEC Supplemental

Normally, DECterm uses the DEC Multinational Character Set.

The ASCII character set makes up the first half of the DEC Multinational Character Set. Figure 6–1 illustrates the ASCII character set (characters with decimal values 0 through 127).

The first column identifies the character as you would enter it on a VT300-, VT200-, or VT100-series terminal or as you would see it on a printer (except for the nonprintable characters). The second half of each column identifies the character by the binary value of the byte; the value is stated in three radixes: octal, decimal, and hexadecimal. For example, the letter A has a storage value

of hexadecimal 41 (a bit configuration of 01000001), equivalent to 101 in octal notation and 65 in decimal notation.

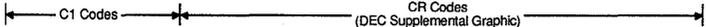## Figure 6–1   DEC Multinational Character Set, Part I

Column b8/b7/b6/b5 → Row b4 b3 b2 b1 ↓	0 (0 0 0 0)	1 (0 0 0 1)	2 (0 0 1 0)	3 (0 0 1 1)	4 (0 1 0 0)	5 (0 1 0 1)	6 (0 1 1 0)	7 (0 1 1 1)
0 (0 0 0 0)	NUL 0/0/0	DLE 20/16/10	SP 40/32/20	0 60/48/30	@ 100/64/40	P 120/80/50	` 140/96/60	p 160/112/70
1 (0 0 0 1)	SOH 1/1/1	DC1 21/17/11	! 41/33/21	1 61/49/31	A 101/65/41	Q 121/81/51	a 141/97/61	q 161/113/71
2 (0 0 1 0)	STX 2/2/2	DC2 22/18/12	" 42/34/22	2 62/50/32	B 102/66/42	R 122/82/52	b 142/98/62	r 162/114/72
3 (0 0 1 1)	ETX 3/3/3	DC3 23/19/13	# 43/36/23	3 63/51/33	C 103/67/43	S 123/83/53	c 143/99/63	s 163/115/73
4 (0 1 0 0)	EOT 4/4/4	DC4 24/20/14	$ 44/36/24	4 64/52/34	D 104/68/44	T 124/84/54	d 144/100/64	t 164/116/74
5 (0 1 0 1)	ENQ 5/5/5	NAK 25/21/15	% 45/37/25	5 65/53/35	E 105/69/45	U 125/85/56	e 145/101/65	u 165/117/75
6 (0 1 1 0)	ACK 6/6/6	SYN 26/22/16	& 46/38/26	6 66/54/36	F 106/70/46	V 126/86/56	f 146/102/66	v 166/118/76
7 (0 1 1 1)	BEL 7/7/7	ETB 27/23/17	' 47/39/27	7 67/55/37	G 107/71/47	W 127/87/57	g 147/103/67	w 167/119/77
8 (1 0 0 0)	BS 10/8/8	CAN 30/24/18	(50/40/28	8 70/56/38	H 110/72/48	X 130/88/58	h 150/104/68	x 170/120/78
9 (1 0 0 1)	HT 11/9/9	EM 31/25/19	) 51/41/29	9 71/57/39	I 111/73/49	Y 131/89/59	i 151/105/69	y 171/121/79
10 (1 0 1 0)	LF 12/10/A	SUB 32/26/1A	* 52/42/2A	: 72/58/3A	J 112/74/4A	Z 132/90/5A	j 152/106/6A	z 172/122/7A
11 (1 0 1 1)	VT 13/11/B	ESC 33/27/1B	+ 53/43/2B	; 73/59/3B	K 113/75/4B	[133/91/5B	k 153/107/6B	{ 173/123/7B
12 (1 1 0 0)	FF 14/12/C	FS 34/28/1C	, 54/44/2C	< 74/60/3C	L 114/76/4C	\ 134/92/5C	l 154/108/6C	| 174/124/7C
13 (1 1 0 1)	CR 15/13/D	GS 35/29/1D	- 55/45/2D	= 75/61/3D	M 115/77/4D	] 135/93/5D	m 155/109/6D	} 175/125/7D
14 (1 1 1 0)	SO 16/14/E	RS 36/30/1E	. 56/46/2E	> 76/62/3E	N 116/78/4E	^ 136/94/5E	n 156/110/6E	~ 176/126/7E
15 (1 1 1 1)	SI 17/15/F	US 37/31/1F	/ 57/47/2F	? 77/63/3F	O 117/79/4F	_ 137/95/5F	o 157/111/6F	DEL 177/127/7F

Key: ← C0 Codes → ← CL Codes (ASCII Graphic) →

Character | ESC 33/27/1B | Octal / Decimal / Hex

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Figure 6–2 illustrates the second half of the DEC Multinational Character Set (characters with decimal values 128 through 255). The first half of each of the numbered columns identifies the character as you would see it on a VT300- or VT200-series terminal or printer (these characters cannot be output on a VT100-series terminal).

Figure 6–2   DEC Multinational Character Set, Part II

8	9	10	11	12	13	14	15	Column (b8 b7 b6 b5)	Row
								Bits (b4 b3 b2 b1)	
200 128 80	DCS 220 144 90	240 160 A0	° 260 176 B0	À 300 192 C0	320 208 D0	à 340 224 E0	360 240 F0	0 0 0 0	0
201 129 81	PU1 221 145 91	¡ 241 161 A1	± 261 177 B1	Á 301 193 C1	Ñ 321 209 D1	á 341 225 E1	ñ 361 241 F1	0 0 0 1	1
202 130 82	PU2 222 146 92	¢ 242 162 A2	² 262 178 B2	Â 302 194 C2	Ò 322 210 D2	â 342 226 E2	ò 362 242 F2	0 0 1 0	2
203 131 83	STS 223 147 93	£ 243 163 A3	³ 263 179 B3	Ã 303 195 C3	Ó 323 211 D3	ã 343 227 E3	ó 363 243 F3	0 0 1 1	3
IND 204 132 84	CCH 224 148 94	244 164 A4	264 180 B4	Ä 304 196 C4	Ô 324 212 D4	ä 344 228 E4	ô 364 244 F4	0 1 0 0	4
NEL 205 133 85	MW 225 149 95	¥ 245 165 A5	µ 265 181 B5	Å 305 197 C5	Õ 325 213 D5	å 345 229 E5	õ 365 245 F5	0 1 0 1	5
SSA 206 134 86	SPA 226 150 96	246 166 A6	¶ 266 182 B6	Æ 306 198 C6	Ö 326 214 D6	æ 346 230 E6	ö 366 246 F6	0 1 1 0	6
ESA 207 135 87	EPA 227 151 97	§ 247 167 A7	· 267 183 B7	Ç 307 199 C7	Œ 327 215 D7	ç 347 231 E7	œ 367 247 F7	0 1 1 1	7
HTS 210 136 88	230 152 98	¤ 250 168 A8	270 184 B8	È 310 200 C8	Ø 330 216 D8	è 350 232 E8	ø 370 248 F8	1 0 0 0	8
HTS 211 137 89	231 153 99	© 251 169 A9	¹ 271 185 B9	É 311 201 C9	Ù 331 217 D9	é 351 233 E9	ù 371 249 F9	1 0 0 1	9
VTS 212 138 8A	232 154 9A	ª 252 170 AA	º 272 186 BA	Ê 312 202 CA	Ú 332 218 DA	ê 352 234 EA	ú 372 250 FA	1 0 1 0	10
PLD 213 139 8B	CSI 233 155 9B	« 253 171 AB	» 273 187 BB	Ë 313 203 CB	Û 333 219 DB	ë 353 235 EB	û 373 251 FB	1 0 1 1	11
PLU 214 140 8C	ST 234 156 9C	¼ 254 172 AC	¼ 274 188 BC	Ì 314 204 CC	Ü 334 220 DC	ì 354 236 EC	ü 374 252 FC	1 1 0 0	12
RI 215 141 8D	OSC 235 157 9D	½ 255 173 AD	½ 275 189 BD	Í 315 205 CD	Ÿ 335 221 DD	í 355 237 ED	ÿ 375 253 FD	1 1 0 1	13
SS2 216 142 8E	PM 236 158 9E	256 174 AE	276 190 BE	Î 316 206 CE	336 222 DE	î 356 238 EE	376 254 FE	1 1 1 0	14
SS3 217 143 8F	APC 237 159 9F	¿ 257 175 AF	¿ 277 191 BF	Ï 317 207 CF	ß 337 223 DF	ï 357 239 EF	377 255 FF	1 1 1 1	15

|←——— C1 Codes ———→|←——————— CR Codes (DEC Supplemental Graphic) ———————→|

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UPSS ISO Latin 1

You can override the DEC Multinational Character Set by clicking on the UPSS ISO Latin 1 option. This causes the International Standards Organization (ISO) Latin 1 Character Set to be used. Figure 6–3 illustrates the ISO Latin 1 Supplemental Character Set.

Figure 6–3   ISO Latin 1 Supplemental Character Set

8	9	10	11	12	13	14	15	Bits b4 b3 b2 b1	Row
200 128 80	DCS 220 144 90	NBSP 240 160 A0	° 260 176 B0	À 300 192 C0	Ð 320 208 D0	à 340 224 E0	ð 360 240 F0	0 0 0 0	0
201 129 81	PU1 221 145 91	¡ 241 161 A1	± 261 177 B1	Á 301 193 C1	Ñ 321 209 D1	á 341 225 E1	ñ 361 241 F1	0 0 0 1	1
202 130 82	PU2 222 146 92	¢ 242 162 A2	² 262 178 B2	Â 302 194 C2	Ò 322 210 D2	â 342 226 E2	ò 362 242 F2	0 0 1 0	2
203 131 83	STS 223 147 93	£ 243 163 A3	³ 263 179 B3	Ã 303 195 C3	Ó 323 211 D3	ã 343 227 E3	ó 363 243 F3	0 0 1 1	3
IND 204 132 84	CCH 224 148 94	¤ 244 164 A4	´ 264 180 B4	Ä 304 196 C4	Ô 324 212 D4	ä 344 228 E4	ô 364 244 F4	0 1 0 0	4
NEL 205 133 85	MW 225 149 95	¥ 245 165 A5	µ 265 181 B5	Å 305 197 C5	Õ 325 213 D5	å 345 229 E5	õ 365 245 F5	0 1 0 1	5
SSA 206 134 86	SPA 226 150 96	¦ 246 166 A6	¶ 266 182 B6	Æ 306 198 C6	Ö 326 214 D6	æ 346 230 E6	ö 366 246 F6	0 1 1 0	6
ESA 207 135 87	EPA 227 151 97	§ 247 167 A7	· 267 183 B7	Ç 307 199 C7	× 327 215 D7	ç 347 231 E7	÷ 367 247 F7	0 1 1 1	7
HTS 210 136 88	230 152 98	¨ 250 168 A8	¸ 270 184 B8	È 310 200 C8	Ø 330 216 D8	è 350 232 E8	ø 370 248 F8	1 0 0 0	8
HTS 211 137 89	231 153 99	© 251 169 A9	¹ 271 185 B9	É 311 201 C9	Ù 331 217 D9	é 351 233 E9	ù 371 249 F9	1 0 0 1	9
VTS 212 138 8A	232 154 9A	ª 252 170 AA	º 272 186 BA	Ê 312 202 CA	Ú 332 218 DA	ê 352 234 EA	ú 372 250 FA	1 0 1 0	10
DLP 213 139 8B	CSI 233 155 9B	« 253 171 AB	» 273 187 BB	Ë 313 203 CB	Û 333 219 DB	ë 353 235 EB	û 373 251 FB	1 0 1 1	11
PLU 214 140 8C	ST 234 156 9C	¬ 254 172 AC	¼ 274 188 BC	Ì 314 204 CC	Ü 334 220 DC	ì 354 236 EC	ü 374 252 FC	1 1 0 0	12
RI 215 141 8D	OSC 235 157 9D	- 255 173 AD	½ 275 189 BD	Í 315 205 CD	Ý 335 221 DD	í 355 237 ED	ý 375 253 FD	1 1 0 1	13
SS2 216 142 8E	PM 236 158 9E	® 256 174 AE	¾ 276 190 BE	Î 316 206 CE	Þ 336 222 DE	î 356 238 EE	þ 376 254 FE	1 1 1 0	14
SS3 217 143 8F	APC 237 159 9F	¯ 257 175 AF	¿ 277 191 BF	Ï 317 207 CF	ß 337 223 DF	ï 357 239 EF	ÿ 377 255 FF	1 1 1 1	15

|←——— C1 Codes ———→|←——————— CR Codes / ISO Latin–1 Supplemental Graphic ———————→|

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Note *To use these character sets you must set the Character Set mode option to 8-Bit Characters.*

8-Bit Multinational Characters
Normally, the character mode is set to 8 bits for use with the DEC Supplemental or ISO Latin 1 Supplemental Character Set.

7-Bit NRCS Characters
To use National Replacement Character Sets, click on the 7-Bit NRCS Character Mode option. This option lets DECterm operate in 7-bit mode, using the national character set selected in the 7-Bit NRCS dialog box. The default is the 8-bit Multinational Character Set. Figure 6–4 shows the characters in each NRC set that differ from the ASCII set.

Figure 6–4   National Replacement Character Sets

National Replacement Character Sets

Character Set	2/3	4/0	5/11	5/12	5/13	5/14	5/15	6/0	7/11	7/12	7/13	7/14
ASCII	#	@	[	\	]	^	–	`	{	|	}	~
United Kingdom	£	@	[	\	]	^	–	`	{	|	}	~
Dutch	£	¾	ÿ	½	|	^	–	`	··	f	¼	´
Finnish	#	@	Ä	Ö	Å	Ü	–	é	ä	ö	å	ü
French	£	à	°	ç	§	^	–	`	é	ù	è	··
French Canadian	#	à	â	ç	ê	î	–	ô	é	ù	è	û
German	#	§	Ä	Ö	Ü	^	–	`	ä	ö	ü	ß
Italian	£	§	°	ç	é	^	–	ù	à	ò	è	ì
Norwegian/ Danish	#	@	Æ	Ø	Å	^	–	`	æ	ø	å	–
Portuguese	#	@	Ã	Ç	Õ	^	–	`	ã	ç	õ	~
Spanish	£	§	¡	Ñ	¿	^	–	`	`	°	ñ	ç
Swedish	#	É	Ä	Ö	Å	Ü	–	é	ä	ö	å	ü
Swiss	ù	à	é	ç	ê	î	è	ô	ä	ö	ü	û

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VT300 Mode, 8-Bit Controls
Normally, DECterm emulates a VT300-series terminal, using 7-bit control characters (codes 0–31). You can change this to VT300 Mode with 8-bit control characters by clicking on the VT300 Mode, 8-Bit Controls option. This causes DECterm to translate 8-bit control characters (codes 128 to 159) for function keys. For example, CSIA for the up arrow key. Not all applications understand 8-bit control characters.

VT300 Mode, 7-Bit Controls
Normally, DECterm operates in VT300 mode with 7-bit control characters. This means that function keys are transmitted in 7-bit form. For example, ESC OA for the up arrow key.

VT100 Mode
Click on VT100 Mode to cause DECterm to emulate a VT100 terminal. DECterm operates in 7-bit mode and VT300 terminal features are in operation.

VT52 Mode
Click on VT52 Mode to override the VT300 Mode and cause DECterm to emulate a VT52 terminal.

Customizing a Keyboard

Choose Keyboard... from the Customize menu to set keyboard features. DECterm displays a dialog box.

```
┌─────────────────────────────────────────────────┐
│  DECterm: Keyboard                          [⊞]  │
├─────────────────────────────────────────────────┤
│  ■ Warning Bell          ◉ Comma Key Sends ,,    │
│  ☐ Margin Bell           ○ Comma Key Sends ,<    │
│  ■ Auto Repeat                                   │
│  ■ Ctrl-Q, Ctrl-S = Hold ◉ Tilde Key Sends '~    │
│                          ○ Tilde Key Sends ESC   │
│  ◉ <X] Delete            ◉ Angle Brackets Key Sends <> │
│  ○ <X] Backspace         ○ Angle Brackets Key Sends '~ │
│                                                  │
│                    ┌──────┐ ┌───────┐ ┌────────┐ │
│                    │  OK  │ │ Apply │ │ Cancel │ │
│                    └──────┘ └───────┘ └────────┘ │
└─────────────────────────────────────────────────┘
```
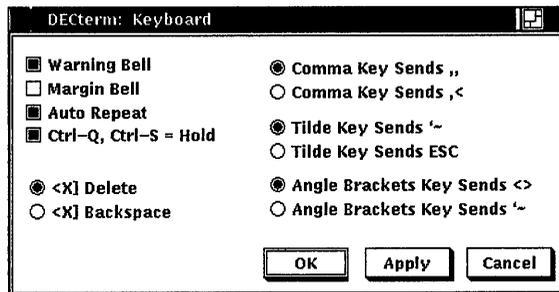
From the Keyboard dialog box, you can set the following keyboard features:

Warning Bell
Normally, the keyboard warning bell rings when errors occur. Click on Warning Bell to disable this option.

Margin Bell
Normally, the margin bell does not ring when the cursor reaches the right margin. You can cause it to ring by clicking on Margin Bell.

Auto Repeat
Normally, continuing to press a key causes the character to be displayed repeatedly . Clicking on the Auto Repeat option causes only one character to be displayed.

Ctrl–Q, Ctrl–S = Hold
Normally, pressing Ctrl/S causes the display to stop scrolling and pressing Ctrl/Q causes the display to resume scrolling. Click on Ctrl–Q, Ctrl–S = Hold) to disable this option.

<X] Delete
Normally, the <X] Delete key functions as a delete key, deleting the character to the left of the cursor.

<X] Backspace
You can override the <X] Delete default by clicking on <X] Backspace option. This causes the <X] key to function as a nondestructive backspace key.

Comma Key Sends ,,

On the North American and Dutch keyboards, the Comma Key
Sends ,, option is set. This causes a comma (,) to be displayed
when you press the comma key, whether or not the key is shifted.

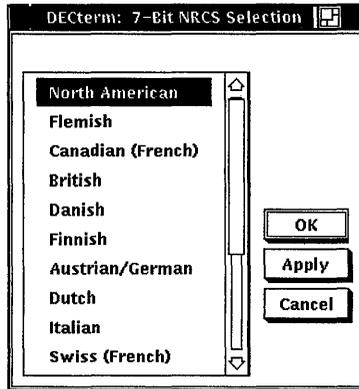### Comma Key Sends ,<

On the North American and Dutch keyboards, you can override
the Comma Key Sends ,, default by clicking on the Comma Key
Sends ,< option. This causes a comma (,) to be displayed when
you press the comma key shifted, and a left angle bracket (<) to
be displayed when you press the comma key unshifted.

Tilde Key Sends '~

On the North American and Dutch keyboards, the Tilde Key
Sends '~ option is set. This causes the '~ key to display a left
single quotation mark (') when unshifted and a tilde (~) when
shifted.

Tilde Key Sends ESC

On the North American and Dutch keyboards, you can override
the Tilde Key Sends '~ default by clicking on the Tilde Key Sends
ESC option. This causes the '~ key to function as an escape (ESC)
key.

Angle Brackets Key Sends <>

On the North American and Dutch keyboards, the Angle Brackets
Key Sends <> option is set. This causes the angle bracket key to
display a left angle bracket (<) when unshifted and a right angle
bracket (>) when shifted.

Angle Brackets Key Sends '~

On the North American and Dutch keyboards, you can override
the Angle Bracket Key Sends <> default by clicking on the Angle
Brackets Key Sends '~ option. This causes the <> key to display
a left single quotation mark ' when unshifted and a tilde ~ when
shifted.

Choosing a National Replacement Character Set

Choose 7-Bit NRCS Selection... from the Customize menu to
choose a National Replacement Character Set (NRCS) that
corresponds to your keyboard. DECterm displays a dialog box.

The NRCS selection is used only with the 7-Bit NRCS Character
option in the Customize General menu. Normally, to use a 7-
bit national character set you need to choose the corresponding
keyboard in the Session Manager and also select the 7-bit NRCS
in DECterm.

```
┌────────────────────────────────────────────┐
│  DECterm: 7-Bit NRCS Selection  [■]         │
├────────────────────────────────────────────┤
│ ┌──────────────────────┐ [△]                │
│ │ North American        │ ║                 │
│ │   Flemish             │ ║                 │
│ │   Canadian (French)   │ ║                 │
│ │   British             │ ║                 │
│ │   Danish              │ ║   ┌──────────┐  │
│ │   Finnish             │ ║   │   OK     │  │
│ │   Austrian/German     │ ║   ├──────────┤  │
│ │   Dutch               │ ║   │  Apply   │  │
│ │   Italian             │ ║   ├──────────┤  │
│ │   Swiss (French)      │ [▽] │  Cancel  │  │
│ └──────────────────────┘     └──────────┘  │
└────────────────────────────────────────────┘
```

You can select the following character sets and corresponding keyboards (see Appendix B for the keyboard illustrations):

North American	Italian
Flemish	Swiss (French)
Canadian (French)	Swiss (German)
British	Swedish
Danish	Norwegian
Finnish	Belgian/French
Austrian/German	Spanish
Dutch[1]	Portuguese

---

[1]Selecting the Dutch NRCS is the same as selecting the North American NRCS. The Dutch NRCS is not supported.

Customizing Graphics

Choose Graphics... from the Customize menu to modify DECterm graphics features such as color map entries. DECterm displays a dialog box.

```
┌────────────────────────────────────────────┐
│  DECterm: Graphics                    [■]   │
├────────────────────────────────────────────┤
│ ☐ Share Color Map Entries                   │
│ ■ Enable Backing Store          4  Bit Planes│
│ ☐ Report Macrograph Contents                │
│                                             │
│     ┌──────┐ ┌────────┐ ┌────────┐          │
│     │  OK  │ │ Apply  │ │ Cancel │          │
│     └──────┘ └────────┘ └────────┘          │
└────────────────────────────────────────────┘
```
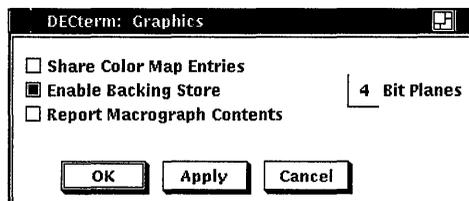
From the Graphics dialog box, you can customize the following graphics features:

Share Color Map Entries

Normally, this option is enabled on single-plane and true color systems and disabled on GPX systems. Clicking on this option prevents DECterm from allocating color map entries for its exclusive use. Instead, DECterm allocates shared, read-only colors out of the default color map. This means that DECterm does not need to create a private color map which would prevent the windows from displaying in their true colors, but it also means that DECterm colors may not match the colors used on a real terminal.

Enable Backing Store

Normally, the Enable Backing Store option is on, causing DECterm to redraw graphics after the window has changed. Disabling this option improves performance.

See the DECterm Graphics Programming Manual for detailed information on macrographs.

Report Macrograph Contents

Normally, DECterm does not respond to a request by an application to report macrograph contents. Clicking on this option enables ReGIS commands to report macrograph contents. This feature may risk security in some environments. When reporting is complete, disable this feature.

2-Bit Planes

You can choose the number of colors available in ReGIS and sixel graphics by entering the number of planes supported by your system. With 2-bit planes DECterm can display four different colors at the same time; and with 4-bit planes DECterm can display 16 colors.

Normally, DECterm uses 2-bit planes on 4-plane systems and 4-bit planes on all other systems. This reduces the probability that DECterm must create a private color map.

Applications written for the VT240 terminal require only 2-bit planes, while applications written for the VT340 may require up to 4-bit planes.

Saving and Restoring Customized Features

When you modify DECterm settings, you can save your changes. If you save your changes, DECterm uses these settings each time you create a DECterm window. If you change your mind and want to use the settings that came with your system, you can restore the defaults.

To save customized settings:

■ Choose Save Current Settings from the Customize menu for routine saving of customized features.

■ Choose Save Current Settings As... from the Customize menu when you want to save the current customized features with a new or different file name. DECterm displays a dialog box.
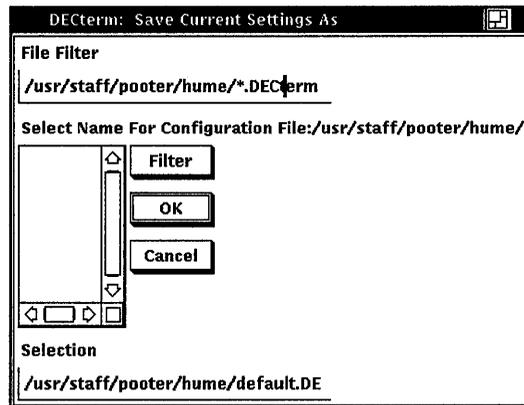
```
┌─────────────────────────────────────────────────────┐
│  DECterm:  Save Current Settings As          [□]     │
├─────────────────────────────────────────────────────┤
│ File Filter                                          │
│ /usr/staff/pooter/hume/*.DECterm                     │
│                                                      │
│ Select Name For Configuration File:/usr/staff/pooter/hume/ │
│  ┌──────┐△  ┌──────────┐                             │
│  │      │   │  Filter   │                            │
│  │      │   └──────────┘                             │
│  │      │   ┌──────────┐                             │
│  │      │   │    OK     │                            │
│  │      │   └──────────┘                             │
│  │      │   ┌──────────┐                             │
│  │      │▽  │  Cancel   │                            │
│  └──────┘   └──────────┘                             │
│  ◁ ▭ ▷ □                                             │
│ Selection                                            │
│ /usr/staff/pooter/hume/default.DE                    │
└─────────────────────────────────────────────────────┘
```

The dialog box prompts you for the name of the file you want to use to save your customized features. The file list box displays the names of any files in the current directory that contain customized features. By default, these files have the file extension **.DECterm**.

To use a file name that is not listed, enter the name of that file in the Selection text field and click on the OK button.

To restore customized settings, choose:

■ Use Last Saved Settings from the Customize menu to restore an existing file.

■ Use System Defaults from the Customize menu to restore the system defaults.

- Use Saved Settings From... from the Customize menu to restore previously saved settings. DECterm displays a dialog box.
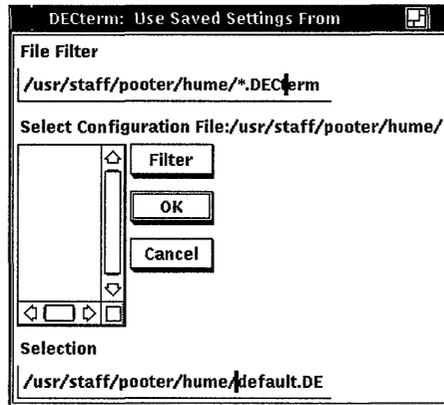
```
┌────────────────────────────────────────────┐
│    DECterm: Use Saved Settings From     ▣   │
├────────────────────────────────────────────┤
│ File Filter                                 │
│ /usr/staff/pooter/hume/*.DECterm            │
│                                             │
│ Select Configuration File:/usr/staff/pooter/hume/ │
│   ┌──────────┬─┐  ┌──────────┐              │
│   │        △ │▲│  │  Filter  │              │
│   │          │ │  └──────────┘              │
│   │          │ │  ┌──────────┐              │
│   │          │ │  │    OK    │              │
│   │          │ │  └──────────┘              │
│   │          │ │  ┌──────────┐              │
│   │          │ │  │  Cancel  │              │
│   │        ▽ │▼│  └──────────┘              │
│   ├──────────┼─┤                            │
│   │◁ ▭ ▷│▢│                                 │
│   └──────────┴─┘                            │
│ Selection                                   │
│ /usr/staff/pooter/hume/default.DE           │
└────────────────────────────────────────────┘
```

The dialog box prompts you for the name of the file you want to use to save your customized features. The file list box displays the names of any files in the current directory that contain customized features. By default, these files have the extension **.DECterm**. Double click on the file name of the file you want to use.

Or, use the File filter text field to list a subset of files you can then select from. For example, to display all files in another directory with the file type DECterm, type the full directory path −**/jones/customize/*.DECterm**− in the File filter text field and click on the Filter button. Then double click on the file name of the file you want to use.

Copying Information

Choose the Edit menu to copy information within or between terminal windows.

```
┌───────────┐
│   Edit    │
├───────────┤
│ Copy      │
│ Paste     │
│ ......... │
│ Select All│
└───────────┘
```

To copy information:

1   Select the information you want to copy by pressing and holding MB1, dragging the pointer over the information, and releasing MB1. Or, choose the Select All menu item from the Edit menu to copy the entire display.

The selected area is highlighted.

2   Choose the Copy menu item from the Edit menu to store the copied information.
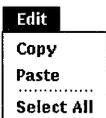
3 Click on the area where you want to place the information.

4 Choose the Paste menu item from the Edit menu.

The selected information is copied to the new location.

Clearing and Resizing Terminal Windows

Commands
Clear Lines Off Top
Clear Display
Resize Window
Clear Communications
Reset Terminal
Quit
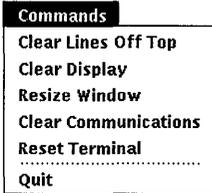
From the Commands menu, you can clear or resize the terminal window.

Clear Lines Off Top

You can erase information stored in the transcript by choosing the Clear Lines Off Top menu item. The transcript is an area of memory that contains the last saved lines of your screen display (use the Customize Display menu to change the size of the transcript). You can read it by using the scroll bars. The transcript exists as long as the Record Lines Off Top option in the Window dialog box is in effect. Normally, Record Lines Off Top is on.

Clear Display

You can clear all information displayed in a terminal window by choosing the Clear Display menu item.

Resize Window

Choose the Resize Window menu item to resize the window to match the size (number of rows and columns) of DECterm.

Clear Communications

Choose the Clear Communications menu item to reset the communications buffers. This causes DECterm to read data to the host system even when DECterm has received an XOFF signal.

For detailed information about Soft Terminal Reset, see the DECterm Text Programming Manual.

Reset Terminal

Clicking on Reset Terminal causes a Soft Terminal Reset (STR).

Choosing Reset Terminal also restores the default color map. On a 4-plane system such as the VS2000/GPX, displaying ReGIS or sixel graphics causes DECterm to create and load its own hardware color map, so that other windows do not display in their true colors when the DECterm window has input focus.

To restore the default hardware color map, first erase the graphics from the window by choosing the Clear Display menu item from the Commands menu, and then reset the terminal with the Reset Terminal menu item.

Normally DECterm emulates only 2 planes of graphics on a 4-plane system; therefore, DECterm usually does not create a color map.

Composing Characters

For more information about composing characters, see Appendix A.

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. For example, you can create the cents ¢ symbol, or the Japanese yen ¥ symbol by entering a compose sequence.

You can create any character from the character set DECterm is currently using.

Exiting from DECterm

Commands
Clear Lines Off Top
Clear Display
Resize Window
Clear Communications
Reset Terminal
Quit

Choose Quit from the Commands menu or enter the logout command to exit from DECterm and close the DECterm window.

7

Using Mail

Mail allows you to exchange messages with other computer users. You can use Mail to send messages, read messages sent to you, and print, file, delete, reply to, and forward messages.

This chapter describes how to:

- Start Mail
- Send messages
- Read messages
- Reply to messages
- Forward messages
- Print messages
- Create files from messages
- Work with folders
- Customize your Mail environment
- Exit from Mail

Starting Mail

To start Mail, choose Mail from the Session Manager Applications Menu or enter the following command in a DECterm window:

```
% dxmail &
```

Mail displays its main window.

Folder Area →

Message Area

Push Buttons
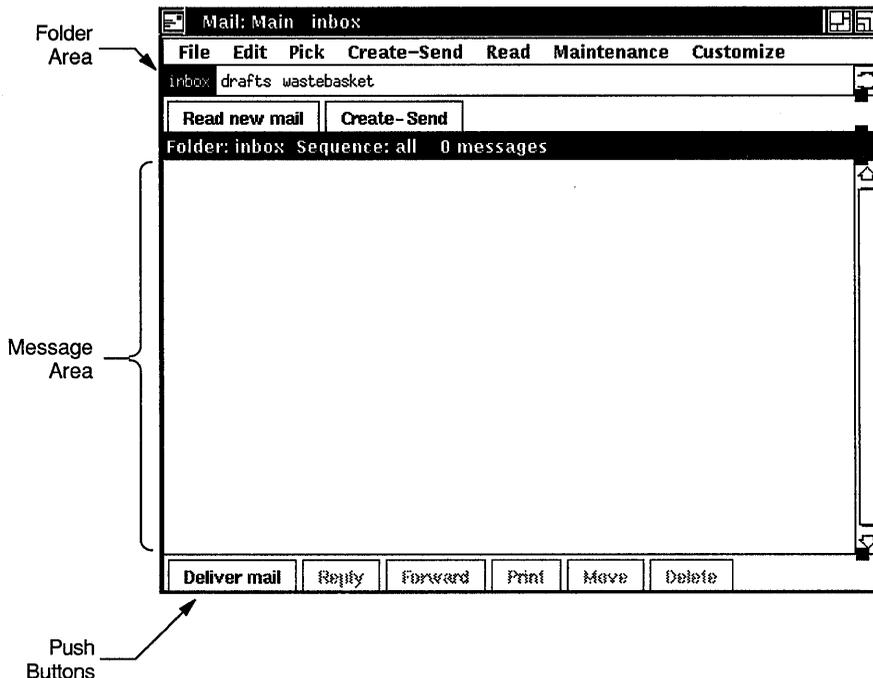
The main Mail window uses two areas to display your mail folders
and messages. The top area lists your folders; the bottom area
lists the messages in the opened folder.

Folders help you organize your mail messages. You can create as
many folders as you need. When you enter Mail for the first time,
three folders (inbox, drafts, and wastebasket) appear in the folder
area. The inbox folder contains messages that have been sent to
you. The drafts folder contains drafts of messages you create, and
the wastebasket folder contains messages that you have deleted.
You might file all messages on a related topic in one folder.

The names of your folders are always displayed, regardless of
the number of messages in the open folder. Double clicking
MB1 on a folder name opens the folder and displays a list of the
messages. Only one folder can be opened at one time. To view
lists of messages in multiple folders simultaneously, choose the
Open folder in new menu item from the File menu.

Folders can be opened to reveal their contents and closed to
conceal their contents. To open a folder, double click MB1 on
the folder name. To close a folder, double click MB1 on name of
another folder.

The inbox is also automatically opened when you enter Mail.
If there are any messages in the inbox, they are listed in the
Message index. Messages are chronologically arranged by date
received. To display messages in a different folder, open that
folder.

Near the bottom of the window is a row of push buttons. These
buttons allow you to execute the tasks you most commonly
perform with messages. Many of the push buttons are disabled
when you first start Mail and remain so until you select a specific
message.

Pressing MB2 over a folder or an open message in a Mail window
displays a pop-up menu. Pop-up menus contain many commonly
performed tasks. The items on a pop-up menu vary according to
the type of object (folder or message) on which you are positioned
and act on the object on which you are positioned.

Pop-up menu items and push buttons duplicate pull-down menu
items. Where you can choose among a push button, pop-up menu,
or pull-down menu to execute a task, instructions in this chapter
list one way to accomplish the task. Depending on your working
style, you may prefer to use one of the other methods when you
are familiar with Mail.

Sending Messages

With Mail, you can create and send a mail message or an existing
file to one user or many users.

Sending a Message

To send a mail message to any user on your system or another
system, click on the Create-Send button in the main window. A
Create-Send window opens. You can have multiple Create-Send
windows opened at one time.

```
┌──────────────────────────────────────────────────────────┐
│ ▣  Mail: Create                                  │⊞│⊡│   │
│  File   Edit                                             │
├──────────────────────────────────────────────────────────┤
│ To:                                                    △ │
│ cc:                                                      │
│ Subject:                                                 │
│ -------                                                  │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                        ▽ │
├──────────────────────────────────────────────────────────┤
│ │ Close │ │ Reset │ │ Save │ │ Send │                    │
└──────────────────────────────────────────────────────────┘
```
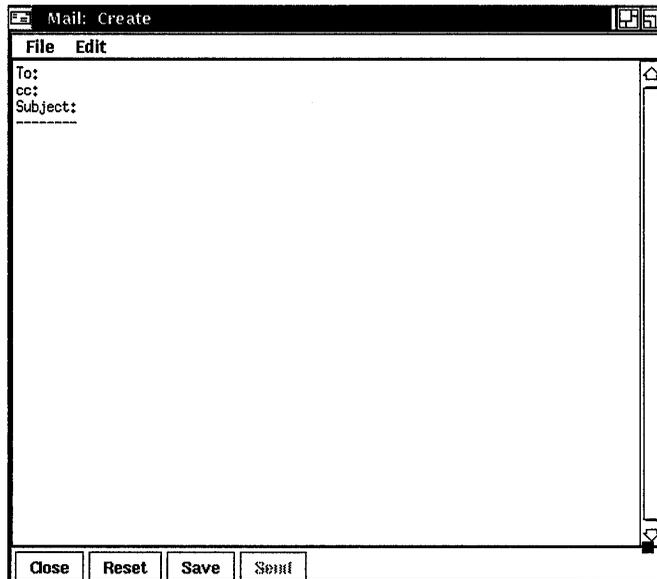
The Create-Send window is divided into an envelope area and a message area. The envelope area contains the items shown in the following table.

Field	Description
To:	In this field, you specify the person or persons to whom you want to send the message. You can enter a user name, with optional node name. Separate names with commas.
CC:	In this field, if desired, you specify users to receive copies of the message.
Subject:	The subject of the message (optional).

Use the built-in editing commands, described in the DECwindows User's Guide, to enter text and correct mistakes.

To enter text in a field, point to the field and click MB1. Enter your message text in the message area.

To send the message, click on the Send button. When the message is sent, the Send button is dimmed until you begin composing another message.

To close the window, click on the Quit button. This deletes all text in the window and closes the window.

To clear the window without closing it, click on the Reset button. The text in the Create-Send window is erased and the window can be used to send another message.

Saving a Draft of a Message

Selecting Save allows you to save a draft of the message in the drafts folder. Click on the Save button to save a draft. The Save button dims to indicate the draft is now saved in the drafts folder. You can still send or cancel the message after it has been saved.

Resuming Work on a Draft Message

You can continue working on a draft of a message that you previously saved.

To resume work on a draft message:

1   Select a message from the main window.

2   Choose Use as comp from the main Mail window's File menu.

    When you choose the Use as comp menu item, Mail displays a Create-Send window that contains the contents of the selected message.

Including a File in a Message

You can insert an existing file into a mail message.

To include a file in a message:

1   Choose Include File... from the Create-Send window's File menu. Mail displays a dialog box.

```
┌─────────────────────────────────────────────────┐
│ ▦  Choose file to insert                    ⊞   │
│ ┌───────────────────────────────────────────────│
│ File Filter                                      │
│                                                  │
│ │*                                               │
│ ─────────────────────────────────────            │
│                                                  │
│ Files in /usr/staff/almost/hume/                 │
│ ┌────────────────────────────────┐△  ┌────────┐ │
│ │/usr/staff/almost/hume/229JNL   ││   │ Filter │ │
│ │/usr/staff/almost/hume/92dJNL   ││   └────────┘ │
│ │/usr/staff/almost/hume/Mail     ││   ┌────────┐ │
│ │/usr/staff/almost/hume/bin      ││   │   OK   │ │
│ │/usr/staff/almost/hume/c3JNL    ││   └────────┘ │
│ │/usr/staff/almost/hume/personal ││   ┌────────┐ │
│ │                                ││   │ Cancel │ │
│ │                                ││   └────────┘ │
│ │                                │▽             │
│ └◁□──────────────────────▷□──────┘             │
│                                                  │
│ Selection                                        │
│ ─────────────────────────────────────            │
│                                                  │
└──────────────────────────────────────────────────┘
```
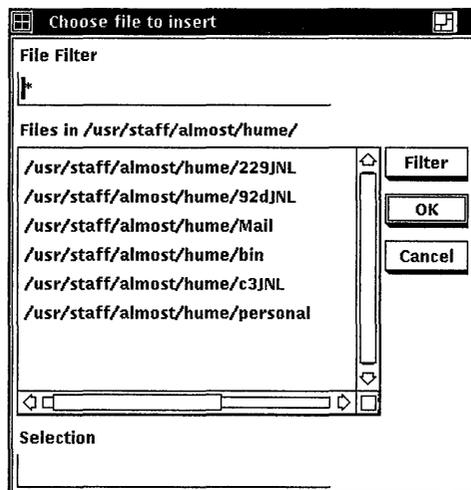
The dialog box prompts you for the name of the file you want to include. The file list box lists the names of all files in the current directory.

2   Double click on the name of the file you want to include.

The contents of the file are displayed in the Create-Send window. You can edit the file if desired.

You can also use the File Filter text entry field to list a subset of files that you can then select from. For example, to list all files in another directory with the file extension **.TXT**, type the full directory path, **/jones/messages/*.TXT**, in the File filter text entry field and click on the Filter button. Then, double click on the file name of the file you want to include.

3   Click on the Send button to send the message.

Selecting Messages

Message commands act on messages displayed in the Message area. To indicate that a message is to be acted on, you first need to select it.

To select a single message, click the MB1 on either the message or the envelope icon beside the message.

To select a range of messages from the Message area, you can follow one of two procedures. The first procedure is to press MB1 on the first message to be selected, drag the mouse to the last message to be selected, and release MB1. The second procedure is to select the first message, and then place the mouse pointer on the last message to be selected, and press the SHIFT key and MB1.

To add a message to the current selection, first place the mouse pointer on the envelope icon of the message to be included in the selection, press and hold the SHIFT key, and click MB1.

To select all messages in the open folder, choose Select all from the Edit menu in the main window.

To cancel the selection of one object, select another object by clicking MB1, or position to the selected object, press and hold the Shift key, and click MB1.

Reading Messages

You can use Mail to read an old or new mail message. New messages are added to the inbox folder; messages that have been read are held in the inbox folder until you move them elsewhere.

Reading a New Message

To read a new message, click on the Read New Mail button. This adds new messages to the inbox folder, opens the inbox folder, and displays the first message received since the inbox folder was last opened. The message is displayed in a Read window.
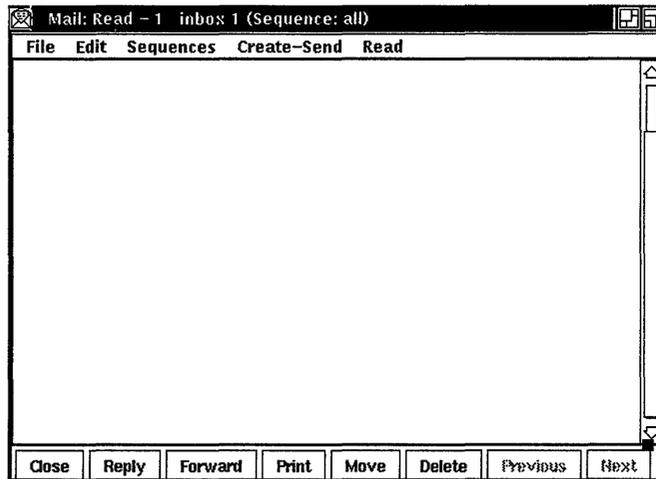
The message area displays the mail message. Use the scroll bar to display any text that does not fit in this area.

The small black square on the area dividing line is called an adjustment knob. Using this knob, you can adjust the relative size of the areas. Making one area smaller makes the other area larger. This allows you to view more text in either area without resizing the window. To use the area adjustment knob, move to the knob, press MB1, drag the area dividing line to the desired location, and release MB1.

If you receive a message whose contents are not text (such as a file containing spreadsheet data), the file cannot be viewed in Mail. Mail displays a message informing you of the problem. You can print, forward, extract, or reply to the message. See the appropriate sections of this chapter for information on printing, forwarding, extracting, and replying to messages.

To continue to read new messages, click on the Next or Previous button to read the next or previous message in the folder.

If you receive new mail while reading messages in the inbox, choose Read New Mail on the pop-up menu in the Read window's message area. This displays the first message received since the inbox folder was last opened.

To close a Read window, click on the Close button.

Displaying a List of New Messages

You can add new messages to your inbox folder and update the list of new messages without reading a message. To update the inbox, click on the Deliver Mail button in the main window. Mail cannot be delivered if the inbox is open in a Read window or if you are replying to a message in the inbox.

Reading an Old Message

To read an old message (one that has already been read), point to the envelope symbol beside the appropriate message in the Message area and double click MB1.

To read a series of old messages:

1   Select the messages to be read by holding down the Shift key and clicking on the desired messages.

2   Move to one of the selected messages, press MB2, and choose Read in Default from the pop-up menu.

3   In the Read window, choose Next Selected or Previous Selected from the Read menu to display the next or previous selected message.

Multiple Read Windows

You can open more than one Read window at one time. This allows you to read multiple messages at once, or to read new mail without disrupting the message you are currently reading.

The first Read window you display is your default Read window, identified by the number 1 in the window's title bar. Additional Read windows are identified by the number in their title bar, for example, Read-2, Read-3, and so on.

The default Read window is used to display messages unless you specify another window. For example, clicking on the Read New Mail button or double clicking on a message envelope icon in the main window will display the message in your default Read window.

To read new mail in another Read window, choose New Mail In New from the main window's Read menu. A new Read window is opened, and the first message received since inbox was last opened is displayed.

To read an old message in another Read window, select the message and choose the In New menu item from the main window's Read menu.

If you have already opened multiple Read windows, you can specify the window in which to read the selected message by pulling down the main window's Read menu, dragging the pointer to the submenu icon next to the In Window menu item, and releasing MB1 over one of the listed Read windows.

To use a different window as the default Read window, choose Make Default Window from the Read window's File menu. The number one will be displayed in the window's title bar, and will be removed from the previous default window's title bar.

Replying to Messages

To reply to the first selected or currently displayed message in a Read window, click on the Reply button.

Replying to a message opens a Create-Send window. In the To: field, Mail inserts the name of the sender of the original message. In the Subject: field, Mail inserts the subject of the original message preceded by RE:.

Enter text and make any desired edits.

To send the reply, click on the Send button. To close the Create-Send window, click on the Close button.

Forwarding Messages

To forward to another user the selected or currently displayed message in a Read window:

1   Click on the Forward button.

    Mail opens a Create-Send window and inserts the forwarded message in the message area. The header (the address information) is included in the forwarded message in most cases. Headers are not included in messages created with editors that do not produce ASCII files, such as files created with DECwindows Paint.

2   Enter the address and subject information and make any desired changes to the text.

3 Click on the Send button to send the message.

4 Click on the Close button to close the window.

Printing Messages

You can print selected messages or the message currently displayed in a Read window. Messages can be printed using your default print settings, or you can modify the print settings for the messages being printed.

To print the selected or currently displayed message using your default print settings, click on the Print button in the main or Read window.

Creating a File from a Mail Message

You can create files from mail messages. You can select existing messages to be copied to a file, or you can create a file from a message you are reading or creating.

To create a file from the selected or currently displayed message:

1 Choose Extract... from the File menu in the main, Create-Send, or Read window.

2 Enter the name of the file to be created. If you want to append the message to an existing file, enter the name of that file.

3 Click on the OK button to create the file.

Deleting and Retrieving Messages

You can delete mail messages and retrieve deleted messages.

To delete selected messages or the message currently displayed in the Read window, click on the Delete button in the main or Read window.

The index is updated to show which messages have been marked for deletion. Messages are not actually deleted until the folder is closed. You can still perform many Mail functions on messages that are marked for deletion, such as moving, copying, and printing. When the folder is closed, the messages are deleted and reference to them is removed.

Once the folder is closed, deleted messages are moved to the wastebasket folder.

Deleted messages collect in the wastebasket folder until you empty it by choosing the Empty wastebasket menu item from the main window's Maintenance menu. Once the wastebasket is emptied, the deleted messages are irretrievable.

To reverse the delete operation in the main window, before the folder is closed select the messages to be retrieved, pull down the Edit menu, and choose the Undo move/delete menu item.

To undo the delete operation in a Read window, choose Undo Move/Delete menu item from the Edit menu.

To update the index of messages to reflect that the messages have been moved to the wastebasket folder, either select the Commit Changes menu item from the Maintenance menu in the main window or reopen the folder that contains the deleted message.

If the message has already been moved to the wastebasket, you can retrieve the message by moving it to another folder. For more information about moving messages between folders, see Moving and Copying Messages to Another Folder.

Working with Folders

You can create and delete folders, move and copy messages between folders, and renumber and sort messages within folders. These options are described in the following sections.

Creating New Folders

To create a new folder, choose Create folder... from the Maintenance menu in the main window.

Mail displays a dialog box in which you enter the name of the new folder to be created. Folder names are limited to 39 characters and can contain letters, numbers, spaces, periods, dashes, underscores, and dollar signs.

Deleting Folders

To delete folders, select the folder to be deleted, and then choose Delete folder... from the Maintenance menu. If the folder is not empty, Mail displays a dialog box in which you confirm whether to delete the folder or cancel the delete request.

If you attempt to delete the inbox folder, all messages in the inbox are deleted but the folder is not deleted.

When a folder is deleted, any messages that existed in the folder are placed in the wastebasket folder and can be retrieved until the wastebasket folder is emptied.

Moving and Copying Messages to Another Folder

You can move or copy a message or group of messages from one folder to a different folder. Moving messages to another folder removes them from the original folder. Copying messages to another folder does not remove them from the original folder.

You can move and copy messages from either the main or Read windows.

To move selected messages or the message currently displayed in the Read window:

1   Select or display the message to be moved or copied.

2   Select the folder you are moving or copying the message to.

3   Click on the Move or Copy button in either the main or Read window.

When you click on the Move or Copy button, Mail marks the message appropriately.

Messages are not actually moved or copied until the folder is closed. You can still perform many Mail functions on messages which are marked for moving or copying, such as deleting, and printing. When the folder is closed, the messages are moved or copied.

To undo the move or copy operation in the main window, select the messages to be retrieved and choose Undo Move/Delete from the main window's Edit menu.

To undo the move operation in a Read window, select the Undo Move/Delete menu item from the Read window's Edit menu. You cannot undo the copy operation.

Renumbering and Sorting Messages

To renumber your messages in the open folder so they start from one and increment by one, choose Renumber Messages from the Maintenance menu in the main window.

To sort the messages in the open folder in increasing order by date, choose the Sort by Date menu item from the Maintenance menu in the main window.

To cause Mail to check and make sure its information about the folder is correct, choose Rescan Folder from the Maintenance menu in the main window.

Picking Messages

Picking messages allows you to create a subset of the messages in a folder based on their having some criterion in common. This subset is called a message sequence. You can then perform functions, such as copying, moving, extracting, or reading, on the subset of picked messages. In addition, you can open and delete a specified message sequence by selecting the appropriate menu item from the Pick menu.

To pick messages, first open or select the folder containing the messages and choose Pick from open folder... or Pick from selected folder... from the Edit menu in the main window. Mail displays a dialog box.

The dialog box allows you to specify the criterion for picking messages. For example, you could specify that you would like to pick those messages containing a certain word in the subject, or those from a certain sender.

You can enter multiple selection criteria to further limit the messages to be picked. For example, you could enter text in the From: field and the On: field in the dialog box to pick messages that the specified user sent to you on the specified day.

Only those messages in the open or selected folder are searched for the specified criteria.

When a subset of messages has been picked, the index is updated to list only the picked messages. When the folder is closed, the picking criterion is lost. All messages will again be listed in the index.

Text fields, which are the first five fields in the dialog box, search for matching text anywhere in the field and are not case sensitive. For example, entering the text John in the From: field might pick messages from Jane Johnson, John Doe, and Olav Bejohnesson.

Each field in the pick dialog box is described in Table 7–1.

Table 7–1   Pick Dialog Box Fields

Field	Function
From:	To pick all messages in the open folder that were sent from a certain user, enter the user name of the sender.
To:	To pick all messages in the open folder that were sent to a certain user, enter the user name of the addressee or the name of a distribution list.
Cc:	To pick all messages in the open folder that were sent as a courtesy copy to certain users, enter the user names of the addressees.
Date:	To pick messages received on a certain date, enter the date in the format DD-MMM-YYYY.
Subject:	To pick messages with a common subject, enter the subject or text included in the subject.
Search:	To pick messages containing a word or phrase in the body of the messages, enter the word or phrase.

Next, enter the appropriate information in the text fields at the bottom of the dialog box. The date range specifies that messages received between certain dates and times are picked. Enter the date and, if desired, the time in the format DD-MMM-YYYY HH:MM:SS.

When you have finished entering the picking criteria, select either the OK screen button to pick the designated messages or the Cancel screen button to cancel the pick.

Opening a New Main Window

To create a new main window, first select the folder from the current Mail window. Next, choose Open In New from the File menu. A new main window is displayed, and the current folder is opened.

You can perform all Mail functions on the folders and messages displayed in this window. You can customize certain Mail features to suit your working environment by modifying your mail profile. Modifying your mail profile allows you to alter the way your messages are sent, stored, and displayed. To modify your mail profile, choose Modify mail profile... from the Customize menu.

For more information about customizing your mail profile and the Mail window, see the UWS reference page dxmail(1X).

The Mail Profile dialog box has the following options:

- Skip to next message upon deleting current one.

- Skip to next message upon moving current one.

- Commit changes in a folder upon closing it.

- Renumber messages in a folder after every commit.

- Put deleted messages into wastebasket instead of deleting immediately.

- Incorporate new messages when invoking Show Unopened.

- Buttons affect the current message if no messages are selected.

- Beep instead of putting up a No New Mail dialog box.

An option is on when the corresponding square is shaded. To turn an option off, click on the appropriate black square.

Selecting the OK screen button saves the profile settings. Selecting the Cancel screen button returns the original settings to the profile, making no changes to the profile as it appeared when the dialog box was first displayed.

Exiting from Mail

To exit from the Mail application, choose Exit from the main Mail window's File menu. The main window and any open Read or Create-Send windows are closed. Open folders are closed. If Create-Send windows have been modified, for example, if a message has been created but not sent, Mail displays a dialog box asking if you really want to exit.

If multiple main windows are open, the File menu contains the Close menu item rather than Exit. Choosing Close closes only the main window from which Close is chosen. When there is only one remaining main window, its File menu contains the Exit menu item.

8

Using the Notepad Editor

The Notepad is an editing program that lets you compose and manipulate text. You can use the Notepad editor for any writing task.

This chapter describes how to:

- Start the editor
- Type and format text
- Edit a file
- Name a file
- Open a second Notepad
- Open an existing file
- Find and replace text
- Split the screen into multiple views
- Change fonts
- Exit from an editing session

Starting the Notepad Editor

To start the Notepad editor, choose Notepad from the Session Manager Applications menu or enter the following command in a DECterm window:

```
% dxnotepad&
```

Notepad displays an empty editing window, in which you can type text from the keyboard or copy in an existing file for editing. Notepad is interactive, so you see the changes to a file as you make them.
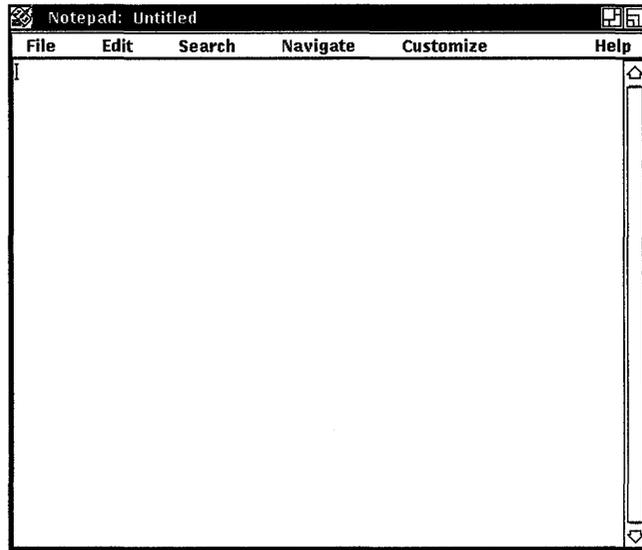
As you are using Notepad, you will notice that key combinations are listed next to many menu items. These key combinations, called accelerators or key bindings, provide an alternative method for performing operations. To perform the function listed on the menu, you can either choose the menu item or press the key combination.

For example, you can start a new Notepad by choosing the New menu item from the File menu, but you can also simply hold down the Alt key and press the N keyboard key. (The Alt key is marked Compose Character or Symbol on your keyboard.)

Some accelerators combine two or more of the special defined keys, such as Shift, Control, and Find (which is E1 on some keyboards). To use a three-key accelerator, press and hold the first two keys, in order, and then press the third key.

Typing Text

To enter text in the Notepad window, give the window input focus and begin typing text from the keyboard. Notepad enters the text at the position marked by the text insertion cursor. Initially, the insertion cursor is displayed in the upper left corner, but it moves right as you type.

The Notepad inserts text into a temporary holding area called a **buffer**. The contents of the buffer appear in the Notepad window. At the beginning of an editing session, the buffer may contain very little text, but the buffer grows longer as you add information.

A buffer exists only during the editing session. When you end an editing session, you direct the Notepad editor to save or discard the contents of the buffer.

Formatting Text

Use the Tab key, the space bar, and the Return key to arrange text in the Notepad window as you want it to appear.

You can also size the Notepad window so it has the line width you want. By default, Notepad wraps text lines at the right margin automatically so you do not have to press the Return key at the end of every line. To disable word wrapping, choose Word Wrap from the Customize menu. When word wrapping is in effect, a shaded toggle button appears to the left of the Word Wrap menu item. When you disable word wrapping, the toggle button disappears.

Scrolling the Buffer

As your text buffer grows, it extends beyond the frame of the Notepad window. To view text at the beginning or end of the buffer, use the vertical scroll bar along the right side of the window. The position of the slider indicates your position in the buffer. When the slider is at the top of the scroll bar, you are at the beginning of the buffer. When the slider is at the bottom of the scroll bar, you are at the end of the buffer.

Editing a File

The Notepad navigation and editing commands let you move within a text buffer quickly and easily, adding or modifying information.

Positioning the Cursor

When you insert text in the buffer, Notepad adds the text at the current cursor position, pushing existing text to the right. Therefore, the cursor is normally positioned at the spot where you last entered text.

To move the text insertion cursor, position the pointer anywhere in the Notepad window or on your workstation screen where there is text or spaces and click MB1.

With a long buffer, reposition the text cursor using menu items from the Navigate menu. Choose the Go To Top menu item to move to the top of the buffer. Choose the Go To Bottom menu item to move to the bottom of the buffer.

To reposition to a specific line in the buffer:

1   Choose Go To Line... from the Navigate menu.

    The Notepad displays a line dialog box.

2   Type the line number.

3   Press the Return key or click on OK.

Notepad repositions the cursor to the specified line.

Another method of positioning on a certain line is to select the line number somewhere on your screen and choose the Go To Selected Line menu item on the Navigate menu.

For example, suppose you are reading an error listing file in a DECterm window and editing the program source file in a Notepad window. The error listing tells you that the program has an error on line 1019. Use the mouse cursor to select 1019 in the DECterm window, and then choose Go to Selected Line Number from Notepad's Navigate menu. Notepad places the cursor on line 1019 of your file.

Selecting Text

In order to delete, move, or copy text in a buffer, you must first select it. Select text by pressing and holding MB1, dragging the pointer over the text, and releasing MB1. This highlights the selected text. Notepad stores this text until you tell it what to do.

You can select text by using mouse clicks. Double clicking MB1 selects the current word. Clicking MB1 three times selects the current line; four clicks selects the entire document. Choosing Select All from the Edit menu also selects all text in the buffer.

You can also select blocks of text that extend beyond what you can currently view. To select an extended block of text:

1   Place the cursor at one end of the range you want to select.

2   Scroll the file to the other end of the range.

3   Hold down the Shift key and click MB1.

Notepad selects the text between the two points you designated and places the cursor at the new insertion point.

If you already have an active select range, Notepad selects the text from the insertion point (where you hold down the Shift key and click MB1) to the existing active select range. Notepad then places the cursor at the insertion point.

If you change your mind and want to cancel the selection, position the pointer over any spot in the selected area and click, or choose the Clear menu item on the Edit menu.

Deleting Text

Use the Delete key to erase a few characters. To delete a line or a section of text, select the text and press the Delete key or begin inserting new text. Inserting new text causes the selected text to be deleted and the new text to take its place.

To delete all of the text in a buffer, choose the Select All menu item and then the Clear menu item from the Edit menu. You can replace the text by choosing Undo from the Edit menu.

Canceling an Edit

To cancel your most recent edit, choose the Undo menu item on the Edit menu. For example, if you remove text with the Cut menu item, you can restore the text to its former location with the Undo menu item.

Notepad keeps a detailed record of all your edits so you can undo a series of edits. To cancel a series of edits:

1   Choose Undo... from the Edit menu.
    Notepad displays the Undo dialog box.

2   Click on the Undo screen button to cancel the last editing operation.
    Each time you click on the Undo button, the Notepad cancels another editing operation.

3   If you undo an editing operation by mistake, reinstate the edits by clicking on the Redo screen button.

4 To complete the operation, click on the Dismiss screen button.

You can cancel all the edits of an editing session in one step by choosing the Revert from the File menu. The Notepad restores the buffer to the state it was in when you first opened the file.

Moving Text

Because the Notepad saves the last text you selected and deleted, you can move text from one location in the text buffer to another location. There are three methods for moving text, so you can choose the one that feels most comfortable to you.

To use the Edit menu to copy text:

1 Select the text you want moved to another location.

2 Choose Cut from the Edit menu.

3 Move the text cursor to where you want the deleted text inserted by positioning the pointer and clicking MB1.

4 Choose Paste from the Edit menu.

The deleted text is moved to the new location.

To cut and paste text, using the mouse:

1 Use MB1 to select a range of text.

2 Move the text cursor to where you want the text to appear by positioning the pointer and clicking MB1.

3 Hold down the Control key and click MB3.

The selected text disappears from the old location and appears in the new location.

To use the quickest method for moving text:

1 Move the text cursor by positioning the pointer and clicking MB1.

2 Select the text you want to move by holding down the Control key and pressing MB3, while dragging the mouse. The selected text is underlined.

3 Release the Control key and MB3.

The selected text disappears from the old location and appears in the new location.

Copying Text

Because Notepad keeps track of your selected text, you can copy text from one location in a text buffer to another location. As with moving text, you can use any of three methods for copying text; choose the one most comfortable to you.

To use the Edit menu to copy text:

1   Select the text you want copied to another location.

2   Choose Copy from the Edit menu to store the copied text.

3   Move the text cursor to where you want the selected text copied by positioning the pointer and clicking MB1.

4   Choose Paste from the Edit menu.

The selected text is copied to the new location.

You can also use the mouse to copy text:

1   Use MB1 to select a range of text.

2   Move the text cursor to where you want the selected text copied by positioning the pointer and clicking MB1.

3   Click MB3.

The selected text appears at the new location.

An even quicker method for copying text is as follows:

1   Move the mouse pointer to where you want the text copied by positioning the pointer and clicking MB1.

2   Select the text you want to copy by holding down the Control key and pressing MB3 while dragging the mouse. The selected text is underlined.

3   Release the Control key and MB3.

The selected text is copied to the new location.

These copy methods let you copy text from another application window that supports text selection. For example, you can use the Calculator's Edit menu to copy the number in its accumulator. Then, by choosing the Paste menu item from Notepad's Edit menu, you can place that number into your Notepad buffer. Or, you can use MB1 to select some text in a Mail window and use MB3 to paste it into a Notepad buffer.

Including an Existing File

You can include an existing file in the text buffer that you are currently editing.

To include a file:

1 Move the text cursor to where you want the included file placed.

2 Choose Include File... from the File menu.
   Notepad displays the Open File dialog box.

3 Either select the file from the files listed in the dialog box or type the name of the file that you want to include.

4 Press the Return key or click on the OK button.

The contents of the included file appear in the editing window at the location you specified.

Filling a Block of Text

As you edit, deleting and inserting text, the lines of text will probably become uneven and ragged. The Fill operation reorganizes text so that the maximum number of whole words fits on an 80-character line. If your Notepad window size is 80 characters or more, you can use this option to neaten broken paragraphs.

To fill text:

1 Use MB1 to select the text you want to wrap.

2 Choose Fill from the Edit menu.

Notepad reorganizes the block of text into 80-character lines.

Sorting Text

If your text includes records or a list of items in which each item begins a new line aligned on the left, you can sort the items according to the leftmost characters. Choosing the Sort menu item is equivalent to running the ULTRIX sort command.

To sort some lines of text:

1 Use MB1 to select the lines you want to sort.

2 Choose Sort from the Edit menu.

The text disappears and then reappears in sorted order.

The sort operation places numbers before alphabetic characters and places uppercase alphabetic characters before lowercase alphabetic characters. If any of the lines of text start with tabs or space characters, those characters affect the result of the sort operation.

Changing the Left Margin

You can change the left margin of a block of text, moving it to either the right or to the left. First use MB1 to select the text. Choose Indent+4 from the Edit menu to move the text four columns to the right; repeat the procedure to move the text again, as far as you like.

To move the margin to the left, select the text and choose Indent-4 from the Edit menu.

Using ULTRIX Text Filters

Notepad lets you use the ULTRIX commands or programs on your system to process text. You can use any ULTRIX command that takes source text, filters it through a program, and writes the output to the original location in the Notepad buffer. To use an ULTRIX text filtering command:

1   Select a block of text.

2   Choose Filter Selection... from the Edit menu.

    The Filter Selection dialog box appears.
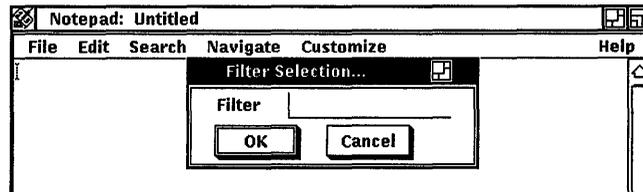
3   Enter the ULTRIX command name in the text input field. ULTRIX commands must be entered in lowercase letters.

4   Press OK.

For example, while writing programs in the C language, you can invoke cb, the C program beautifier, which formats code so as to display its structure. Select the lines that need structuring, choose Filter Selection... from the Edit menu, and enter cb in the text field of the Filter Selection dialog box. The selected code disappears and reappears in your Notepad, now structured correctly.

Saving Text in a File

When you add text to Notepad, the editor records the information in the buffer. Because a text buffer exists only for the editing session, if you want to save the contents of the buffer you must direct Notepad to write your text to a file.

To save the text in your buffer as a file:

1 Choose Save As... from the File menu.

   Notepad displays a dialog box that prompts you for the name of the file.

```
┌─────────────────────────────────────────────────────────────┐
│ 🖾  Notepad: Untitled                                   ⊞🔲 │
├──────┬──────┬────────┬──────────┬───────────┬───────────────┤
│ File │ Edit │ Search │ Navigate │ Customize │         Help  │
├──────┴──────┴────────┴──────────┴───────────┴───────────────┤
│ ╔═══════════════════════════════════════════╗            △ │
│ ║          Save As...                   ⊞    ║              │
│ ║                                            ║              │
│ ║     Save As   ▯                            ║              │
│ ║     ┌──────────┐   ┌──────────┐            ║              │
│ ║     │   OK     │   │  Cancel  │            ║              │
│ ║     └──────────┘   └──────────┘            ║              │
│ ╚═══════════════════════════════════════════╝              │
│                                                             │
└─────────────────────────────────────────────────────────────┘
```
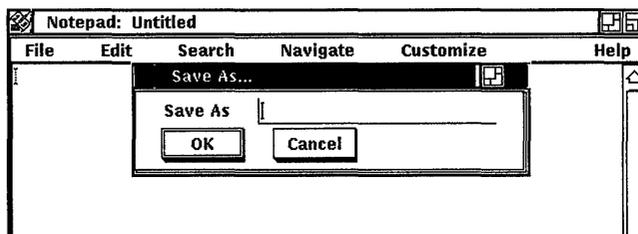
2 Type the name of the file, assigning a name that corresponds to the contents of the file so that you can easily recognize it. Use the Delete and arrow keys to make any necessary corrections.

3 Press the Return key or click on the OK button.

Notepad writes the contents of the buffer to the new file and posts the file name in the title bar of the editing window.

When you make changes to an existing file, it is also necessary to save the changes. Once a file has a name, use the Save to update the file.

Opening a Second Notepad

You can open a second Notepad window without closing the first window. To create a second Notepad window, choose New from the File menu. A second Notepad window opens.
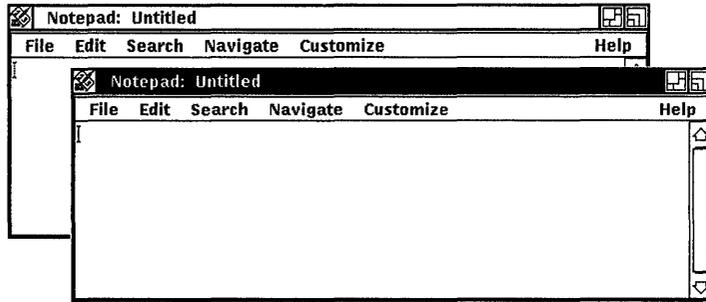
The editing you do in the second Notepad window can be completely independent of the first Notepad window, or you can copy and paste text from one notepad window to the other.

Opening an Existing File

To edit an existing file, you direct Notepad to open the file and read its contents into the Notepad buffer.

To open an existing file:

1 Choose Open... from the File menu.

Notepad displays the Open File dialog box.
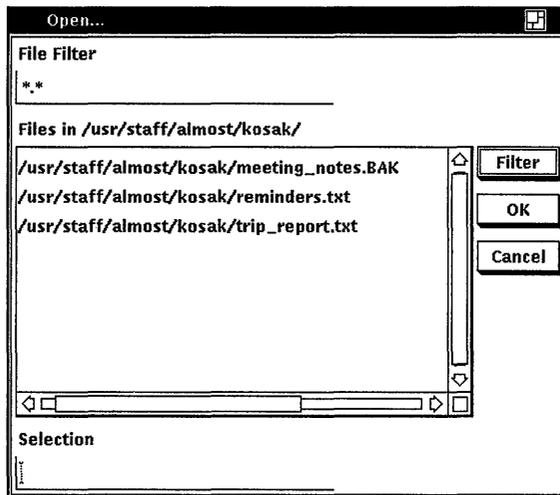
2 Either select the file from the files listed in the dialog box or type the file name.

3 Press the Return key or click on the OK button.

However, if the file name appears anywhere on your screen, you can simply use MB1 to highlight the name and then choose Open Selected from the file menu.

The contents of the file appear in the editing window and Notepad displays the file name in the title bar.

Searching for Text

You can search a text buffer for any text, such as a word, a number, or any other characters that you can type with your keyboard. Because Notepad treats spaces as text, you can search for two or more words. The Notepad searches the buffer from the current cursor position and highlights the first occurrence of the text string.

1 Choose Next... from the Search menu.

Notepad displays the Find dialog box.
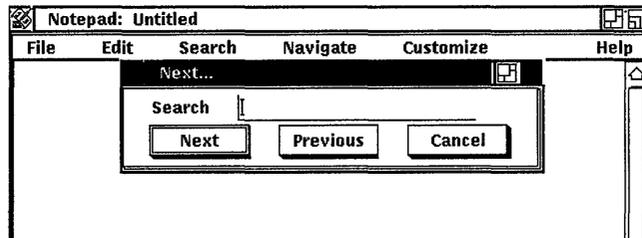
2 Type the text string you want to locate.

3 Click on the Next screen button to initiate a search from the current position to the end of the file.

You can continue to search for the text string by clicking on the Next screen button in the Find dialog box.

By default, the Notepad distinguishes between uppercase and lowercase occurrences of a letter. Click on Case Sensitive Searches on the Customize menu if you prefer to search for any uppercase or lowercase occurrence of the letter you specify.

Notepad can also search a text buffer for a character pattern. You can add characters or delete characters from the search string during the search operation, and the Notepad returns to the initial search position in the buffer and looks again for the modified pattern. Choose the Next Incremental... menu item to search for patterns.

Replacing Text

The Notepad editor can replace one text string with another text string. This is especially useful if you have spelled a word incorrectly throughout a long file, and you want to fix every occurrence of the misspelled word.

To replace a text string:

1   Choose Replace All... from the Search menu.

    Notepad displays a dialog box.
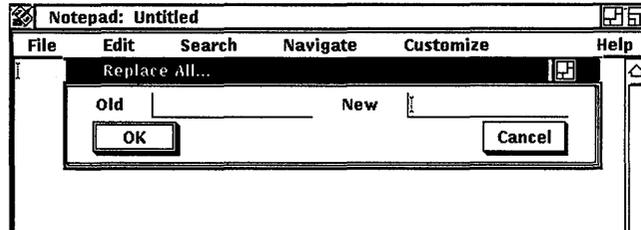
2   Type the old text that you want the Notepad to replace and press the Tab key to move the cursor to the next text entry field.

3   Type the new text that you want substituted and press the Return key.

To replace one occurrence of the text at a time, choose Replace Once... from the Search menu. Notepad searches the buffer from the current cursor position and highlights the first occurrence of the text. Click on the Replace Once button to replace the text with the new text. To skip an occurrence, click on the Skip button.

To replace text within some portion of the buffer, select a range of text. Then choose the Replace Within Selected Area... from the Search menu.

Splitting the Work Area

You can split your Notepad window into a number of edit windows. This lets you work on different portions of the same file simultaneously and perform editing functions between windows, such as cutting and pasting. This is particularly helpful with a long file.

To split the window in which the cursor is currently placed, choose Split View from the Navigate menu.

To get rid of a window in which the cursor is currently placed, choose Delete View from the Navigate menu.

To adjust the size of the split window, position the cursor on the pane adjustment knob (located between the split areas) then drag MB1 up or down until you're satisfied with the size.

Changing the Font

You can select from among a number of character sizes and styles when you edit in Notepad. Choose Font... from the Customize menu. The Font Attributes dialog box appears.


```
Font Attributes

Family (Foundry)                          Size (dpi)

  ITC Avant Garde Gothic (Adobe)                          Apply
  Courier (Adobe)                                         Cancel
  Helvetica (Adobe)
  Interim DM (ADOBE)
  ITC Lubalin Graph (Adobe)

  Weight   Slant   Width  Spacing   Char Set

Sample Text

The quick brown fox jumped over the lazy dog.
abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789
```
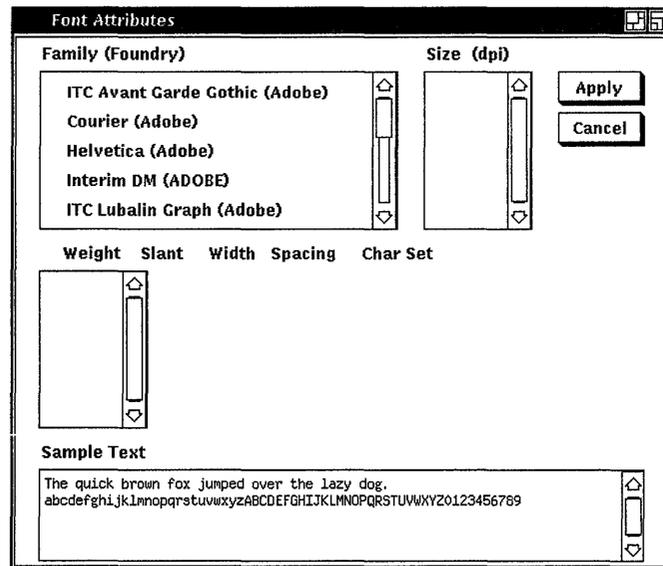
The list of available styles and sizes reflects the fonts installed on your system. To change the font of your Notepad session:

1 Click on the name of a font family to select a design. The font manufacturers (foundries) are shown in parentheses.

The point sizes (heights) for that font family appear, with the screen resolution for which that size is designed, in dots-per-inch. Font resolutions typically match your monitor's screen resolution, but you could have some other choices.

2 Click on a point size. Choose one whose resolution matches your screen's (otherwise the point size appears incorrect).

Attribute combinations for the font family in the currently selected size appear.

3 Click on a line of attributes.

The sample text changes so that you can preview the font.

4 Click on Apply to apply the current font attributes to your Notepad session.

5 Click on Cancel to remove the dialog box, preserving the last applied font.

Choose Save Attributes from the Customize menu to apply these font attributes to future Notepad sessions; choose Restore Attributes to return to the last saved font.

Recovering from an Interrupted Session

Should some unexpected event interrupt your editing session, the Notepad editor can reconstruct it. Notepad keeps a record of your edits so that system failures do not cause you to lose them. (Failures can occur, for example, when a thunderstorm interrupts the electrical power.) This record of edits, called a journal file, usually exists only while an editing session is active. However, the journal file remains if the session ends abnormally.

When you attempt to edit a file that has a journal file associated with it, Notepad displays the Recover dialog box and asks whether you want the previous edits restored.

Notepad can recover a session, even if an interruption occurs when you are editing an untitled buffer that does not yet have a file name. Notepad assigns the buffer a file name. The file name has the format nnnnnnnnJNL, where nnnnnnnn is a process number that uniquely identifies the file. To recover an untitled buffer:

1 Choose Open... from the File menu.

2 Look at the list of files in your current directory. Find a file whose name has the format nnnnnnnnJNL.

3 Enter the process number (represented by nnnnnnnn) in the file selection text field. Omit the JNL characters at the end.

Notepad displays a Recover dialog box, asking you to confirm the recovery.

4 Click on the Yes button.

Exiting from an Editing Session

To end an editing session, choose Exit from the File menu. If you have modified text in the current buffer, Notepad produces a new version of the edited file and closes the Notepad window.

To discard the edits from a session and close the editing window, choose Quit from the File menu.

9

Using Paint

Paint is a graphics program that lets you create any kind of simple picture, such as a sketch, an illustration, or a map. From an assortment of art tools, you can choose those that enhance your picture, adding any details and accents it requires.

The Paint program can save your pictures for later use, print them on different kinds of printers, or copy them to other applications. You can also project these pictures on your terminal screen with the CDA Viewer.

This chapter describes how to:

- Start Paint
- Select tools and menu items
- Erase
- Draw lines and shapes
- Introduce patterns into paintings
- Use the paintbrush
- Edit paintings
- Insert text
- Size and scroll the canvas
- Print paintings
- Exit from Paint

Starting Paint

To start Paint, choose Paint from the Session Manager
Applications menu or enter the following command in a DECterm
window:

```
% dxpaint &
```

The Paint program displays a drawing window that is bordered by
a tool palette.
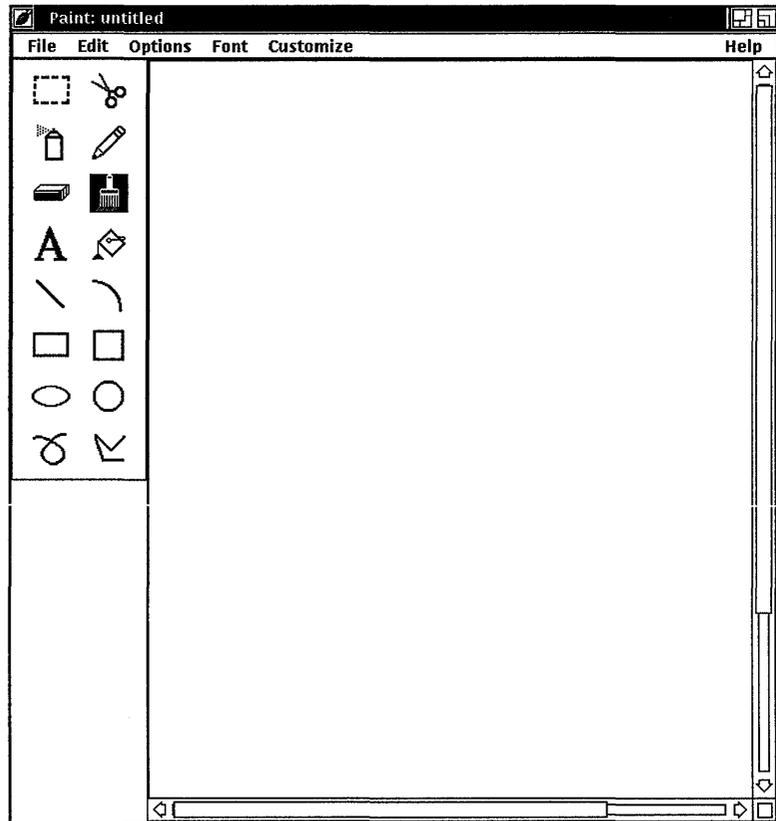
The Paint window frames a portion of the canvas. Horizontal and
vertical scroll bars indicate the percentage of the canvas displayed
in the Paint window.

.earning the Basics

Paint is a bitmap graphics program, which means that it treats pictures as a collection of dots called pixels. Different drawing tools, such as the pencil, the paintbrush, and the text tool, edit the color of the pixels to either the foreground color or the background color to create a pattern. Because the Paint canvas has so many pixels in every square inch, you do not actually see patterns of dots. Instead you see a collection of lines, shapes, and text.

You can begin to understand Paint by modifying a sample picture called the Clock Tower. To display the Clock Tower:

1   In the Paint window, choose the Open... menu item from the File menu.

    The Open Picture dialog box displays the names of any graphics files in the current directory.

```
┌─────────────────────────────────────┐
│  Open Picture              ⊞         │
├─────────────────────────────────────┤
│ File filter                         │
│ *.ddif                              │
│ ─────────────────────────────────── │
│ Picture name:                       │
│              ┌──┐  ┌─────────┐       │
│              │△ │  │ Filter  │       │
│              │  │  └─────────┘       │
│              │  │  ┌─────────┐       │
│              │  │  │   Ok    │       │
│              │  │  └─────────┘       │
│              │  │  ┌─────────┐       │
│              │  │  │ Cancel  │       │
│              │  │  └─────────┘       │
│              │  │                    │
│              │  │                    │
│              │▽ │                    │
│ ◁▭▷ □                               │
│ Selection                           │
│                                     │
└─────────────────────────────────────┘
```
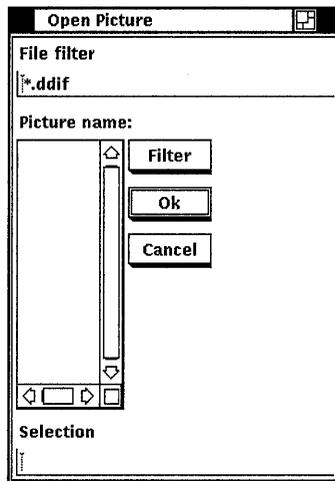
2   Type the following file name in the Selection field:

    /usr/examples/DDIF_graphics/clocktower.ddif

    DDIF is the standard format of a Paint file.

3   Click on the OK button or press Return.

Paint displays the Clock Tower picture. Use the Clock Tower to practice selecting tools and to experiment with some of the Paint menu items.
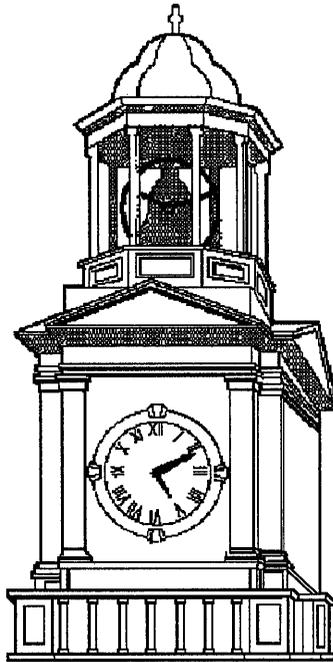
Selecting Tools

The tool palette offers a variety of art tools and basic shapes. You can work with a pencil, a paintbrush, a can of spray paint, or a paint bucket. The shapes on the tool palette let you build pictures quickly and easily.

When you first start Paint, the paintbrush tool is highlighted, indicating it is the current default. Only one tool on the tool palette is active at a time, and that tool remains active until you make another selection.

Try changing the time on the Clock Tower. First, select the eraser to delete the current time. To use the eraser:

1   Place the pointer in the tool palette, position it on the eraser tool, and click MB1.

2   Move the pointer into the drawing window, position it in the center of the clock face, and click MB1.

The eraser is now active in the window.
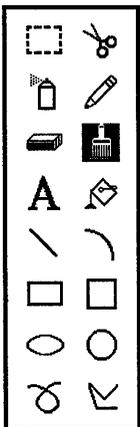
3 Gently drag the eraser along each hand of the clock, eliminating the current time. Release MB1.

Now, draw in the current time, using the straight line tool:

1 Point to the straight line tool on the tool palette and click MB1.

2 Position the pointer in the center of the clock face and press MB1.

The straight line tool is now active, and one end of the line is anchored at the center of the clock. You can stretch and swing the line from the center point by moving the mouse. Try it.

3 Drag the pointer from the center of the clock to the current hour postion. Once the line points to the correct time, release MB1.

4 Add a second line in the same manner for the minute hand.

If you make a mistake, choose the Undo menu item from the Edit menu. Undo always cancels the last action you took.

Creating Special Effects

Using the menu items in the Paint program, you can create special effects with a painting.

For example, the Invert menu item on the Edit menu creates a negative image of a painting. The Paint program can reverse the tones of the Clock Tower, switching the foreground color and the background color.

1 Click on the selection box tool.

2 Move the pointer into the drawing window and select the Clock Tower.

3 Choose the Invert menu item from the Edit menu.

Paint repaints the Clock Tower, making a negative of the original image.

Saving a Painting

To save your version of the Clock Tower:

1 Choose Save As... from the File menu.

Paint displays a dialog box and prompts you for a file name.

```
┌─────────────────────────────────────┐
│  Save As                    ▣        │
│ ┌──────────────────────────────────┐ │
│ │ File filter                      │ │
│ │ |*.img                           │ │
│ │ ─────────────────────────────────│ │
│ │ Files in                         │ │
│ │ ┌───────────┐△  ◉ DDIF  ┌──────┐  │ │
│ │ │           │   ○ X11   │Filter│  │ │
│ │ │           │           └──────┘  │ │
│ │ │           │           ┌──────┐  │ │
│ │ │           │           │  OK  │  │ │
│ │ │           │           └──────┘  │ │
│ │ │           │           ┌──────┐  │ │
│ │ │           │           │Cancel│  │ │
│ │ │           │           └──────┘  │ │
│ │ │           │▽                    │ │
│ │ └───────────┘                     │ │
│ │ ◁☐▷□                             │ │
│ │ Selection                        │ │
│ └──────────────────────────────────┘ │
└─────────────────────────────────────┘
```
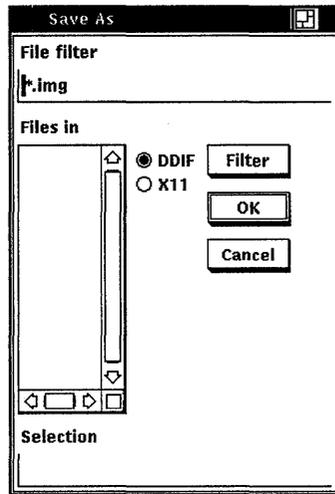
2   Type a file name using the form **~/filename.ddif** so that Paint saves the picture in your login directory.

3   Click on the OK button or press the ⌸Return⌸ key.

Printing a Painting

If you need help completing the dialog box, refer to the DECwindows User's Guide.

To print the Clock Tower, choose one of the Print menu items from the File menu. The Print menu item sends the painting to the default printer, whereas the Print As... menu item displays the print dialog box.

Paint supports output to both PostScript and sixel printers, such as the LA50 and LA100. When printing on an LA50, set an aspect ratio of 2:1. All other printers have a 1:1 ratio.

Erasing

There are several ways to erase in Paint:

■   Use the eraser tool.

■   Select the area using the selection box tool or the scissors tool. Or, select the entire canvas using the Select All menu item from the Edit menu. Then choose Clear from the Edit menu.

Select All acts only on the visible portion of the screen.

■   Choose Undo from the Edit menu to erase the last Paint operation.

Drawing Lines and Shapes
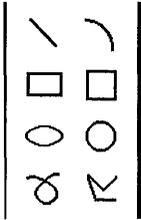
The bottom half of the tool palette contains a collection of line and shape tools that you use in a similar way. Whenever you draw a straight line or a shape, the point where you click MB1 becomes its reference point. That is, you can stretch and swing the line or shape from this reference point by dragging the pointer. When the shape is correct, anchor it in place by releasing MB1.

For example, to draw a rectangle:

1   Click on the rectangle tool.

2   Position the pointer in the drawing window where you want one corner of the rectangle to be. Press MB1 and drag the pointer diagonally across the drawing surface until the rectangle has the desired width and height. (Notice how you can stretch and shrink the rectangle, even flip it over.)

3   Release MB1 to anchor the shape.

If you want to line up a series of shapes or draw them equidistant to each other, choose Grid from the Options menu. It superimposes a horizontal and vertical pattern of dots on the drawing window, as shown in the following figure, that serves as a guide, yet does not become part of your picture.
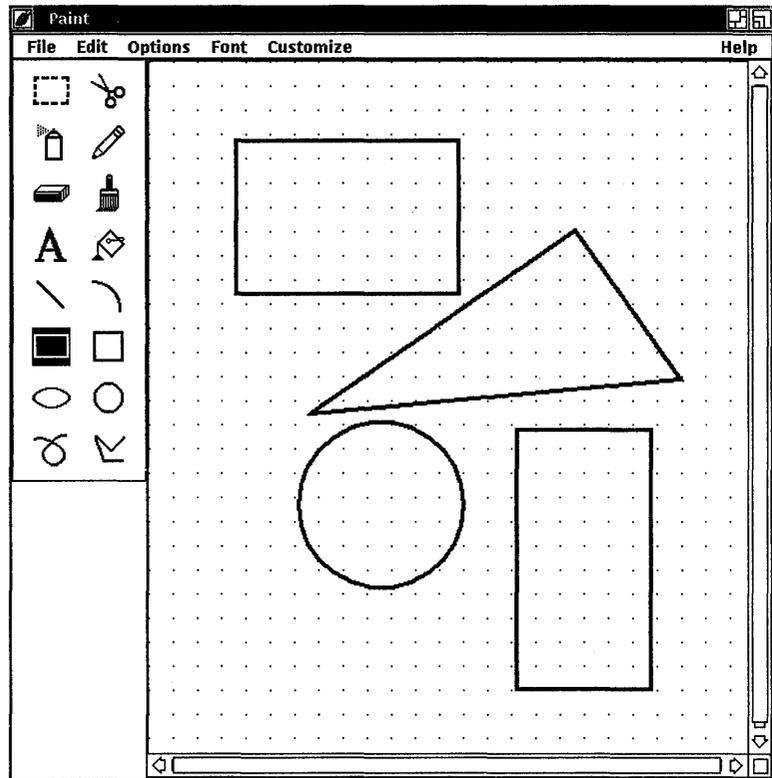
Varying Line Width

Lines drawn with the shape tools can be thick or thin. To change the current line width:

1   Choose Line Width... from the Options menu.

Paint displays a dialog box.

2   Click on the line thickness you want.

For example, to draw non-rectangular polygons with different width borders, choose the line width you want and then do the following:

1   Click on the polyline tool to make it active.

2   After positioning the pointer in the drawing window, drag the pointer to create one side of the polygon. Drag to create additional sides and double-click on the final corner.
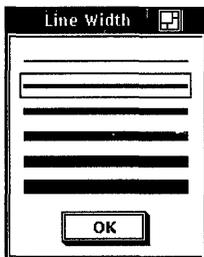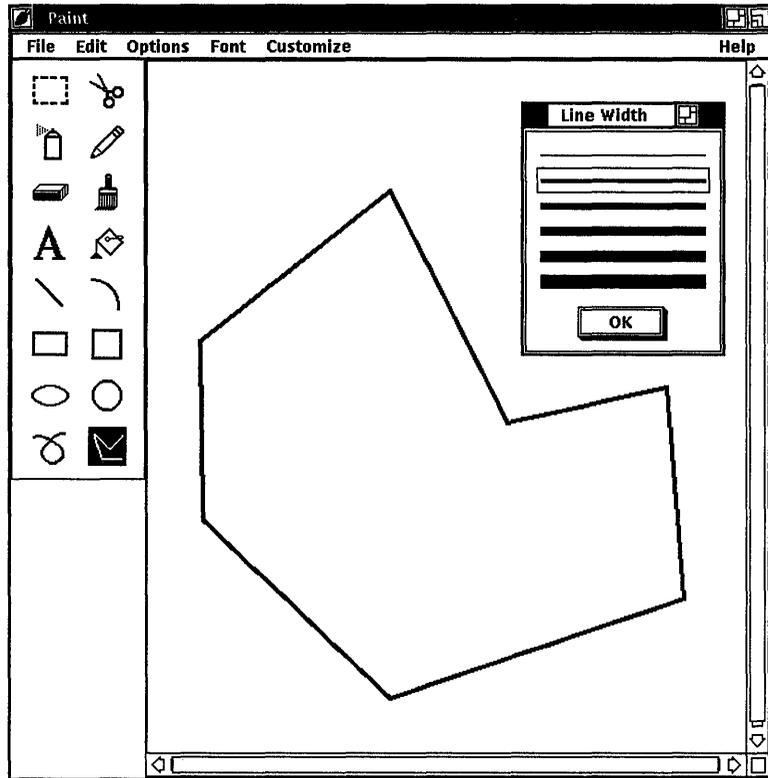
Most of the time, geometric shapes or figures are opaque so you cannot see what lies behind them. However, using Transparent from the Options menu, you can let background images show through foreground images.

Using Patterns

Lines and shapes do not need to be a solid color. They can be striped, speckled, woven, dotted, and so on.

The line and shape tools, the spray can tool, and the paintbrush tool can paint patterned lines and borders. To use patterned lines:

1   Choose Patterns... from the Options menu.

    Paint displays the Patterns palette, which provides a selection of designs. The Patterns palette is shown in Figure 9–1.

Figure 9-1   The Patterns Palette

Outline Pattern —
Foreground Color —
Background Color —

Fill Pattern
No Color

Patterns

None

OK
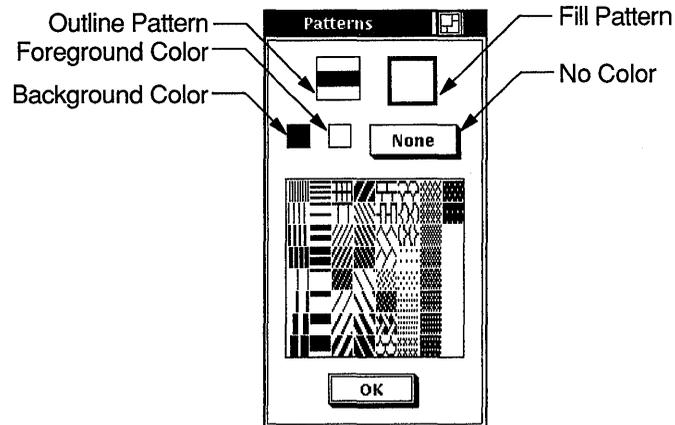
2   Click on the outline button to change the current outline pattern, which is solid.

3   Click on any pattern.

.   Notice that the pattern you clicked on is displayed in the outline button, indicating it is the active pattern.

4   Click on the shape tool you want to use.

5   After positioning the pointer in the drawing window, drag the pointer to create a patterned line or border.

To create shapes with patterned centers:

1   Choose Patterns... from the Options menu.
    Paint displays the Patterns palette, illustrated in Figure 9-1.

2   Click on the Fill button to select a fill pattern.

3   Click on any pattern on the palette.
    Notice that the pattern you click on is displayed in the Fill button, indicating it is the current default.

4   Click on any tool you want to use. The geometric shape tools and the paint bucket tool use the current fill pattern.

5   After positioning the pointer in the drawing window, drag the pointer to create a shape with a patterned center.
    The following shows examples of patterns.
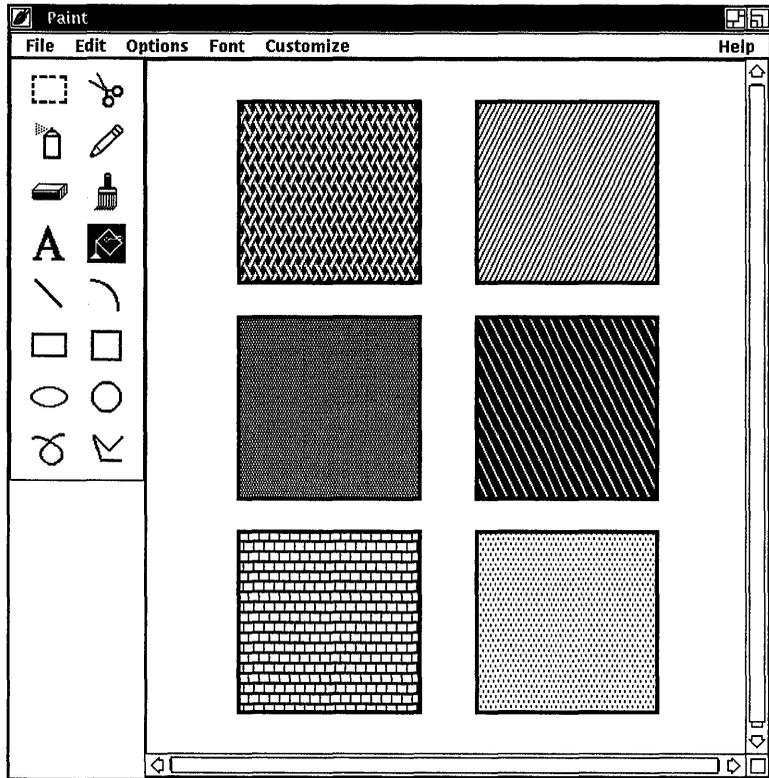
You can fill existing shapes with the paint bucket tool by clicking MB1 inside the shape you want to fill. The shape must be enclosed. Any opening in the border causes the paint to spill out onto the canvas. You can reverse filling a shape by choosing Undo Flood from the Edit menu.

Filling only works on the visible part of the canvas; if you attempt to flood the entire canvas, only the visible portion will be affected.

Creating Your Own Patterns

With Paint, you can create your own patterns and store them on the pattern palette during a Paint session. Create your own pattern from any of the patterns on the palette except the solid foreground, solid background, and None patterns, illustrated in Figure 9–1.

To create your own pattern:

1 Decide whether you want an outline or a fill pattern, and then click on the appropriate button on the Pattern palette.

2 Choose a pattern from the palette that is closest to what you want and click on it. Paint also provides a few blank patterns at the end of the palette that you can customize.

3 Choose Edit Pattern... from the Options menu.

Paint displays a dialog box.
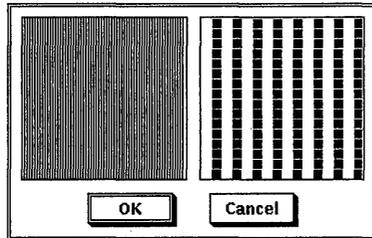
Notice that this dialog box contains two boxes. In the left-hand box, you see the pattern you chose from the palette. In the right-hand box, you see the same pattern magnified.

While you are editing a pattern, the Edit Pattern dialog box has input focus, and the pointer assumes the shape of a pencil.

4 In the Edit Pattern dialog box, edit the magnified version of the pattern to create the effect you want.

Use the pencil to draw over pixels or click on individual pixels. The pencil tool turns a background pixel to the foreground color and a foreground pixel to the background color.

Refer to the pattern shown in the left-hand box to see how the magnified pattern looks under normal conditions.

5 Click on the OK button to complete the pattern and return to the drawing window.

The edited pattern is available on the Pattern palette for the rest of the session, replacing the original pattern.

Using the Paintbrush

For an elegant stroke, one that creates a calligraphic effect, use the paintbrush. The paintbrush tool applies paint along the path of the pointer.

Initially, the paintbrush has a solid stroke, but you can choose a patterned stroke by changing the outline pattern on the Patterns palette.

To shape the tip of the paintbrush:

1 Click on the paintbrush tool.

2 Choose Brush Shape... from the Options menu.
Paint displays a dialog box.
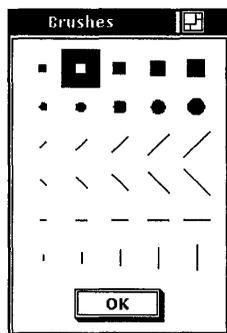
3 Click on the brush shape you want.

4 Move the pointer into the drawing window and try out the new brush stroke.

Editing Paintings

With Paint's electronic canvas, you can easily rearrange images in the drawing window. You can delete images entirely, move them to another part of the window, or copy them. The Paint program can also size selected images, shrinking them or enlarging them as you wish. It can also crop a painting, retaining one section of the canvas while discarding the rest. For further effect, Paint can invert the foreground and background colors in a selected area.

Selecting Images

Two selection tools, the box and the scissors, mark a portion of the drawing window for a graphics operation. The selection box tool marks a rectangular area, while the selection scissors tool marks an area with an arbitrary shape. You can select the entire canvas with the Select All menu item on the Edit menu.

To use the selection box tool, position the pointer in one corner of the area to be selected and drag the pointer over the desired image.

To use the selection scissors tool, drag the pointer around the boundary of the desired object until you reach the starting point.

Paint stores the selected image until you tell it what to do.

Moving Images

You can move an image from one location in the Paint window to another. To move an image:

1   Select the image.

2   Position the pointer inside the selected area and drag the image to the desired location.

    You can cancel the selection by clicking in another part of the window or by selecting another tool.

Copying Images

Once you select an image on the canvas, you can copy the image to the clipboard, leaving the original image intact. Then, paste the clipboard image onto the canvas. Paint can paste graphic images from the clipboard, but it cannot paste text.

To copy an image:

1   Select the image.

2   Choose Copy from the Edit menu.

    Paint copies the image to the clipboard.

3   Choose Paste from the Edit menu.

    Paint takes the image from the clipboard and puts it on the canvas, leaving it selected.

4   Position the pointer in the selected image and drag it to the proper location on the screen.

    You can cancel the selection by clicking on another tool or by selecting another image.

Resizing Images

You can also modify the proportions of selected images. Use the Scale menu item from the Edit menu to enlarge or shrink a selected image. To scale an image:

1   Select the image.

2   Choose Scale from the Edit menu.

Paint displays a dialog box.
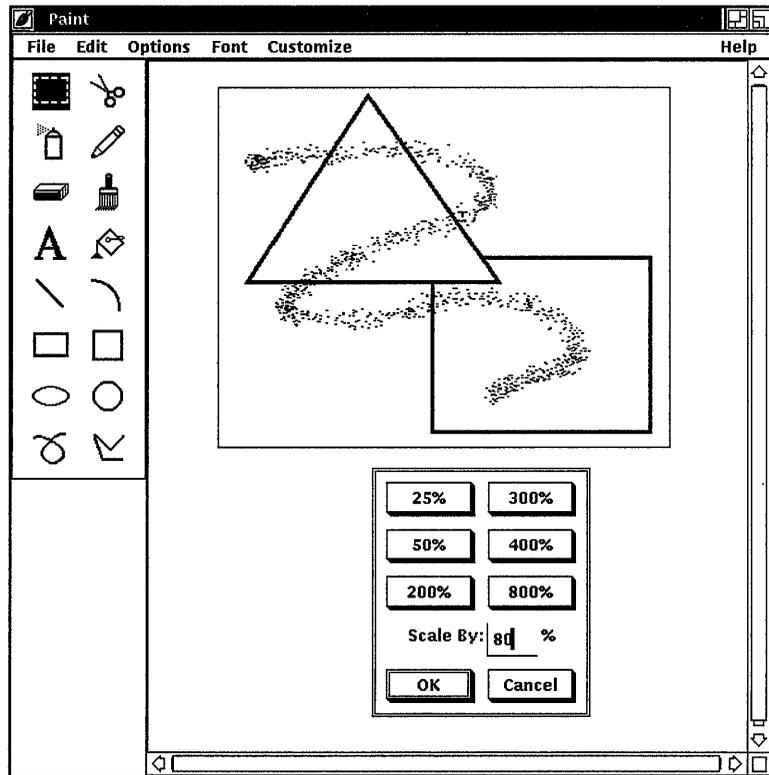
3 Click on one of the percent buttons to change the scale. For example, clicking on 25% reduces the selected area to 25% of the original size; clicking on 200% enlarges the selected area to twice its original size.

If you want to specify your own percentage: enter a number less than 100 to shrink the figure, or a number greater than 100 to expand the figure.

4 Click on the OK button to complete the operation.

To reverse the process and return to your original picture, choose Undo Scale from the Edit menu.

Cropping a Picture

Many times, one section of a painting develops so well that you decide to keep it, discarding the rest of the canvas. Use the Crop menu item to extract a portion of the picture. To crop a picture:

1   Select the section of the picture you want to keep.

2   Choose Crop from the Edit menu.

    Paint repositions the cropped picture in the upper left corner of the window and discards the rest of the painting. You can restore the original picture with the Undo menu item.

Working with Full Views

By using the Full View menu item from the Options menu, you can display entire figures even if they are too large to fit in the Paint window. The Full View dialog box lets you display only a portion of your picture or permanently crop it.

To display an entire picture, choose Full View... from the Options menu. Paint displays the Full View dialog box.

To change modes in the Full View dialog box, display the Mode option menu and choose the desired option. The default mode is Position.

To designate the area of your picture you want to display:

1   Choose Position from the Mode option menu in the Full View dialog box.

2   Press and drag MB1 until the Position window frames the area of the canvas you want to display.

3   Release MB1.

4   Click on OK to display the desired portion of the canvas.

To crop your picture:

1   Choose Crop from the Mode option menu in the Full View dialog box.

2   Press and drag MB1 until the Crop window frames the area of the canvas you want to crop and save.

    The rest of the figure will be discarded.

3   Click on the crop button.

    To reverse cropping, click on the Undo Crop button.

4   Click on OK.

Paint displays a dialog box that tells you the crop operation is irreversible and asks if you want to save the picture before continuing. Click on Yes to retain only the portion of the picture you slected, discarding the rest. Click on No to restore the picture to its precropped state.

Editing in Detail

Not only does Paint magnify patterns in the Edit Patterns dialog box so you can see them better, it also magnifies portions of the canvas with the Zoom On menu item. Zoom acts like a magnifying glass in the drawing window, enlarging an image to eight times its original size.

To magnify a portion of a painting:

1   Choose Zoom On from the Options menu.

    The Zoom window opens beside the Paint window and a magnifying frame is displayed in the Paint window itself. The magnifying frame in the Paint window demonstrates the size of the image that Paint magnifies in the Zoom window. You can resize the Zoom window to edit a larger area of the canvas.
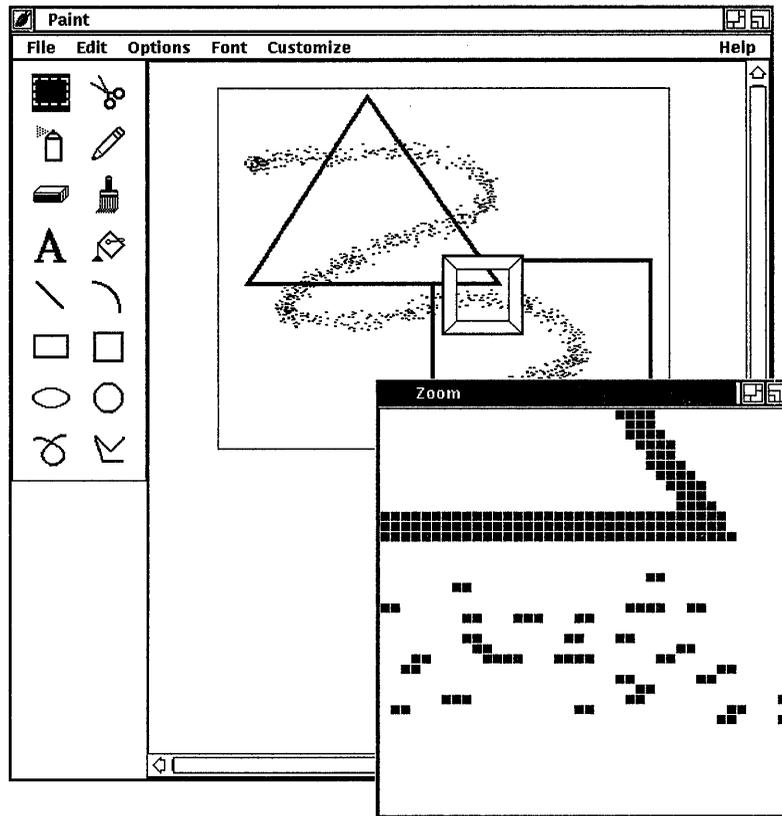
2 Place the pointer inside the magnifying frame and drag the frame over the image that you want to edit.

The Zoom window contains an enlarged version of the image that is defined by the magnifying frame in the Paint window.

3 Select the pencil tool from the tool palette.

4 Bring the pointer into the Zoom window and use the pencil to add fine details to the image. Either click on individual pixels or draw over them.

Notice that the image in the drawing window changes as you edit in the Zoom window, so you can see how the modified figure looks in normal proportions. Continue editing pixels until you are satisfied with the overall effect.

5 To edit other areas of the drawing window, drag the magnifying frame to the next location.

Edit the pixels in the Zoom window as before.

To close the Zoom window, display the Options menu and click on the Zoom Off menu item.

nserting Text

You can insert text anywhere in the Paint window. You can choose from an assortment of fonts, sizes, and styles when adding text. You can change the appearance of text in the drawing window up until the moment you click to complete the text entry. After that, Paint incorporates the text into the graphic image. To insert text:

1 Select the text tool.

2 Position the pointer in the Paint window where you want to insert text and click MB1.

Paint inserts a left corner bracket to mark the left margin of the text entry and displays the text insertion cursor next to it.

3 Type in text from the keyboard, formatting it with the Tab and Return keys.

4 To modify the text font, choose Family from the Font menu and display the pop-up menu. Click on the type of font that you want.

5 Change the text from normal to bold face by choosing Style from the Font menu. Display the pop-up menu from the Style item and click on Bold.

6 To adjust the size of the text, choose Size and display the pop-up menu. Click on the pica size that you want.

Paint applies the selections you make to the text you have already entered.

7 To complete the entry with its current characteristics, either move the pointer to another part of the window and click MB1 or select another tool.

The inserted text becomes part of the picture. You can no longer erase text with the delete key or change its characteristics with items from the Font menu.

Sizing the Canvas

The default Paint window shows only a portion of the canvas. The scroll bars along the right side and the bottom of the window let you view the entire canvas. The position of the slider indicates your position in the canvas. When the slider is at the top of the scroll bar, you are at the beginning of the canvas. When the slider is at the bottom of the scroll bar, you are at the end of the canvas.

You can resize the Paint window to frame the entire canvas by clicking on the resize button.

You can also tailor the size of a Paint canvas by specifying the height and width in pixels, inches or centimeters.

Additionally, you can modify the number of dots per inch (DPI). This lets you manipulate high-resolution images. To modify the DPI, click on the Inches or Centimeters option and press MB1 to display the Resolution menu. Choose 75, 100, or 300 DPI, or the Non-Standard menu item. Non-Standard lets you supply your own resolution. The change will be evident when you print the picture out, rather than in the Paint display.

To alter the canvas:

1   Choose Picture Size... from the Customize menu.

    Paint displays a dialog box.
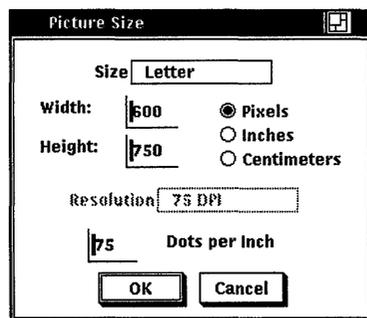
    The Picture Size dialog box shows the current canvas size with its dimensions converted to pixels, inches, or centimeters.

2   Click on Size to display the Size menu.

    Choose one of the Size menu items: Non-Standard, Letter (81/2x11) or Screen (size of screen in pixels). Choose Non-Standard to supply your own value. This is the default.

3   Choose the desired canvas size.

4   Click on the OK button.

Using Accelerators

Certain key combinations, called **accelerators**, let you quickly perform common DECwindows operations. The following shows each key combination and its corresponding function. (The ALT key is marked Compose Character or Symbol on your keyboard.)

Press	To Produce
ALT /Z	Undo
ALT/Q	Quit
ALT/X	Cut
ALT/V	Paste
ALT/P	Print
ALT/S	Save
ALT/W	Refresh Screen

In addition to using accelerators to perform common DECwindows commands, you can use key combinations to manipulate Paint tools. You can press and hold the Shift key while you drag MB1 to produce the following results.

Tool	Effect
Rectangle	Causes it to be a square
Line	Causes it to be at an angle that is a multiple of 45 degrees
Brush	Causes it to be horizontal or vertical
Pencil	Causes it to be horizontal or vertical
Ellipse	Causes it to be a circle
Polygon	Causes angles to be multiples of 45 degrees
Eraser	Causes it to erase only vertically and horizontally

Exiting from Paint

To exit from Paint, choose Quit from the File menu. If you try to Quit without saving your picture, Paint asks if you want to save the picture before quitting. Click on Yes, No, or Cancel to state your choice.

Tool Summary

Table 9–1 lists the tools available on the Paint palette.

Table 9–1   Tool Summary

Tool	Action
Box	Select a rectangular area for editing.
Scissors	Select a shape for editing.
Spray can	Apply paint in the current outline pattern. (The slower the drag, the darker the coat.)
Pencil	Draw a thin line.
Eraser	Delete the image in the path of the pointer.
Paintbrush	Paint a free stroke.
Text	Print what is typed at the keyboard.
Paint bucket	Fill a closed shape with the current fill pattern.
Line	Draw a straight line. Shift-click for a 90 degree or a 45 degree line.
Arc	Sketch a horizontal or vertical arc, depending on the initial movement after the click. Shift-click for a quarter circle.
Rectangle	Draw a rectangle. Shift-click for a square.
Square	Draw a square.
Ellipse	Draw an oval shape. Shift-click for a circle.
Circle	Draw a circle.
Free-hand stroke	Draw a free-hand line in the selected line width and pattern.
Polyline	Draw a multisided figure with rounded corners. Click at each corner, double-click to complete shape. Shift-click for 45 or 90 degree angles.

10

Using the PostScript® Previewer

The PostScript Previewer lets you view formatted PostScript files on your workstation screen without printing them, thus saving you paper and trips to the printer.

This chapter describes how to:

- Start the PostScript Previewer

- View a PostScript file

- Customize your PostScript display

- Exit from the PostScript Previewer

Starting the PostScript Previewer

To start the Postscript Previewer, choose PostScript Previewer from the Session Manager Applications menu or enter the following command in a DECterm window:

```
% dxpsview &
```

See the UWS reference page dxpsview(1X) for information about these command options.

You can specify several options on the command line to specify the file to be displayed or characteristics of the PostScript Previewer window.

The PostScript Previewer displays its main window, which is where you view PostScript files.

® PostScript is a registered trademark of Adobe Systems Incorporated.

```
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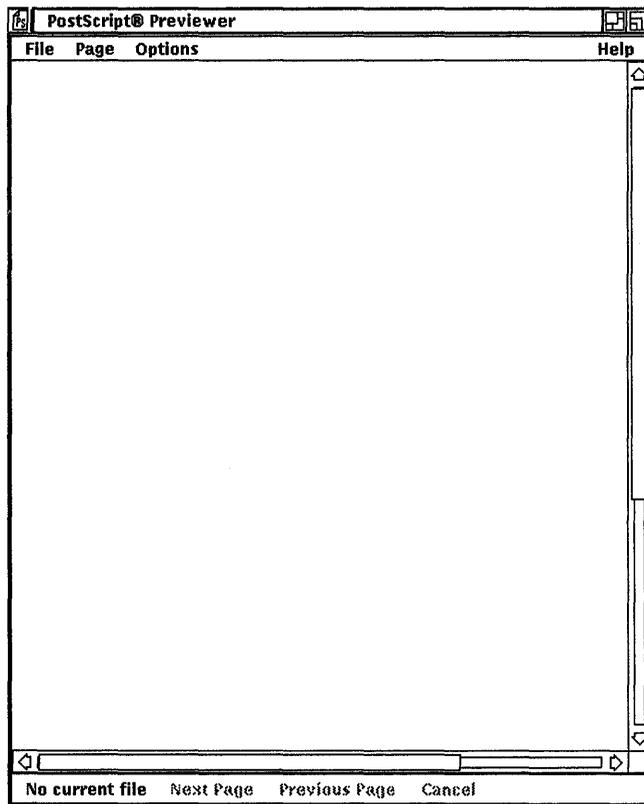
Viewing a PostScript File

To view a PostScript file in the PostScript Previewer window, you
must open it. To open a PostScript file:

1   Choose Open... from the File menu.

    The Previewer displays a dialog box that prompts you for the
    name of the file you want to view. The file list box lists the
    names of the PostScript files in the current directory.

```
Open...

File Filter

*.ps

Files in /usr/staff/pooter/hume/

/usr/staff/pooter/hume/debug_listing.ps        Filter
/usr/staff/pooter/hume/display-2341.ps
/usr/staff/pooter/hume/display-2346.ps           OK
/usr/staff/pooter/hume/header.ps
                                                Cancel




Selection
```
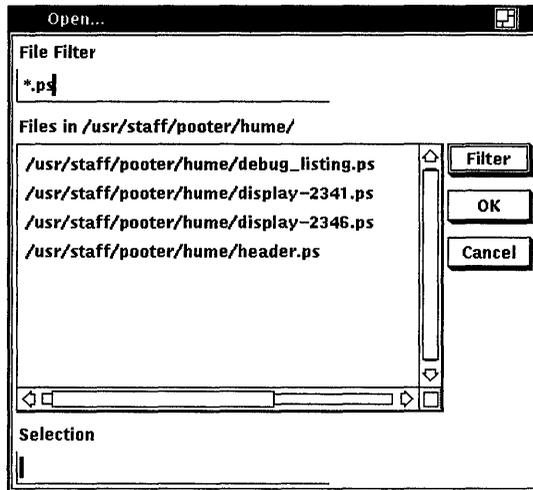
2 Double click on the name of the file you want to view.

The PostScript Previewer displays the file you specified.

If you want to view a PostScript file that is not listed, type the
name of that file in the Selection text entry field and click on the
OK button. Or, use the File Filter text entry field to list a subset
of files that you can select from. For example, to list all files that
end in .ps in another directory, type the full directory path (such
as **/jones/project/*.ps**) in the File filter text entry field and click
on the Filter button. When the list of files from the **/jones/project
directory** appears in the list box, double click on the name of the
file you want to view.

If the name of the file you want to view appears in any other
window, you can select that file name and view the file. To view a
file whose file name appears in another window:

1 Select the name of the file you want to view.

2 Choose Open Selected from the File menu.

The PostScript file you selected is displayed.

Paging Through the File

The number of the page currently displayed appears in the Status area in the lower left corner of the window. To view another page in the displayed file, you can:

- Specify the number of the page you want to see

- Specify the next page

- Specify the previous page

To view a specific page:

1   Choose Display... from the Page menu.
    The PostScript Previewer displays a dialog box.

2   Enter the number of the page you want to see.

3   Click on the OK button.

The PostScript Previewer displays that page.

To view the next page, you can either choose the third menu item from the Page menu or click on the Next Page button at the bottom of the Previewer window. You can continue to page through the file by choosing the appropriate menu item from the Page menu or by clicking on the Next Page and Previous Page buttons.

If you are viewing the first page in the file, the first menu item on the Page menu and the Previous Page button are unavailable. If you are viewing the last page in the file, the last menu item on the Page menu and Next Page push button are unavailable.

Revisiting the File

If you make changes to a PostScript file based on what you see when you view it, you do not have to close the file to see those changes in effect. By revisiting the file currently displayed, you can see the changes you made. This means you can modify the file in one window while you are viewing it in another, reprocess the file to produce new PostScript output, and view the modified file.

To revisit the currently displayed file, choose the Revisit Current menu item from the File menu. The file is redisplayed from the beginning.

Customizing the PostScript Previewer

By customizing the PostScript Previewer, you can:

- Change the page size, page orientation, or scale of the display
- Speed the display of pages in random order
- View files for either format or content
- View files that contain unsupported PostScript tray size directives
- Watch the Postscript Previewer draw images to the screen

Changing the Page Size, Page Orientation, and Scale

You can change the size and orientation of a page you want to view. Changing the page size does not change the size of the PostScript Previewer window. Instead, the display is formatted (in length and width) for the page size you specify. Unless you specify otherwise, the display page size is Letter (8 1/2 x 11 inches).

To change the page size of the file currently displayed:

1 Choose Sheet Selection... from the Options menu.

The Previewer displays a dialog box.
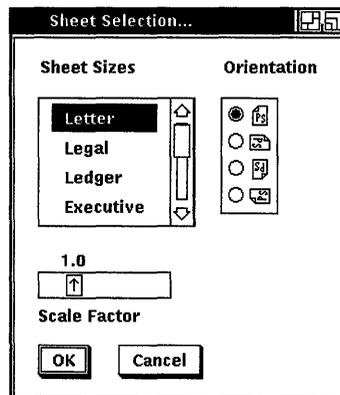
2 To choose a sheet size, click on the appropriate size.

You can choose from the following tray sizes:

- Letter (8.5 x 11 inches)
- Legal (8.5 x 14 inches)

- Ledger (11 x 17 inches)

- Executive (7.5 x 10.5 inches)

- A3 (297 x 420 mm)

- A4 (210 x 297 mm)

- A5 (148 x 210 mm)

- B4 (257 x 364 mm)

- B5 (182 x 257 mm)

Unless you specify otherwise, the page is displayed upright at 0 degrees. You can view the page at 0, 90, 180, or 270 degrees. To change the orientation of the page in the Previewer window, click on the appropriate orientation symbol. The new page orientation takes effect at the next page operation, when another file is opened, or when the current file is reopened with the Revisit Current menu item.

You can also specify the factor by which the Postscript Previewer magnifies or shrinks the images in the file. A scale factor of 1 creates images on screen that are the same size as those printed on paper. Reducing the scale factor below 1 shrinks images; increasing the scale factor magnifies them.

To change the scale of the display, drag the arrow in the slider left or right, or move the pointer to a location on the slider and press MB1. The scale appears in the Status area when it is more or less than 1 (as 0.3X or 1.5X, for example).

Click on the OK button in the Sheet Selection box when you have selected the sheet size, orientation, and scale you want. The options you have specified take effect immediately.

Using Comments

Many programs that produce Postscript files have formatting conventions that enable pages to be processed independently of each other. These "comments" in the file allow the PostScript Previewer to more quickly display any page in the file in random order; the Previewer can display the page that you request, without processing each previous page. This means that you can view page five of a file without waiting for the Previewer to process pages one through four.

The Use Comments option is in effect by default: the PostScript Previewer uses comments if they are present in the file, and the option button is shaded. However, the Use Comments option might occasionally cause you to receive an error message when you attempt to view a PostScript file. If that occurs, try correcting the problem by disabling the Use Comments option.

Using Bitmap Widths

The same PostScript file can be either printed or viewed on the screen, but characters look somewhat different on the printed page and the screen. The printer has finer resolution (more dots per inch) than the screen, so that images processed for printing appear less clear on the screen. Therefore, in order to create clearer, better readable characters, the PostScript Previewer can use spacing formulas designed for bitmaps (screen images) instead of those designed for print.

The Use Bitmap Widths option is off by default. This setting displays format and layout correctly, with spacing between characters as it is on the printed page. However, there is some cost to the readability of actual text; characters might be dense and difficult to read.

To increase the readability of text, click on the Use Bitmap Widths option. The display changes immediately, and the option button is highlighted. Text characters now appear well spaced and are easily read. However, the page might look slightly different than it would when printed. For example, columns might be slightly out of alignment and right justified text might appear instead with a ragged right margin.

Some PostScript files contains tray size directives. These are device-specific PostScript programming language instructions that tell the printer which tray size to use. For example, a file might contain tray size directives that instruct the printer to switch from the letter tray (8 1/2 x 11) to the ledger tray (11 x 17) while that file is being printed.

The Previewer does not, however, permit the addition of tray size directives to PostScript files in this way. If you try to view a file that contains PostScript tray size directives, the Previewer displays an error message. To continue viewing the file:

1   Press Return to acknowledge the error message.

2   Choose Use Fake Trays on the Options menu.

     The Use Fake Trays menu item, which is off by default, is in effect if its option button is highlighted.

3 Choose Revisit Current from the File menu

The file is redisplayed from the beginning and the tray size remains the same.

To change the tray size, use the Sheet Selection dialog box.

Watching the Previewer's Progress

The PostScript Previewer usually prepares one page of your PostScript file at a time and then draws that entire page to the screen. If you prefer, you can watch the Previewer draw the display as it progressively translates a page of the PostScript file into screen images.

The Watch Progress menu item is disabled by default. To watch the progress of each page translation, click on the Watch Progress menu item.

Exiting from the PostScript Previewer

To exit from the PostScript Previewer, choose Exit from the File menu.

11

Using the Puzzle

The Puzzle is a video version of a number puzzle with slidable squares.

Starting the Puzzle

To start the Puzzle, choose Puzzle from the Session Manager Applications menu or enter the following command in a DECterm window:

```
% dxpuzzle &
```

The Puzzle is displayed.

Puzzle			
File	Customize		Help
2	4	15	12
13	6	7	9
■	1	10	5
3	8	11	14

Playing Around with the Puzzle

The puzzle squares are scrambled. The trick is to arrange them in ascending order in the fewest possible moves. The Puzzle keeps track of the number of moves you make.

Click on the square you want to move. Although you can move only those squares that are adjacent to the blank square, you can slide an entire row at a time.

To make the Puzzle easier or more challenging, choose the Settings... menu item from the Customize menu and change the settings.

Try increasing the number of squares displayed per side. To change the number of squares on each side, place the pointer on the number in the slider and drag to the left or right. Click on the OK button to change the settings, or the Cancel button to return to the Puzzle without changing any settings.

Starting a New Game

You do not have to win one game to start another. To start a new game and rescramble the squares, choose the New Game menu item from the File menu.

Exiting from the Puzzle

To exit from the Puzzle, choose the Quit menu item from the File menu.

If you changed the size, settings, or screen position of the Puzzle and would like to save your changes, choose Save Settings from the Customize menu before quitting. To restore the default settings, choose Use System Defaults from the Customize menu.

A

Composing Characters

In a DECterm window, 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. You can create any character from the character set DECterm is currently using. (For more information on choosing a character set, see Chapter 6.)

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

- Using three-stroke sequences on a VT320 keyboard including the North American/United Kingdom, Dutch, and Norwegian/Danish keyboards.

- Using two-stroke sequences on other keyboards.

To compose a character:

1 Find the character you want to create in column 1 of the following tables.

2 To compose a three-stroke sequence, simultaneously press and then release ⎡Compose⎤ and the space bar, and 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.

Press the Compose key and space bar, Delete key, Tab key, Return key, or Enter key to cancel a compose sequence.

Note *The North American, United Kingdom, and Dutch keyboards do not have diacritical marks. If you use a diacritical mark, DECterm uses an equivalent character.*

Table A-1   Composing Characters in Multinational Character Mode

Character		Three-Stroke Sequence	Two-Stroke Sequence
"	quotation mark	¨ space bar	¨ space bar
#	number sign	++	
'	apostrophe	´ space bar	´ space bar
@	commercial at	A A	
[	opening bracket	((	
\	backslash	/ / or / <	
]	closing bracket	))	
^	circumflex accent	^ space bar	^ space bar
`	grave accent	` space bar	` space bar
{	opening brace	(-	
|	vertical line	/ ^	
}	closing brace	) -	
~	tilde	~ space bar	~ space bar
¡	inverted !	!!	
¢	cent sign	C / or C |	
£	pound sign	L- or L=	
¥	yen sign	Y- or Y=	
§	section sign	SO or S! or S0	
¤	currency sign	XO or X0	
©	copyright sign	CO or C0	
ª	feminine ordinal	A_	
«	open angle brackets	< <	
°	degree sign	0 ^	
±	plus or minus sign	+-	
²	superscript 2	2 ^	
³	superscript 3	3 ^	
µ	micro sign	/ U	
¶	paragraph sign	P!	

Character		Three-Stroke Sequence	Two-Stroke Sequence
·	middle dot	. ^	
¹	superscript 1	1 ^	
º	masculine ordinal	O_	
»	closed angle brackets	>>	
¼	fraction one-quarter	1 4	
½	fraction one-half	1 2	
¿	inverted ?	??	
À	A grave	A`	`A
Á	A acute	A′	′A
Â	A circumflex	A^	^A
Ã	A tilde	A~	~A
Ä	A umlaut	A" or ¨A	¨A
Å	A ring	A* or A° (degree sign)	°A
Æ	A E diphthong	AE	
Ç	C cedilla	C,	
È	E grave	E`	`E
É	E acute	E′	′E
Ê	E circumflex	E^	^E
Ë	E umlaut	E" or ¨E	¨E
Ì	I grave	I`	`I
Í	I acute	I′	′I
Î	I circumflex	I^	^I
Ï	I umlaut	I" or ¨I	¨I
Ñ	N tilde	N ~	~ N
Ò	O grave	O`	`O
Ó	O acute	O′	′O

Table A–1 (Cont.) **Composing Characters in Multinational Character Mode**

Character		Three-Stroke Sequence	Two-Stroke Sequence
Ô	O circumflex	O^	^O
Õ	O tilde	O~	~O
Ö	O umlaut	O" or ¨O	¨O
Œ	O E diphthong	O E	
Ø	O slash	o/	
Ù	U grave	U`	`U
Ú	U acute	U′	′U
Û	U circumflex	U^	^U
Ü	U umlaut	U" or ¨U	¨U
Ÿ	Y umlaut	Y" or ¨Y	¨Y
ß	German small sharp s	ss	
à	a grave	a`	`a
á	a acute	a′	′a
â	a circumflex	a^	^a
ã	a tilde	a~	~a
ä	a umlaut	a" or ¨a	¨a
å	a ring	a* or a° (degree sign)	°a
æ	a e diphthong	a e	
ç	c cedilla	c , (comma)	
è	e grave	e`	`e
é	e acute	e′	′e
ê	e circumflex	e^	^e
ë	e umlaut	e" or ¨e	¨e
ì	i grave	i`	`i
í	i acute	i′	′i
î	i circumflex	i^	^i
ï	i umlaut	i" or ¨i	¨i

Table A–1 (Cont.) Composing Characters in Multinational Character Mode

Character		Three-Stroke Sequence	Two-Stroke Sequence
ñ	n tilde	n~	~n
ò	o grave	o`	`o
ó	o acute	o'	' o
ô	o circumflex	o^	^o
õ	o tilde	o~	~o
ö	o umlaut	o" or ¨o	¨o
œ	o e diphthong	o e	
ø	o slash	o/	
ù	u grave	u`	`u
ú	u acute	u'	' u
û	u circumflex	u^	^u
ü	u umlaut	u" or ¨u	¨u
ÿ	y umlaut	y" or ¨y	¨y

ISO Latin 1 Characters[1]

	no break space	sp sp	
¦	broken vertical bar	¦ or ! ^	
¬	logical not	- , *	
SHY	soft (syllable) hyphen	- -	
RO	registered trademark	R O	
‾	macron	_ ^	
3/4	three quarters	3 4 *	
÷	division sign	- :	
xx	multiplication sign	x x	
´	acute accent	' '	
¸	cedilla	, ,	

[1]In the ISO Latin 1 mode, the characters œ, Œ, and Ÿ are not available.

Table A–1 (Cont.)   Composing Characters in Multinational Character Mode

Character		Three-Stroke Sequence	Two-Stroke Sequence
¨	diereses	" "	¨ space bar
Y'	Y acute	Y'	' Y
y'	y acute	y'	' y
TH	capital Icelandic thorn	T H	
th	small Icelandic thorn	t h	
-D	capital Icelandic Eth	- D	
-d	small Icelandic Eth	- d	

Table A–2   Composing Characters in National Replacement Mode Using Typewriter Keys

Character		Three-Stroke Sequence	Two-Stroke Sequence
British			
£	pound sign	L- or L=	
`	grave accent	` space bar	
Danish			
#	number sign	++	
'	apostrophe	' space bar	
@	commercial at	AA	
`	grave accent	` space bar	

Character		Three-Stroke Sequence	Two-Stroke Sequence
Dutch			
£	pound sign	L- or L=	
'	apostrophe	' space bar	
¼	one quarter	1 4	
½	one half	1 2	
3/4	three quarters	3 4	
ij	i j sign	i j	
fl	Florin	f -	
`	grave accent	` space bar	
´	acute accent	' '	
..	diereses	" ^	
Finnish			
#	number sign	++	
'	apostrophe	' space bar	
Flemish and French/Belgian			
£	pound sign	L- or L=	
'	apostrophe	' space bar	
`	grave accent	` space bar	
French Canadian			
'	apostrophe	' space bar	
à	a grave	`a	`a
â	a circumflex	^ a	^ a

Character		Three-Stroke Sequence	Two-Stroke Sequence
è	e grave	`e	`e
ê	e circumflex	^ e	^ e
î	i circumflex	^ i	^ i
ô	o circumflex	^ o	^ o
ù	u grave	`u	`u
û	u circumflex	^ u	^ u

German/Austrian

| ´ | apostrophe | ´ space bar | |
| ` | grave accent | ` space bar | |

Italian

| ´ | apostrophe | ´ space bar | |

Norwegian

| ´ | apostrophe | ´ space bar | |
| ` | grave accent | ` space bar | |

Portuguese

´	apostrophe	´ space bar	
`	grave accent	` space bar	
Ã	A tilde	~ A	
Õ	O tilde	~ O	
ã	a tilde	~ a	
õ	o tilde	~ o	

Character		Three-Stroke Sequence	Two-Stroke Sequence

Spanish

£	pound sign	L- or L=	
'	apostrophe	' space bar	
§	section sign	!S or OS or 0S	
`	grave accent	` space bar	
~	tilde	~ space bar	

Swedish

#	number sign	++	
'	apostrophe	' space bar	
É	E acute	' E	
é	e acute	' e	

Swiss (French) and Swiss (German)

'	apostrophe	' space bar	
ê	e circumflex	^ e	^ e
î	i circumflex	^ i	^ i
ô	o circumflex	^ o	^ o
ù	u grave	` u	` u
û	u circumflex	^ u	^ u

Table A–3   Composing Characters in National Replacement Mode Using Data Processing Keys

Character		Three-Stroke Sequence
"	quotation mark	" space bar
#	number sign	+ +
'	apostrophe	' space bar
@	commercial at	aa or AA or aA
[	opening bracket	((
\	backslash	/ <
]	closing bracket	^ space bar
'	apostrophe	' space bar
{	opening brace	(-
|	vertical bar	^ /
}	closing brace	) -
~	tilde character	~ space bar

B

National Replacement Keyboards

In DECterm, you can pick a National Replacement Keyboard (NRCS) that corresponds to the chosen keyboard dialect by choosing the 7-bit NRCS Selection... menu item from DECterm's Customize menu.

The following National Replacement Character Sets are available:

North American	Italian
Flemish	Swiss (French)
Canadian (French)	Swiss (German)
British	Swedish
Danish	Norwegian
Finnish	Belgian/French
Austrian/German	Spanish
Dutch[1]	Portuguese

[1]Use of the Dutch national keyboard is discouraged. It may not be supported in future versions of DECterm. Dutch users should use the ISO Latin 1 Keyboard instead.

The following figures illustrate the corresponding keyboards.

Figure B–1 illustrates the North American Keyboard.

Figure B–2 illustrates the Flemish Keyboard.

Figure B–3 illustrates the Canadian (French) Keyboard.

Figure B–4 illustrates the British Keyboard.

Figure B–5 illustrates the Danish Keyboard.

Figure B–6 illustrates the Finnish Keyboard.

Figure B–7 illustrates the Austrian/German Keyboard.

Figure B–8 illustrates the Dutch Keyboard.

Figure B–9 illustrates the Italian Keyboard.

Figure B–10 illustrates the Swiss (French) Keyboard.

Figure B–11 illustrates the Swiss (German) Keyboard.

Figure B–12 illustrates the Swedish Keyboard.

Figure B–13 illustrates the Norwegian Keyboard.

Figure B–14 illustrates the Belgian/French Keyboard.

Figure B–15 illustrates the Spanish Keyboard.

Figure B–16 illustrates the Portuguese Keyboard.
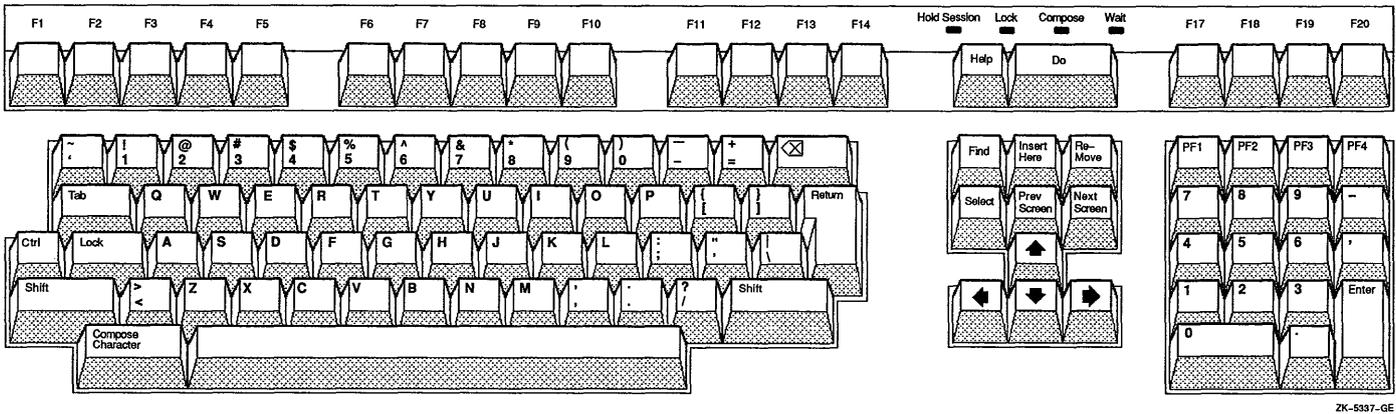
Figure B-1 The North American Keyboard

| BEELD VAST | SCHERM AFDRUK | SET-UP | DATA/ SPRAAK | COM LIJN | | F6 | F7 | F8 | F9 | F10 | | F11 (ESC) | F12 (BS) | F13 (LF) | F14 | | BEELD VAST | ◇ | SAMENST | WACHT | | F17 | F18 | F19 | F20 |

| HELP | VOER OPDR UIT |

Keyboard diagram rows:

~ ` | 1 & | 2 é | 3 " | 4 ' | 5 (| 6 § | 7 è | 8 ! | 9 ç | 0 à | °) | _ - | ⌫

TAB | A | Z | E | R | T | Y | U | I | O | P | ^ | $ ¨

CTRL | ▽ | Q | S | D | F | G | H | J | K | L | M | % ù | @ # \ | ⌫

> < | W | X | C | V | B | N | ? , | . ; | / : | + =

SAMENGEST TEKEN

| ZOEK | VOEG IN | WIS BLOK |
| SEL | VORIG BEELD | VOLG BEELD |

⬆ | ⬅ ⬇ ➡

PF1	PF2	PF3	PF4
7	8	9	–
4	5	6	,
1	2	3	VOER IN
0		.

ZK–0386A–GE
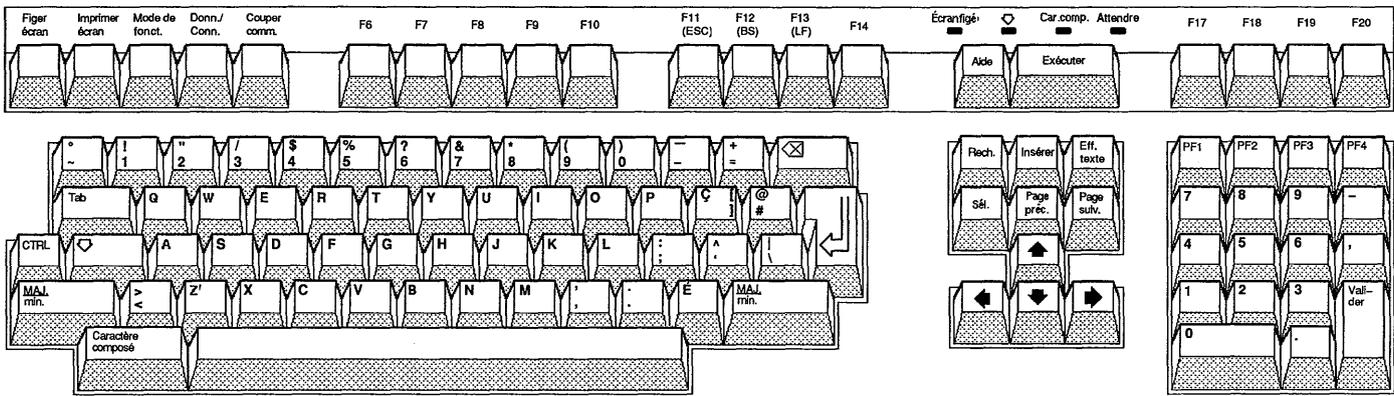
ZK–5334–GE

Figure B–3   The Canadian (French) Keyboard

ZK-5336-GE

ZK–5324–GE

ZK–5333–GE

| Figer écran | Imprimer écran | Mode de fonct. | Donn./ Conn. | Couper comm. | | F6 | F7 | F8 | F9 | F10 | | F11 (ESC) | F12 (BS) | F13 (LF) | F14 | | Ecran figé | ▽ | Cat. comp. | Attendre | | F17 | F18 | F19 | F20 |

Aide   Exécuter

ZK-0388A-GE

ZK–0389A–GE

Figure B-9   The Italian Keyboard
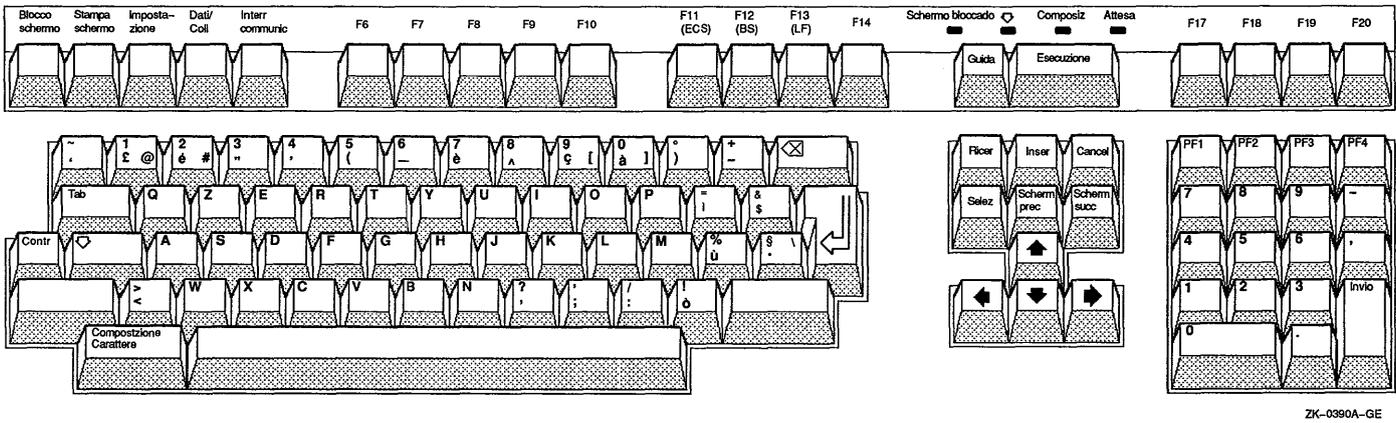
ZK-0390A-GE
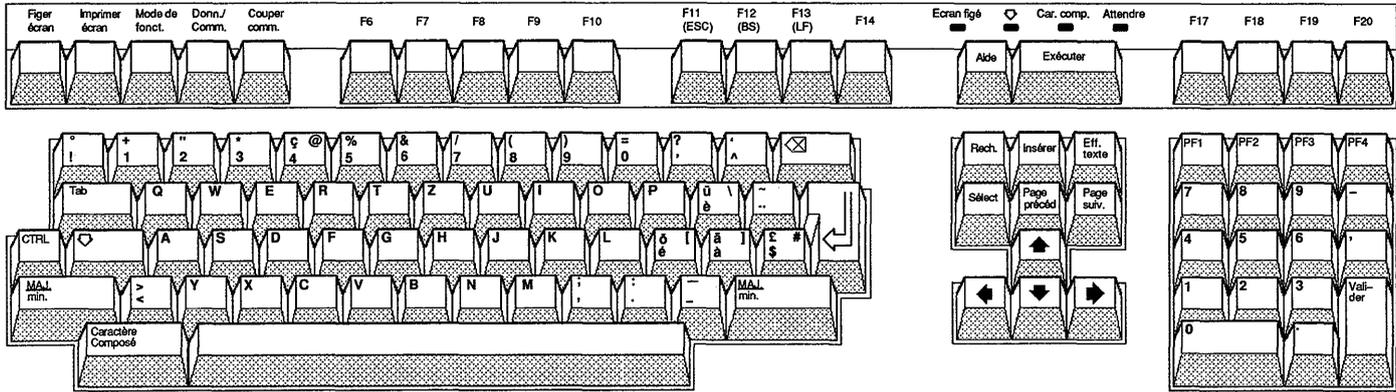
ZK-0394A-GE

Figure B-11 The Swiss (German) Keyboard
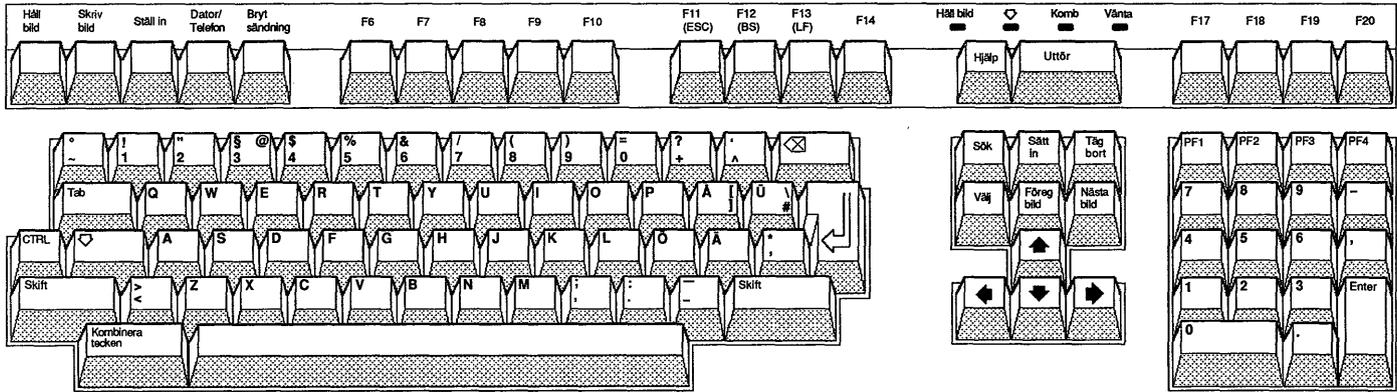
ZK-0395A-GE

Figure B-12   The Swedish Keyboard

ZK-0393A-GE

Figure B-13 The Norwegian Keyboard
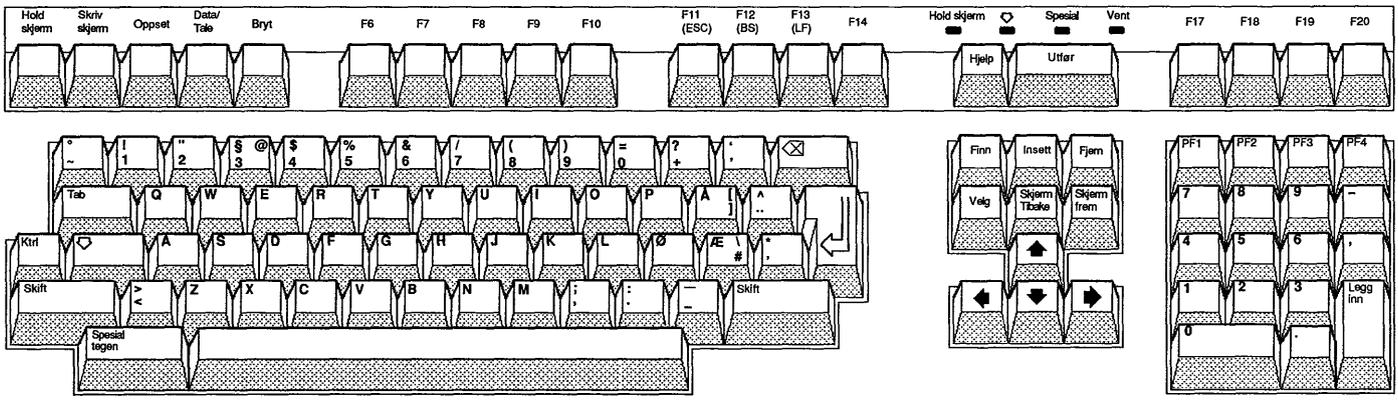
ZK-0391A-GE
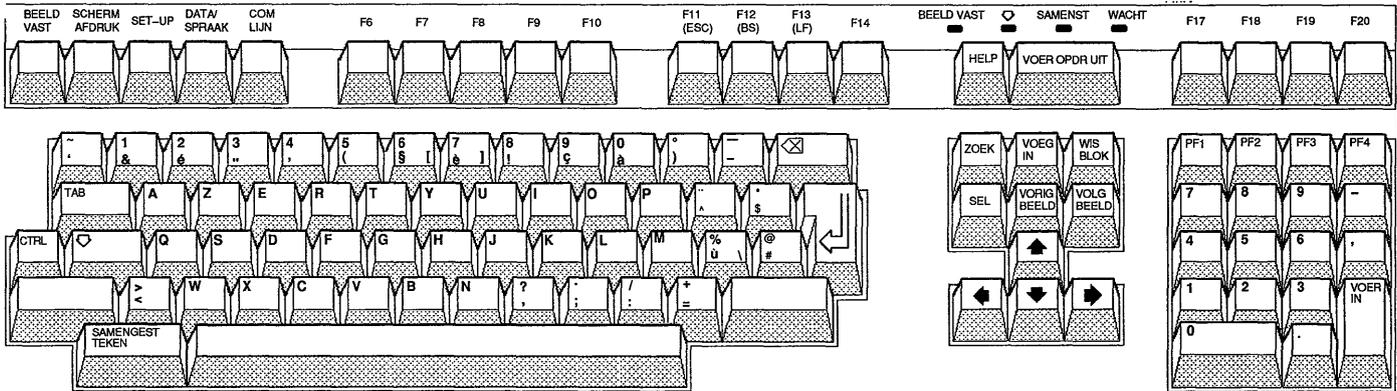
ZK–0386A–GE

Figure B-14   The Belgian/French Keyboard
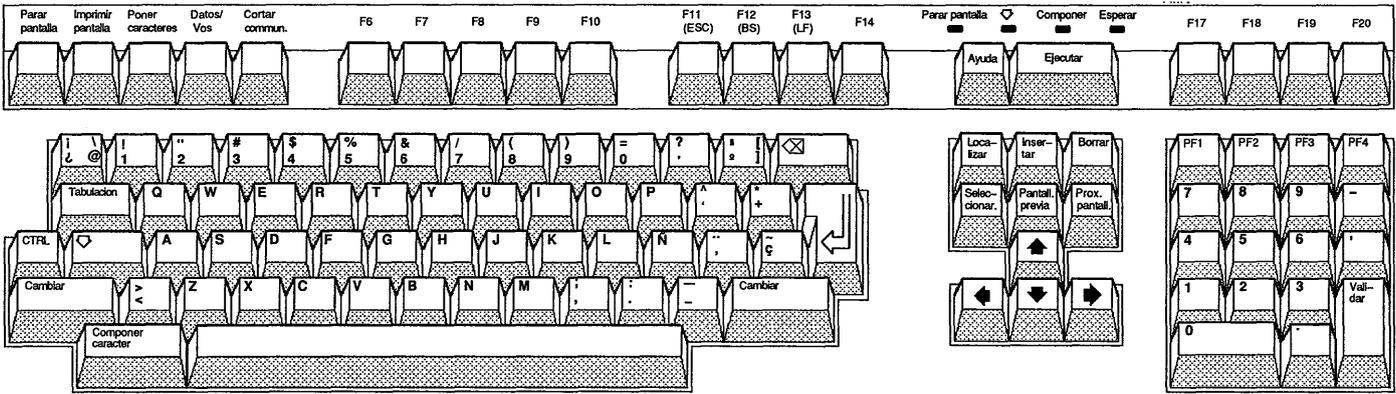
Figure B-15 The Spanish Keyboard

ZK-0392A-GE
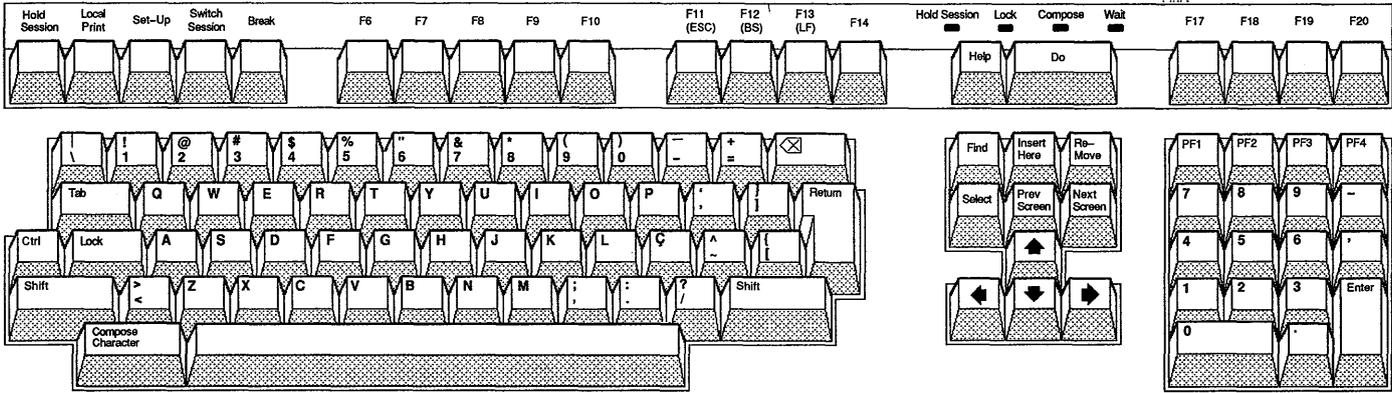
ZK-0396A-GE

Figure B-16 The Portuguese Keyboard

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Thank you for your assistance.

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Clarity (easy to understand)	☐	☐	☐	☐
Organization (structure of subject matter)	☐	☐	☐	☐
Figures (useful)	☐	☐	☐	☐
Examples (useful)	☐	☐	☐	☐
Index (ability to find topic)	☐	☐	☐	☐
Page layout (easy to find information)	☐	☐	☐	☐

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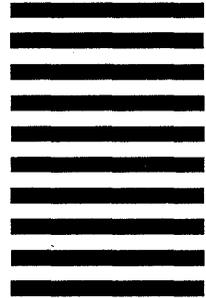FIRST CLASS PERMIT NO.33 MAYNARD MASS.

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