Tru64 UNIX

CDE Companion

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This guide introduces the Common Desktop Environment (CDE) and provides information for CompaqTru64 UNIX (formerly DIGITAL UNIX) Version 5.0 or higher on migrating from DECwindows Motif to CDE.

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About This Manual

This manual provides an introduction to the Common Desktop Environment (CDE), a graphical user interface (GUI) that provides an easy method of interacting with the Compaq Tru64™ UNIX (formerly DIGITAL UNIX) operating system.

The *CDE Companion* is divided into two parts:

- *Part 1* provides an introduction to the Common Desktop Environment (CDE) for those users who are not familiar with desktop interfaces.

- *Part 2* provides information on migrating from DECwindows Motif to CDE.

_____ **Note** _____

In this manual all references to DECwindows refer to the DECwindows Motif software.

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Audience

This manual is divided into two parts and has distinct and separate audiences as follows:

- The user who is unfamiliar with desktop environments
- The user who wants to migrate from DECwindows Motif to the CDE environment

For users new to desktop environments, this book provides quick-start information on logging into the system, navigating in the new environment, managing the desktop, and using integrated applications.

For users migrating from DECwindows to CDE, this book introduces the new environment and provides information about how to use CDE to perform tasks formerly done with DECwindows Motif.

This book should be used along with the *Common Desktop Environment: User's Guide*.

New and Changed Features

The following list describes the major changes made to this book:

- This version of the operating system provides many new features and enhancements to its System Management Applications, including a setup utility. For more information, see the *Installation Guide*, *System Administration*, *Technical Overview*, the `sysman_intro`(8) reference page, and the online help for the applications.

- New figures show commonly used CDE features and integrated applications.

- Adobe has retired their Display PostScript (DPS) product, which includes the client libraries, X Server extension, and various applications and examples. Therefore, Compaq has also retired the Adobe DPS product from Tru64 UNIX. No replacements will be available. Customers who have used the Adobe DPS libraries to develop their own applications will not have a migration path. The following Adobe applications have been retired and will no longer be included with the operating system.

    – `dpsclock`

    – `dpsexec`

    – `draw`

    – `fontview`

    – `makepsres`

    – `pswrap`

    – `scratchpad`

    – `texteroids`

    – `wonderland`

    – `xepsf`

    – All Adobe fonts under `/usr/lib/X11/fonts/Type1Adobe`

    Support for Adobe Display PostScript (DPS) utilities that depend upon DPS, such as `dxbook`, `dxmail`, `dxnotepad`, and `showps`, are no longer available.

    You can use the **ghostscript** and **ghostview** utilities instead, which are available on the freeware distribution media.

    The following applications, which use Adobe DPS, have been retired and will no longer be included with the operating system:

    – `dxvdoc`

    – `dxbook`

    – `dxnotepad` (I18N version in WorldWide Language Support software in the APCD)

- You can now access the Netscape Navigator application from the Personal Applications subpanel on the CDE Front Panel, and startup instructions are in *Section 1.3.2*.

- *Section 3.1* shows the `root` user's SysMan Station Front Panel control.

- *Section 3.2.1.4*, describes the SysMan Applications Subpanel.

- *Section 3.2.2.2* introduces the CDE Window List. This tool, new for this release, can help you locate application windows across multiple workspaces.

- *Chapter 5* accurately describes current integrated applications. It also introduces the SysMan Menu and SysMan Station applications, and the DECterm application.

- *Section 8.1* covers information about display-specific sessions.

Organization

This book is organized into ten chapters divided into two parts, and an appendix:

- *Part 1* introduces CDE to those users who are not familiar with a graphical desktop environment.

- *Part 2* provides information on migrating from DECwindows Motif to CDE.

- *Appendix A* discusses differences in mail handlers.

Part 1	Introduces the Common Desktop Environment (CDE) and provides information on getting started in this environment.
Chapter 1	Describes the main components of CDE and describes how to access the documentation set, online help, and reference pages.
Chapter 2	Provides information on navigating in the CDE desktop using the mouse and keyboard, and describes how to start and end a desktop session.
Chapter 3	Provides a tour of the Front Panel and explains how to access applications, use subpanels, and use workspaces.
Chapter 4	Describes how to use the desktop to manipulate files, access applications, and customize the environment.
Chapter 5	Provides an overview of the desktop and system management utilities that are integrated into CDE, and introduces the SysMan Menu and SysMan Station.
Part 2	Discusses migrating from the DECwindows Motif environment to CDE.

Chapter 6	Provides an overview of the common components and differences between DECwindows Motif and CDE.
Chapter 7	Describes differences between DECwindows Motif and CDE when starting and ending a session and accessing applications.
Chapter 8	Describes the CDE methods used to customize your desktop environment instead of using DECwindows Motif.
Chapter 9	Discusses internationalization migration issues in CDE for those who used these features in DECwindows Motif.
Chapter 10	Describes how to convert DECwindows mail folders and calendar databases to a format that is understood by the CDE mail and calendar applications.
Appendix A	Describes differences between MH/DXmail and the CDE mail application.

Related Documents

Icons on Tru64 UNIX Printed Manuals

The printed version of the Tru64 UNIX documentation uses letter icons on the spines of the manuals to help specific audiences quickly find the manuals that meet their needs. (You can order the printed documentation from Compaq.) The following list describes this convention:

G   Manuals for general users

S   Manuals for system and network administrators

P   Manuals for programmers

R   Manuals for reference page users

Some manuals in the documentation help meet the needs of several audiences. For example, the information in some system manuals is also used by programmers. Keep this in mind when searching for information on specific topics.

The *Documentation Overview* provides information on all of the manuals in the Tru64 UNIX documentation set.

Reader's Comments

Compaq welcomes any comments and suggestions you have on this and other Tru64 UNIX manuals.

You can send your comments in the following ways:

- Fax: 603-884-0120 Attn: UBPG Publications, ZKO3-3/Y32

- Internet electronic mail: `readers_comment@zk3.dec.com`

  A Reader's Comment form is located on your system in the following location:

  `/usr/doc/readers_comment.txt`

Please include the following information along with your comments:

- The full title of the manual and the order number. (The order number appears on the title page of printed and PDF versions of a manual.)

- The section numbers and page numbers of the information on which you are commenting.

- The version of Tru64 UNIX that you are using.

- If known, the type of processor that is running the Tru64 UNIX software.

The Tru64 UNIX Publications group cannot respond to system problems or technical support inquiries. Please address technical questions to your local system vendor or to the appropriate Compaq technical support office. Information provided with the software media explains how to send problem reports to Compaq.

Conventions

The following conventions are used in this manual:

`%` `$`	A percent sign represents the C shell system prompt. A dollar sign represents the system prompt for the Bourne, Korn, and POSIX shells.
`#`	A number sign represents the superuser prompt.
`% `**`cat`**	Boldface type in interactive examples indicates typed user input.
file	Italic (slanted) type indicates variable values, placeholders, and function argument names.
`[	]` `{	}`	In syntax definitions, brackets indicate items that are optional and braces indicate items that are required. Vertical bars separating items inside

brackets or braces indicate that you choose one item from among those listed.

cat(1) A cross-reference to a reference page includes the appropriate section number in parentheses. For example, cat(1) indicates that you can find information on the cat command in Section 1 of the reference pages.

Part 1

Using the Common Desktop Environment

1

Introducing the Common Desktop Environment

The Common Desktop Environment (CDE) provides an easy method of interacting with the operating system. It is a jointly developed graphical user interface based on industry standards, which include the X Consortium's X Window System and the Open Software Foundation's Motif user interface. By using the CDE interface, you can use the mouse or keyboard to navigate and interact with applications.

CDE presents a visual desktop that you can customize. From the desktop, it is easy to access and manage applications. The desktop itself offers a Front Panel, a graphical display at the bottom of the screen area that provides access to applications, printers, and frequently used objects including online help. It also offers you the option of working in different workspaces. A workspace is the screen itself, which includes the Front Panel. By using a control on the Front Panel, you can switch between different workspaces.

This chapter provides a brief overview of the following:

- Logging in and accessing applications
- Managing the desktop and applications
- Locating other sources of information, including the document set, online help, and reference pages

1.1 Logging In and Accessing Applications

The login screen, displayed by the Login Manager, provides you access to the desktop. Not only can you enter your login name and password, it also provides an Options menu where you can select the type of session you want to begin, and the language to use in your session.

You have the option of starting one of the following sessions:

- A **Regular Desktop Session** starts the CDE Session Manager after the Login Manager has verified your login and password. This is the default desktop. Upon exiting a session, the Session Manager remembers the state of your last session and restores it when you log in next.

- A **Failsafe Session** starts a single terminal window and the Window Manager. This is useful when you need access to a single terminal window if there are problems impeding a successful login to a session.

- A **Command-Line Session** suspends the desktop and provides a way for you to work in the base operating system environment without windows. Because the Login Manager is not active and the X server is not running, a login screen is not displayed.

This section contains the following information:

- Front Panel
- Workspaces

The default language is set by your system administrator; however, you can also access other languages that are installed on your system. Choosing a language from the Options menu sets the environment variable LANG for the duration of your session. The default language is restored when you end your session. See Chapter 9 for information on using internationalization features.

1.1.1 Front Panel

The CDE Front Panel is located at the bottom of the desktop. It provides controls (represented by icons) that start applications, and subpanels that you can use in your daily work. The Front Panel also provides a workspace switch, which you can use to move between different work areas. Chapter 3 describes the default applications available from the Front Panel and discusses how to use subpanels and workspaces.

Figure 3–1 shows the default CDE Front Panel.

Figure 1–1: CDE Front Panel

You can customize the Front Panel by adding and removing controls from the Front Panel and subpanels, adding and removing workspaces, and renaming workspaces. If you are familiar with using desktops, you can also create a Front Panel customized configuration file. See the *Common Desktop Environment: User's Guide* for details on customizing the Front Panel. For information on creating configuration files, see the *Common Desktop Environment: Advanced User's and System Administrator's Guide*.

1.1.2 Workspaces

A workspace is the screen display area. Using CDE, you can move between different workspaces by using the workspace switch, which is numbered one through four on the Front Panel. By switching from one workspace to the next, you can set up multiple work areas. For example, one workspace can be used for managing mail, another for project management, and so on. The Front Panel is available in each workspace.

By default, there are four workspaces, but you can add, delete, or rename workspaces. See Chapter 3 for more information.

1.2 Managing the Desktop and Applications

The desktop has a File Manager, Application Manager and Style Manager. Each of these provides you with a specific control in the desktop environment. The following list introduces these controls:

- File Manager

  The File Manager provides a view of desktop objects, which includes files, directories, and applications. All objects are represented by an icon. Using the drag and drop features of the File Manager, you can easily manipulate files and directories, and interact with other applications.

- Application Manager

  The Application Manager is a special directory (folder) where you can launch applications and other tools that are available on your system. Most of the available applications are built into the desktop or installed automatically, but you also can customize the Application Manager by adding other applications.

- Style Manager

  You can use the Style Manager to customize the appearance of your desktop. Using the Style Manager, you can control the workspace colors and palettes, fonts, backdrop patterns, keyboard click and character repeat, mouse button settings, audio, screen blank and screen lock, window focus, icon placement, and how your session begins and ends.

See Chapter 4 for additional information on managing these applications and tools. See Chapter 5 for information about using desktop and system management applications.

1.3 Obtaining More Information

The documentation is available on line and in hardcopy. You can also obtain information about CDE from online help volumes and reference pages.

- Section 1.3.1 describes the documentation.

- Section 1.3.2 explains how to use the Netscape Navigator application to view the documentation set on line.

- Section 1.3.3 explains how to use CDE online help.

- Section 1.3.4 describes how to view reference pages with the Man Page Viewer or the `man` command.

1.3.1 Books, Manuals or Guides

The documentation has three audiences: general user, programmer, and ToolTalk programmer. The CDE documentation is provided on line only and not available in hardcopy.

Table 1–1 lists the documents that are intended for the general user.

Table 1–1: User Documentation

Manual	Description
Common Desktop Environment: Advanced User's and System Administrator's Guide	Describes how to perform advanced customizations of the CDE environment.
Common Desktop Environment: Desktop Korn Shell User's Guide	Provides the information you need to create Motif applications with Korn Shell (kshell) scripts.
Common Desktop Environment: Product Glossary	Provides a comprehensive list of terms used in CDE, and serves as a source and reference base for all users of the desktop.
Common Desktop Environment: User's Guide	Outlines basic features of CDE and explains how to use the desktop and desktop applications such as the File Manager and Application Manager.

Table 1–2 lists the documents that are aimed primarily at programmers.

Table 1–2: Programmer's Documentation

Manual	Description
Common Desktop Environment: Application Builder User's Guide	Describes the Application Builder, which is an interactive tool for developing CDE applications.
Common Desktop Environment: Help System Author's and Programmer's Guide	Describes how to develop online help for application software and integrate help into an application.
Common Desktop Environment: Internationalization Programmer's Guide	Discusses how to internationalize an application so that it can be localized to support various languages and cultural conventions in a consistent user interface.

Table 1–2: Programmer's Documentation (cont.)

Manual	Description
Common Desktop Environment: Programmer's Guide	Discusses the elements of CDE and describes how to use them.
Common Desktop Environment: Programmer's Overview	Provides overview information on building new CDE applications, integrating applications into the desktop, and design issues.
Common Desktop Environment: Style Guide and Certification Checklist	Provides application design style guidelines and lists the requirements for CDE-level certification.

Table 1–3 lists the documents that are intended for ToolTalk programmers.

Table 1–3: ToolTalk Documentation

Manual	Description
Common Desktop Environment: ToolTalk Messaging Overview	Describes the ToolTalk components, commands, and error messages.
Common Desktop Environment: ToolTalk Reference Manual	Describes the Application Interface (API) components, commands, and error messages of the ToolTalk service.
Common Desktop Environment: ToolTalk User's Guide	Describes the ToolTalk service and how to modify your application to send and receive ToolTalk messages.

1.3.2 Viewing Online Documentation with Netscape Navigator

The online documentation set is available in both Hypertext Markup Language (HTML) and Portable Document Format (PDF) versions.

- You can use the Netscape Navigator application to view HTML or PDF versions of the documentation. This version of the operating system is shipped with Netscape Communicator 4.5, which includes Netscape Navigator. See the *Installation Guide* for details.

- You can use the Adobe Acrobat Reader application to view PDF versions of the documentation. See the *Adobe Acrobat Reader Online Guide* for information about setting up Netscape Navigator to view PDF files. You can access this document from the Acrobat Reader Help menu.

To view the online documentation, follow these steps to use Netscape Navigator:

1. Log in as `root` or use the `su` command to gain `root` privileges.

2. Insert the CD-ROM in your system's CD-ROM drive.

3. Use the following command to mount the CD-ROM on
   `/usr/share/doclib/online` if you have only one CD-ROM attached
   to your system,

   # mount -r -t cdfs -o rrip /dev/disk/cdrom0c /usr/share/doclib/online

   If you have more than one CD-ROM device, enter a command similar
   to the following to determine the CD-ROM devices connected to your
   system. Then, decide which CD-ROM device you want to use.

   #ls /dev/disk/cdrom*c

   /dev/disk/cdrom0c

   /dev/disk/cdrom1c

4. Start the Netscape Navigator from the CDE desktop by using one of the
   following methods:

   a. Click on the arrow above the Text Editor icon on the CDE Front
      Panel to display the Personal Applications subpanel.

   b. Click on the Netscape icon.

   c. From a terminal emulator window, enter the following command to
      run Netscape Navigator in the background:

      $**/usr/bin/X11/netscape &**

      Refer to the `netscape`(1) reference page for information about
      options.

5. Load the home page from the Navigator window by opening the file
   `/usr/doc/netscape/TRU64_UNIX.html`.

6. Select the Documentation bookshelf from the list of options.

7. Click on the Bookmarks menu, then click on the Add Bookmark option
   to save this bookshelf for future use.

1.3.3 Online Help

Online help provides detailed information on the CDE interface and
applications.

- From the Front Panel, click on the Help Manager to access a collection
  of help volumes.

- To access the help volume from within an application, click on the Help
  menu.

1.3.3.1 Using the Help Manager

The Help Manager is a special help volume available from the Front Panel that lists all the online help registered on your system. To browse through registered online help, click on the Help Manager icon. To navigate within the Help Manager online help volume, click on any underlined topic and use the help menus and buttons.

The Help Manager icon has an arrow above it, indicating that a subpanel is available. To view specific help topics about the desktop and Front Panel, click on the arrow. The subpanel also includes On Item help for the Front Panel. On Item help is interactive. Clicking on this option turns the pointer into a question mark (?). Position the pointer over an item in the Front Panel or a subpanel and then click to view help on that item.

1.3.3.2 Using an Application's Help Menu

To access help from within a help volume, click on the Help menu. An online help volume is divided into several sections. Table 1–4 describes the contents of an online help volume.

Table 1–4: Contents of an Online Help Volume

Menu Item	Description
Overview	Explains the purpose of the application, how to start it, and how to exit from it.
Tasks	Gives step-by-step examples to illustrate typical uses of the application.
Reference	Describes each window, dialog box, and menu in the application; may include troubleshooting information.
On Item	Turns the pointer into a question mark that you can click on any part of a window or dialog box to get help on a specific field or window area.
Using Help	Explains how online help is organized and how to use it.
About Application	Displays the version and copyright information for the application.

1.3.4 Reference Pages

Reference pages, often referred to as manpages, provide a synopsis and description of each command or application on the system. If the reference page subset is installed on your system, you can use one of the following tools to access reference pages:

- Section 1.3.4.1 explains how to use keywords to find reference pages for a command or application.

- Section 1.3.4.2 tells you how to use the `man` command to view a reference page from within a terminal emulator window.
- Section 1.3.4.3 describes the Man Page Viewer, a graphical user interface (GUI) that lets you view or print a reference page.

1.3.4.1 Finding Reference Pages for Commands and Applications

If you do not know which reference page applies to a command or application, you can use keywords to help identify the appropriate reference page with either the `man` command with the `-k` flag or the `apropos` command.

For example, if you wanted to find reference pages related to the GIF graphics format, you could enter the following:

```
$ man -k gif
gif2tiff (1) - create a .SM TIFF file from a GIF87 format image file
giftoppm (1) - convert a GIF file into a portable pixmap
ppmtogif (1) - convert a portable pixmap into a GIF file
$
```

The output shows any reference page with the string *gif* or *GIF* in either the title or the one-line description on the name line. The search is not case sensitive. The `apropos` command works the same as `man -k`, and the output is identical.

If you want to find the reference page for the command line that invokes the CDE Session Manager, you could enter the following:

```
$ apropos session
```

When you look at the output, you find the following line included:

```
dtsession (1)- the CDE Session Manager
```

You can then access the reference page for `dtsession(1)`.

1.3.4.2 Using the man Command

To view a reference page in a terminal emulator window, enter the `man` command followed by the name of the command or application you want to view. For example, to view the reference page for the CDE Session Manager, enter the following:

```
$ man dtsession
```

Refer to the `man(1)` reference page for more information. See Section 1.3.4.1 for information on finding command and application names by using keywords.

1.3.4.3 Using the Man Page Viewer

The Man Page Viewer provides a graphical user interface (GUI) that allows you to view or print a reference page.

To use the Man Page Viewer to view reference pages:

1. Click on the Application Manager.

2. Double click on Desktop_Apps.

3. View a reference page using one of the following methods:

   - Double click on the Man Page Viewer icon and enter the name of the reference page you want to view. If the reference page name resides in more than one section (such as the make(1) and make(1p) reference pages), you can use the format *command.section*. In the latter example, you would enter **make.1p**.

   - Drag and drop a reference page icon from the File Manager onto the Man Page Viewer. For example, if you are viewing the /usr/man/man1 directory with the File Manager, you can click on the icon for the file man.1.gz, drag it onto the Man Page Viewer icon, and release to view the man(1) reference page.

See Section 1.3.4.1 for information on finding command and application names by using keywords.

2

Getting Started with CDE

The Common Desktop Environment (CDE) presents a visual desktop that you can use to interact with the operating system. This chapter introduces the basic skills you need to perform tasks in the desktop environment. It then describes how to start, pause, and exit from a desktop session.

This chapter contains the following information:

- Navigating in the CDE Desktop
- Using Windows
- Starting a Session
- Pausing a Session
- Ending a Session

2.1 Navigating in the CDE Desktop

To navigate within the CDE desktop, you can use the mouse or keyboard. Both provide you with a method of accessing and interacting with the desktop and applications. The following sections describe the mouse and keyboard controls.

This section contains the following information:

- Using the Mouse
- Using the Keyboard

2.1.1 Using the Mouse

The mouse is a three-button control connected to your workstation. Moving the mouse on a smooth surface directs the movement of the pointer that appears on your desktop. The pointer is shaped like an arrow by default, but it changes shape depending on the action that is being performed. When you perform tasks using the mouse pointer, you specify what to act on by positioning the pointer over that object.

The three mouse buttons determine the type of action that is performed. By default, mouse button 1 is the left button, mouse button 2 is the center button, and mouse button 3 is the right button. By pressing and releasing the mouse buttons, actions occur.

Mouse button 1 is used typically to do the following:

- Start applications
- Select and manage objects in the desktop or in applications
- Cut and paste text
- Move objects on the desktop
- Change the size of objects on the desktop

Mouse button 2 can be used for copy and paste operations or to move objects. You can also use mouse button 2 to display the CDE Window List, as described in Section 3.2.2.2.

Mouse button 3 is used to display and manipulate pop-up menus as described in Section 2.2.2.2.

When you use the mouse to interact with the desktop and applications, you often are instructed to perform click, double click, or drag and drop operations.

- To click on an object with the mouse, point to the object, then press and release the specified mouse button.
- To double click on an object with the mouse, point to the object, and click the specified mouse button twice in quick succession.
- To drag and drop an object with the mouse, position the pointer on the object, then press and hold the specified mouse button while moving the pointer (and object) to a new position. Release the mouse button to drop the object in the new location.

See the *Common Desktop Environment: User's Guide* for more information on using the mouse.

2.1.2 Using the Keyboard

You can use the keyboard instead of the mouse to interact with the desktop. To use the keyboard as a navigator, you combine keys to complete actions. The following list highlights actions you can perform with the keyboard:

- Start applications
- Select objects on the desktop
- Size objects on the desktop
- Move objects on the desktop
- Manipulate the scroll bars in applications
- Display and select objects

Most of the tasks documented in this chapter can be performed using the mouse or keyboard, however only examples of using the mouse are provided.

For instructions on using the keyboard to complete tasks, see the *Common Desktop Environment: User's Guide*.

_____ **Note** _____

Some of the instructions in this document direct you to use a specific key or key combination, such as the Delete key or Alt/F11. If your keyboard does not include a specified key, refer to your keyboard's hardware documentation or see Chapter 8 for information about customizing your keyboard settings.

_____

2.2 Using Windows

When you start most applications, the application is displayed on your desktop in a framed rectangular window. An application may have more than one window.

The window itself is your work area or a place to interact with the application. The window frame has controls that you can use to manage the window. Window controls consist of a title bar, resize borders, buttons, and scroll bars. Some windows also have a Menu Bar.

A Menu Bar offers a choice of menus and menu items that you can use to further manipulate a window or application. Some of the menu items open dialog boxes. A dialog box is similar to a window and provides you with a means of interacting with the system or an application.

The following sections discuss window controls and provide information on managing windows, menus, and dialog boxes. To complete the actions, you must be familiar with mouse or keyboard techniques. The remaining sections in this chapter highlight the use of the mouse only.

This section contains the following information:

- Managing Window Controls
- Managing Multiple Windows, Menus, and Dialog Boxes

2.2.1 Managing Window Controls

Usually, a window frame consists of a title bar, resize borders, buttons, and scroll bars. Table 2–1 highlights these features.

Table 2–1: Window Controls

Window Control	Description
Title bar	Displays the name of the application and contains a Window menu button, Minimize button, and Maximize button.
	Click the Window menu button to display the window menu, then click on menu items to change the characteristics of the window. Double clicking on the Window menu button closes (or exits) the application.
	Click the Minimize button to turn a window into an icon. An icon is a graphical representation of an object. To restore an icon, double click on the icon.
	Click the Maximize button to display the window in its largest size. To restore the window to its original size, click on the Maximize button again.
Resize border and corners	Makes a window larger or smaller. Drag either the border or corner to size the window.
Scroll bars	Enable you to view information such as text or graphics that is not displayed in the current work area. You optionally can have horizontal or vertical scroll bars, or both. Slide the scroll bars by clicking on the scroll arrows or by positioning the pointer over the box in the scroll bar and dragging it to the location you want.

2.2.2 Managing Multiple Windows, Menus, and Dialog Boxes

When you run an application, a window is opened. Most often, you run several applications concurrently, thus you have more than one window opened on your desktop at the same time. Likewise, most application windows have menu bars, and certain applications open two windows or provide dialog boxes.

The following sections provide an overview of managing windows, menus, and dialog boxes.

2.2.2.1 Handling Multiple Windows

Using the window controls is one of the available methods for managing windows. You also can manage multiple windows using the mouse and keyboard. The following lists some actions you can perform using the mouse:

- Make a window active by pointing to any part of a window, then click mouse button 1. You can make a window active by pointing to the resize borders or title bar, then click mouse button 2. The title bar of the window changes to indicate that this window is ready for input.

- Move a window or window icon by pointing to the window's title bar or icon, then drag the window or icon to a new location.

- Move a partially hidden window or window icon to the foreground of your desktop by clicking on any portion of the window or icon.

- Copy text from a window and paste it in another window as follows:

  1. Move the pointer to the start of the text you want to copy.

  2. Drag the pointer to the end of the text and release the mouse button which highlights the text you want to move.

  3. Point to the location where you want to insert text.

  4. Click mouse button 2 to paste the text.

     If you decide you do not want to paste the selected text, keep the pointer in the window that has the selected text, point to an empty space, then release the mouse button.

See the *Common Desktop Environment: User's Guide* for more information.

2.2.2.2 Handling Menus

Menus present you with a list of items that you can use to interact with windows, applications, and the desktop. Often, a menu item specifies an action that is to be performed on an object you select. Sometimes a menu item is dimmed. This indicates that the item is currently unavailable, and is available only under certain conditions.

Table 2–2 lists the three types of menus.

Table 2–2: Menu Types

Menu Type	Description
Pull-down	Located on an application's menu bar, just below the title bar. A menu bar may contain one or more pull-down menus.
	To pull down a menu, click on the menu's name.
	To select a menu item, click on the menu's name, then click on the menu item.
Pop-up	Present in some applications, desktop objects, and on the workspace itself. In applications, these menus often duplicate the items in the pull-down menu. Providing them in a pop-up menu offers further flexibility when you are working in applications.
	To pop up a menu, click mouse button 3 in an application window, on a desktop object, or on the desktop.
Option	Appear in dialog boxes. Option menus appear as buttons, and while they can contain more than one item, only the active option is displayed.

Table 2–2: Menu Types (cont.)

Menu Type	Description
	To view all menu items, click on the Option menu (button).
	To select a menu item from the Option menu, click on the Option menu (button), then click on the item.

When you select a menu item followed by an arrow, it opens a submenu. Select an item in a submenu by clicking on the menu item. When you select a menu item that is followed by an ellipsis (…), it opens a dialog box for additional information to qualify your selection.

See the *Common Desktop Environment: User's Guide* for more information.

2.2.2.3 Handling Dialog Boxes

Some applications have dialog boxes. Dialog boxes typically require that you input additional information before an action is performed. There are several types of controls that appear in dialog boxes. While some dialog boxes may use several controls, others may use only one.

Table 2–3 lists controls you may see in dialog boxes.

Table 2–3: Dialog Box Controls

Control	Purpose
Text entry box	Provides fields for entering requested information. An insertion cursor shows where to enter text. If the cursor is blinking in a field, the text entry box is ready for input. If it is not blinking, click on the text entry box to activate the box. You can delete characters in these fields by using the Delete key.
Radio button	Provides a list of available options. Click on a Radio button to view options.
Check button	Controls on and off settings. Click on a Check button to turn settings on or off.
Sliders and scales	Selects numeric values. Drag the slider or scale to select a value.
List box	Provides a menu of options. If a list box has numerous options, a scroll bar appears. You can select an option by clicking on it.
Push button	Used to respond to queries, to indicate how an application is to handle information you have input, or to offer a set of options. To perform a push-button operation, click on a push button.

For more information on dialog boxes, refer to the *Common Desktop Environment: User's Guide*.

2.3 Starting a Session

The Login Manager displays a login screen. The login screen has fields where you must enter your user name and password. Push buttons at the bottom of the screen are used to manage your login session:

This section contains the following information:

- Selecting a Language
- Selecting a Session
- Resetting the Login Screen Option

Button	Description
OK	Indicates that the information you entered is correct.
Start Over	Resets the login screen if you enter incorrect information or lose your place.
Options	Displays the Options menu. The Options menu is used to select the type of session you want to start and to specify a language.
Help	Provides details on using the login screen.

To start a session:

1. Type your user name and press the Return key or click OK.
2. Select the options you want, if any, from the Options menu.
3. Type your password and press the Return key or click OK.

2.3.1 Selecting a Language

The default language for your system is set by your system administrator; however, you can access other languages that are installed on your system by using the Options menu as follows:

1. Click on the Options menu.
2. Click on the Language menu item and select a language group.
3. Select a language.

Choosing a language from the Options menu sets the environment variable LANG. The default language is restored at the end of the session.

2.3.2 Selecting a Session

Selecting a session determines how your work environment is set up during your login session. You have the option of starting a Regular Desktop Session, Failsafe Session, or Command Line Session.

Select a session from the Options menu as follows:

1. Click on the Options menu.

2. Click on the Session menu item.

3. Select the type of session you want to start.

A Regular Desktop Session starts the CDE Session Manager. When you start a CDE desktop session, a console window and a Front Panel are displayed. The console displays all system messages received during a session. The Front Panel provides you access to applications and workspaces. See Chapter 3 for information on the Front Panel.

A Failsafe Session opens a terminal window and starts the Window Manager. Logging into a Failsafe Session is useful when you want to execute commands before starting a desktop session. For example, you may have a problem that you want to fix before beginning a session.

The Command-line Login Session suspends the desktop and provides a way for you to work in the base operating system environment, an environment without windows. Because the Login Manager is not active and the X server is not running, a login screen is not displayed.

2.3.3 Resetting the Login Screen Option

If you decide that the options you selected are not the ones you want, you can reset the login screen. Resetting the login screen returns all options selected back to their default values.

2.4 Pausing a Session

If you plan to be away from your current session for a time, you can pause your session indefinitely. Pausing your session locks your workstation, but applications that were started continue to run. Each environment that you work in offers a different method of pausing a session:

*   To pause a Regular Desktop Session, click on the Lock control on the Front Panel.

*   To pause a Failsafe Session, type the `dxpause` command at the command line prompt.

When you pause your session, a blank screen is placed over the workstation screen and a dialog box is displayed stating that the display is locked.

You have the option of displaying other screen savers by using the Style Manager. Enter your password in the text entry box to resume your session.

2.5 Ending a Session

Each environment that you work in offers a different method of ending a session:

- To end a Regular Desktop Session, click on the Exit button on the Front Panel. A dialog box appears that asks you to confirm the end of session. You can choose to continue with the log out process, cancel the logout process, or select help.

  All settings from this session are saved and restored during your next session, including all applications that support save and restore. That is, all applications that are opened when you exit a session, which support save and restore, are opened when you log in again. For some applications, all the work is restored, while for others, only the main screen of the application is restored.

  If you changed your startup options using the Style Manager Startup control specifying other options, the state of your next session depends on your selection.

- To end a Failsafe Session, type the `exit` command at the command line prompt in a terminal emulator window.

- To end a Command Line Login Session, type the `exit` command at the command line prompt.

3

Using the Front Panel

The Front Panel is the horizontal display located at the bottom of your workspace. It displays the controls (or tools) that you use to start applications, manage tasks in a desktop session, or change workspaces. Each control is represented by an icon that indicates its purpose.

This chapter provides descriptions of the controls available by default on the Front Panel and discusses how to use subpanels and workspaces.

This chapter contains the following information:

- Touring the Front Panel
- Using Front Panel Menus and Workspaces

3.1 Touring the Front Panel

By default, the Front Panel provides several controls that you can use to manage your desktop sessions. Some controls, such as the Clock, are indicators only. Indicators do not perform actions. Others, such as the Mail control, perform actions. That is, you can use mail to send and receive messages.

Figure 3–1 shows the default CDE Front Panel.

Figure 3–1: CDE Front Panel

The available Front Panel controls are described in Table 3–1. For detailed information on the use of each tool, see the *Common Desktop Environment: User's Guide*.

Table 3–1: Front Panel Controls

| Application	Use of Application
Clock	Displays the time of day in analog format. Clicking on this control does not perform an action.

Table 3–1: Front Panel Controls (cont.)

Application	Use of Application
Calendar	Displays the current month and day. Use this application to schedule appointments and To Do Items, set reminders, browse other calendars, and schedule group appointments. Dropping an appointment file on the Calendar control adds the appointment to your calendar database.
File Manager	Provides a view of directories (folders) and files. Dropping a directory on the File Manager control opens a view of that directory.
Text Editor	Opens a Text Editor window where you can create letters or notes. Dropping a file on the Text Editor icon opens that file in a Text Editor window.
Mailer	Starts the Mailer application. Use this application to send, receive, save, and forward mail messages. Dropping a file on this control displays a new message window, with the file dropped in as an attachment.
Lock	Pauses a session indefinitely. Pausing a session locks the workstation display, but applications continue to run. To resume a session, enter your password.
Workspace Switches	Changes workspaces. Use this switch to move to different work areas. There are four workspaces by default.
Busy Light	Indicates that an action is being performed. For example, when you start an application, the light blinks. Once the call to the application is complete, the busy light stops blinking. Clicking on this icon does not produce an action.
Exit	Starts the logout process for a session.
Printer	Displays the status of the default printer. Dropping a file on the Printer icon prints that file on the default printer.
Style Manager	Opens the Style Manager application. Use this application to change the characteristics of your environment.
Application Manager	Starts the Application Manager, which is a container for applications and other tools available on your system.
SysMan Station	Starts the SysMan Station, a graphical system map that lets you visually select system components and run SysMan applications that apply to those components. Available only if you are logged in as `root`. Figure 3–2 shows a portion of the CDE Front Panel that includes the SysMan Station Control.

Table 3–1: Front Panel Controls (cont.)

Application	Use of Application
Help Manager	Displays the top level of available online help information. Dropping a master help volume file (`*.sdl`) onto the Help Manager opens a help viewer window and displays the contents of that volume.
Trash Can	Opens the Trash Can application. Use this application to delete files. Dropping a file on the Trash Can control moves the file to a discard directory.

Figure 3–2 shows the SysMan Station control on the CDE Front Panel. This is available only if you are logged in as `root`.

Figure 3–2: SysMan Station Control on CDE Front Panel
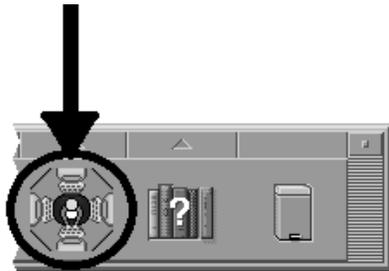
3.2 Using Front Panel Menus and Workspaces

Some Front Panel controls have arrows above them, indicating that a subpanel is available. A subpanel is a menu that provides access to other controls, which you can use to manage your desktop session. Section 3.2.1 provides more information and describes the default subpanel menus.

All controls on the Front Panel have a pop-up menu that you access by pointing to the control and clicking mouse button 3. Usually, pop-up menus contain a control that you can use to add or remove a subpanel, and a control to view an online help volume. Controls, that perform actions, such as the Text Editor, also provide a control on the pop-up menu that you can use to start that action from the menu. Refer to Table 2–2 for general information on using menus.

You can use the Workspace Menu to manage workspaces. The workspace menu is a pop-up menu used to manage windows, the Front Panel, and more. Section 3.2.2.1 tells you more about the Workspace menu.

The CDE Window List lets you quickly locate an application window among many open windows in multiple workspaces. Section 3.2.2.2 explains how to use the CDE Window List.

This section contains the following information:

- Using Subpanel Menus
- Using Workspaces

3.2.1 Using Subpanel Menus

Subpanel menus provide you further access to other tools and controls for the Front Panel. Each subpanel on the Front Panel also provides an Install Icon control to add other tools to the subpanel.

By default, there are three subpanels available from the Front Panel. They are the Personal Applications, Personal Printer, and Help Manager subpanels. To open a subpanel, point to a control icon that has an arrow above it, then click on mouse button 1. If you are logged in as root, you also may have access to the SysMan Applications Subpanel located above the SysMan Station control on the Front Panel.

The following sections discuss the default subpanels. For more information on using and customizing the subpanels, see the *Common Desktop Environment: User's Guide*.

3.2.1.1 Personal Applications Subpanel

The Personal Applications subpanel contains applications that you use frequently. It is located above the Text Editor control on the Front Panel. Figure 3–3 shows the Personal Applications subpanel.

Figure 3–3: CDE Personal Applications Subpanel
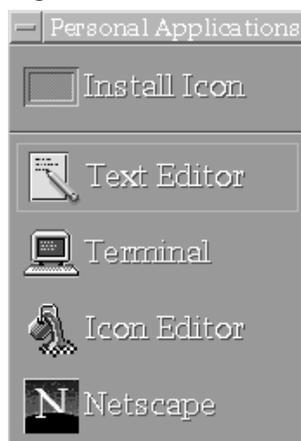
The menu items available on this subpanel include:

- Install Icon

Use this control to add items to the Personal Applications subpanel. To add an item, drag an item from the File Manager or Application Manager onto the Install Icon control, then release. The item is then added to the subpanel.

- Text Editor

  Use this control to create text files such as notes and messages. This control is a duplicate of the Text Editor control available on the Front Panel.

- Terminal

  Use this control to start the `dtterm` terminal emulator, which emulates the portion of a VT220 terminal that is consistent with ANSI and ISO standards. You can use the terminal emulator to enter UNIX commands, copy and paste text, or communicate with remote systems.

  _____ **Note** _____

  In certain locales, the DECwindows Motif terminal emulator `dxterm` is available on this subpanel instead of `dtterm`. Refer to Chapter 9 for more information.

  _____

- Icon Editor

  Use this control to create or modify icons and backdrop images in bitmap or pixmap format.

- Netscape

  Use this control to launch the Netscape Navigator application.

3.2.1.2 Personal Printers Subpanel

The Personal Printers subpanel lists default printers. It is located above the Printer control on the Front Panel. Figure 3–4 shows the Personal Printers subpanel.

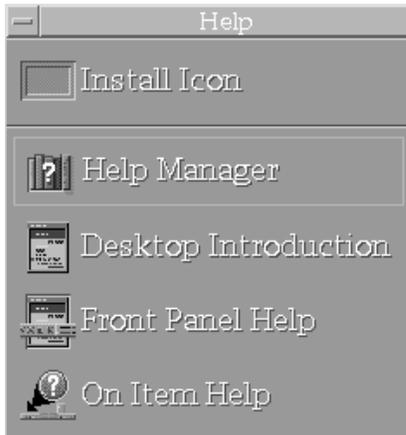**Figure 3–4: CDE Personal Printers Subpanel**

The menu items include:

• Install Icon

Use this control to add items to the Personal Printers subpanel. To add an item, drag an item from the File Manager or Application Manager onto the Install Icon control, then release. The item is then added to the subpanel.

• Default

Use this control to display the status of print jobs on the default printer. If you drag and drop a file on this menu item, the job is printed on the default printer or a printer of your choice. This control is the same as the Default Printer control on the Front Panel.

• Print Manager

Use this control to obtain a view of available printers on the system.

3.2.1.3 Help Subpanel

The Help Manager subpanel lists other available help volumes. It is located above the Help Manager control on the Front Panel. Figure 3–5 shows the Help Manager subpanel.

Figure 3–5: CDE Help Manager Subpanel

The menu items include:

- Install Icon

  Use this control to add items to the Help Manager subpanel. To add an item, drag an item from the File Manager or Application Manager onto the Install Icon control, then release. The item is then added to the subpanel.

- Help Manager

  Use this control to display the top level of help information. This control is the same as the Help Manager control on the Front Panel.

- Desktop Introduction

  Use this control to display the introductory help volume for the desktop.

- Front Panel Help

  Use this control to display help for the Front Panel.

- On Item Help

  Use this control to obtain on-item help for controls in the Front Panel. To obtain on-item help, click on the On Item Help control. The pointer turns into a question mark (?). Position this question mark over an object on the Front Panel, then release. Help is then displayed for that object.

3.2.1.4 SysMan Applications Subpanel

The SysMan Applications subpanel lists System Management Applications. It is located above the SysMan Station control on the Front Panel. Both the SysMan Applications subpanel and the SysMan Station control on the Front Panel are available only if you are logged in as root.

Figure 3–6 shows the SysMan Applications subpanel.

Figure 3–6: SysMan Applications Subpanel

- Install Icon

  Use this control to add items to the SysMan Applications subpanel. To add an item, drag an item from the File Manager or Application Manager onto the Install Icon control, then release. The item is then added to the subpanel.

- SysMan Station

  Use this control to start the SysMan Station, a graphical system map that lets you visually select system components and run SysMan applications that apply to those components. This is available only if you are logged in as `root`.

- Daily Administration

  Use this control to access applications used for frequently performed system administration tasks.

- Configuration

Use this control to access applications used to configure a system after installation. Ordinarily, you will not need to use these applications once your system is set up.

- Monitoring/Tuning

  Use this control to access applications used to monitor and tune your system after it is up and running.

- Software Management

  Use this control to access applications used to install and manage additional software on your system.

- Storage Management

  Use this control to access applications used to monitor and manage file sytems.

- Tools

  Use this control to access applications used to display a variety of system statistics with the Display Window application. You can repeatedly display the same statistics to monitor progress or trends.

- SysMan Menu

  Use this control to access the SysMan Menu, a hierarchical menu of system management tasks that can be used in several different user environments.

3.2.2 Using Workspaces

Workspaces offer you a method of organizing your work into categories. Use the workspace switch on the Front Panel to move between workspaces. By default, the workspace switch has four buttons, labeled One, Two, Three, and Four. To move between workspaces, click on one of the workspace buttons. Figure 3–7 shows the workspace switch.

Figure 3–7: CDE Front Panel Workspace Switch

Each workspace offers you a view of the Front Panel. Thus, you can easily locate applications and tailor each workspace to suit your needs. Often it is useful to rename a workspace. To rename a workspace:

1. Click on the workspace button that you want to change. The workspace selected is displayed.

2. Click on the workspace button again. This changes the button to an input text field.

3. Enter the new name in the text field and then press the Return key.

You also can use the workspace button pop-up menu to rename, add, or remove workspaces. To use the workspace button pop-up menu:

1. Point to the workspace button that you want to change and press mouse button 3.

2. Choose the option you want from the pop-up menu.

If you add a workspace, it is labeled New. You can rename the workspace using either of the previous methods.

If you remove a workspace that contains windows, the windows are moved to the next workspace. If it is the last workspace and it has windows, removing the workspace causes all windows to be moved to the first workspace (labeled one by default).

3.2.2.1 Using the Workspace Menu

CDE provides a Workspace menu. The Workspace menu is a pop-up menu that contains items for managing each of your workspaces. To open the Workspace menu, point to any blank area on your screen and click and hold mouse button 3. Figure 3–8 shows the CDE Workspace Menu.

Figure 3–8: CDE Workspace Menu

Use the Workspace menu to:

- Raise or lower windows relative to each other

- Refresh the display

- Minimize or restore the Front Panel

- Consolidate scattered icons in the Workspace

- Restart the Window Manager (especially if you have customized configuration files)

- Log out of the session

You can customize the Workspace menu by adding or removing items as you choose. See the *Common Desktop Environment: User's Guide* for more information.

3.2.2.2 Using the CDE Window List

CDE provides a Window List to help locate application windows in your Workspaces. Use either of these methods to open the CDE Window List:

- Point to any blank area on your workspace backdrop and click mouse button 2.

- Press the Alt/F11 key combination.

Figure 3–9 shows the CDE Window List.

Figure 3–9: CDE Window List

The CDE Window List lets you quickly locate an application window among many open windows in multiple workspaces. Use the CDE Window List to:

- Find an application window
- Show the icon image, location, and state of an application window
- Go directly to an application window from the CDE Window List
- Sort the list of application windows by title, class, workspace, or time created (most recently used at the bottom of the list)
- Search for application windows by title, class, or workspace

See the online help volume for detailed information on using the CDE Window List. To access the online help volume, start the CDE Window List and click on the Help button.

4

Managing the Desktop and Applications

This chapter provides information on managing your desktop and applications. The CDE desktop provides a File Manager, Style Manager, and Application Manager. Each provides you with a method of managing and customizing your desktop environment.

- Use the icon-based File Manager to manage directories (folders) and files on your system, see Section 4.1. You can create new directories and files, locate directories and files, and remove directories and files. Because it is integrated with the desktop, you can drag objects from the File Manager to use in other applications.

- Use the Application Manager to access other tools that are available on your system, see Section 4.2. From the Application Manager, you can start applications or move applications to the Front Panel.

- Use the Style Manager to customize the appearance of your desktop, see Section 4.3. You can change colors, background patterns, window attributes, mouse and keyboard attributes, and choose how your session begins and ends.
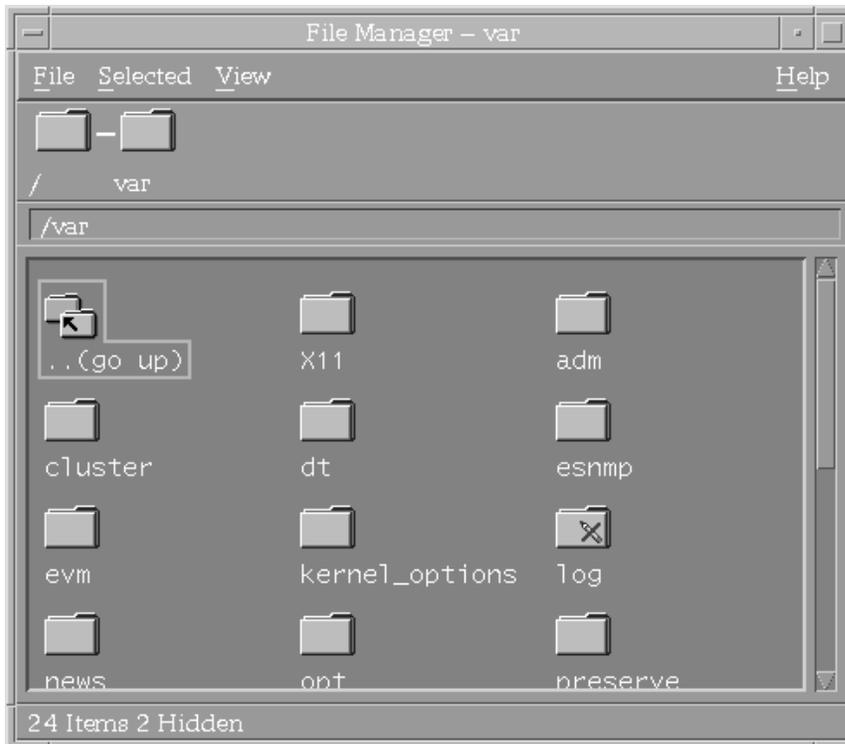
The following sections discuss in more detail how to use the File Manager, Application Manager, and Style Manager.

4.1 Managing Files and Folders

The File Manager is an application that you can use to manage directories (folders) and files on your system. A directory can contain subdirectories, files, and applications, and each is represented by an icon in the File Manager. The structure of directories under the File Manager is the same as the structure in a nongraphical environment. In fact, you can display files by name only.

When the File Manager is started, a window is opened that displays the current directory path, menus, a viewing area, and the directory contents, represented by icons in the viewing area. A status line specifies the number of objects in the directory you are viewing. Figure 4–1 shows the CDE File Manager.

Figure 4–1: CDE File Manager

By using the File Manager menus, you can change, move and rename directories and files. You also can perform actions on certain files or specify how they are viewed. The following sections discuss the options available in the File Manager menus. For more information on other methods of managing files, see the *Common Desktop Environment: User's Guide*.

This section contains the following information:

- Using the File Manager File Menu
- Using the File Manager Selected Menu
- Using the File Manager View Menu

4.1.1 Using the File Manager File Menu

Use the File menu to rename directories or files and to move directories and files within the File Manager. Table 4–1 shows the selections in the File Manager's File menu.

Table 4–1: File Manager File Menu

Menu Item	Purpose
New Folder...	Opens a dialog box that you can use to create new directories. If you do not specify a pathname, the directory is created in the current directory.
New File...	Opens a dialog box that you can use to create new files. If you do not specify a path, the file is created in the current directory.
Go Home	Changes to your home directory. The viewing area displays all files and directories in your home directory.
Go Up	Changes to the Parent Folder. That is, the view changes to the directory above your current display.
Go To...	Opens a dialog box where you can specify the directory you want to view.
Find...	Opens a dialog box where you can specify a directory or file that you want to locate. Wildcards are permitted in directory and file specifications. If you do not know the name of the file, you can specify a search by file content. Files that are located are listed by name. You have the option of placing the file on the workspace or viewing the contents of the file in the File Manager.
Open Terminal	Opens a terminal emulator window. You can use this window to create new files or perform other tasks related to file management.
Close	Exits from the File Manager.

4.1.2 Using the File Manager Selected Menu

Use the Selected menu to perform actions on specified directories or files. You first must select a directory or file before initiating an action. To select a directory or file, click on your selection in the File Manager window. Table 4–2 shows the selections in the File Manager's Selected menu.

Table 4–2: File Manager Selected Menu

Menu Item	Purpose
Move To...	Opens a dialog box that you can use to move a directory or file to a new destination.
Copy To...	Opens a dialog box that you can use to copy a directory or file to a new destination.
Copy as Link...	Opens a dialog box that you can use to copy a directory or file to a new destination, which is to be used as a link.
Put in Workspace	Places the selected directory or file in the workspace.
Put in Trash	Marks the selected directory or file for delete.

Table 4–2: File Manager Selected Menu (cont.)

Menu Item	Purpose
Rename...	Opens a dialog box that you can use to specify a new name for the directory or file.
Change Permissions...	Opens a dialog box that you can use to change the permissions on the selected directory or file.
Select All	Marks all directories and files in the current directory for an action that you specify.
Deselect All	Causes all directories and files marked for an action to be unmarked.
Open in Place	Displays the contents of the directory or file in the current File Manager window.
Open New View	Displays the contents of the directory or file in a new File Manager window.
Print	Submits to the print queue the selected directory or file.

4.1.3 Using the File Manager View Menu

Use the View menu to manipulate how directories and files are displayed. Table 4–3 shows the selections in the File Manager View Menu.

Table 4–3: File Manager View Menu

| Menu Item	Purpose
Open New View	Opens a new File Manager window.
Set View Options...	Opens a dialog box that you can use to specify the format of headers, placement of files, and how they are viewed.
Save as Default Options...	Opens a dialog box that you can use to save the current settings for the File Manager.
Show Hidden Objects	Displays all hidden directories and files in the current directory.
Set Filter Options...	Displays the Set Filters Options dialog box, which you use to specify files you want hidden based on data type or name.
Clean Up	Sorts and arranges objects in the current directory into columns and rows.
Update	Refreshes the File Manager display adding any new directories or files that have been created since the application was started.

4.2 Managing Applications

The Application Manager is a container for applications and other tools on your system. Applications are placed under the Application Manager when your system is installed, the system administrator adds them, or you can add them to this area. Figure 4–2 shows the CDE Application Manager.

This section contains the following information:

- Accessing Built-in Application Groups
- Using the Application Manager Menus
- Running an Application from the Application Manager

Figure 4–2: CDE Application Manager
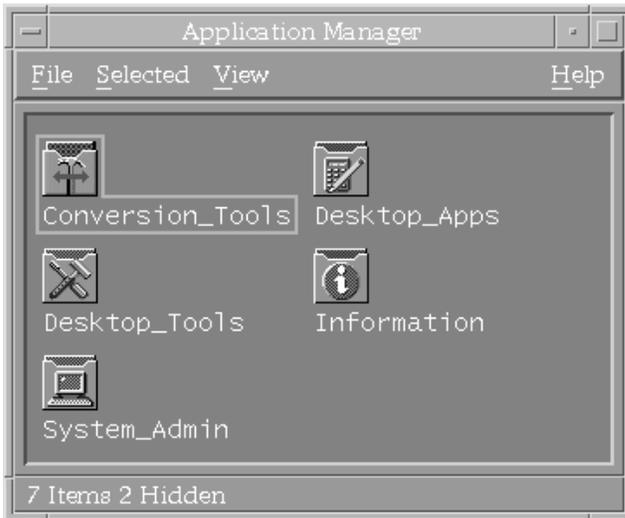
4.2.1 Accessing Built-in Application Groups

When you start the Application Manager, a set of application groups is displayed in the main window. Each application group is a directory that can contain one or more controls or subdirectories.

The default application groups are as follows:

- Conversion_Tools

  Contains applications to migrate the DECwindows Calendar to the CDE Calendar, and to convert mail folders from dxmail format to CDE's dtmail format. See Section 10.1 for information on converting your mail folders.

- Desktop_Apps

Contains the desktop applications such as the File Manager, Style Manager, and Calendar applications.

- Desktop_Tools

  Contains commonly used tools for desktop administration such as the `vi` text editor, Check Spelling, and Reload Application.

- Information

  Contains icons that represent frequently used help volumes.

- System_Admin

  Contains the tools used by a system administrator to manage the system.

4.2.2 Using the Application Manager Menus

The Application Manager is actually a File Manager view of a special directory on the system. Unlike the File Manager, the directories and controls in this view group applications in related groups, and all files contained in these groups are data files, read me files, templates, and actions. The menus for both the Application Manager and File Manager are closely related. For information on using the Application Manager menus, see the descriptions of the File Manager menus in Section 4.1.

4.2.3 Running an Application from the Application Manager

To run an application from the Application Manager, double click on the application group's icon to display the contents, then double click on the application that you want to start.

4.3 Customizing Your Environment

The Style Manager is an application that you can use to customize your environment. When the Style Manager is started, a window is opened that displays several controls. Each control is represented by an icon, and collectively these are used to customize screen appearance, system characteristics, and startup and logout behavior. Each control opens a dialog box that offers a variety of options. Figure 4–3 shows the CDE Style Manager.

Figure 4–3: CDE Style Manager

The *Common Desktop Environment: User's Guide* provides detailed
instructions on using the Style Manager. The following sections discuss
these options.

This section contains the following information:

- Changing Screen Appearance

- Setting System Characteristics

- Specifying Startup and Logout Behavior

4.3.1 Changing Screen Appearance

The Style Manager provides three controls that you can use to change the
appearance of your workspace. These include the Color, Font, and Backdrop
controls.

Use the Color control to set the colors displayed by windows and applications.
A default list of color palettes is provided, and each can be previewed before
being applied to the desktop.

By using the color control, you can do the following:

- Select a palette

- Modify an existing palette

- Choose a color from the workspace

- Create a custom palette

- Delete a palette

- Change the number of colors used on the desktop

Use the Font control to change the size of fonts used by your applications and
windows. The fonts available to you are determined by your display type.

By using this control, you can preview all selected fonts before applying
them to the desktop.

Use the Backdrop control to change the background pattern of your
workspace. This control provides a list of several patterns that you can

choose from and each can be previewed in a viewing area before you apply them to the desktop.

If you prefer to view the root window, select the No Backdrop option.

4.3.2 Setting System Characteristics

The Style Manager provides five controls that you can use to set system characteristics. These include the Keyboard, Mouse, Beep, Screen, and Window controls.

Use the Keyboard control to set the key click volume and character repeat capability. The key click volume determines how loud key clicks are as you type. If you prefer not to hear key clicks, the volume can be turned off. The character repeat capability determines whether or not a key repeats its action for as long as it is pressed.

The Mouse control is used to select the following:

- Order of button settings

  Sets the behavior of mouse buttons 1 and 3. By default, the mouse is set up for persons who use their right hand. The actions of mouse buttons 1 and 3 can be reversed for persons who are left handed.

- Double-click speed

  Sets the maximum interval that can pass between the first and second click of the mouse to signal a double-click action.

- Pointer acceleration

  Sets the speed with which the pointer moves across the display.

- Pointer threshold

  Sets the distance in pixels that the pointer moves at a slow speed before accelerating.

The Beep control is used to set how audible a beep is, the pitch of the beep, and the duration. The volume can be turned off, which cancels the beep.

_____ **Note** _____

Not all keyboards let you change the key click volume or the beep (bell) volume, tone, or duration.

_____

The Screen control specifies whether or not a screen saver is placed on the screen after a certain time interval. You can choose to have a blank screen or you can select from the list of screen savers available. By using the Screen control, you also can specify whether the screen is locked in these time intervals.

The Window control alters characteristics such as how the window acquires focus, if a window raises when it receives focus, and whether or not to use icon boxes.

4.3.3 Specifying Startup and Logout Behavior

The Style Manager provides a Startup control that you can use to:

- Specify whether you want to resume your current session or start a home session

- Specify whether or not a logout confirmation is displayed

The session in which you are working is referred to as your current session. By default, the desktop saves your current session when you log out. This session is resumed when you log into your next session. By using the Startup control, you have a choice of returning to the current session or starting a home session. A home session displays the same settings each time you log into the system. That is, a home session remains the same regardless of what you do in the current session.

A logout confirmation queries you before ending a session. You optionally can specify whether or not you want a confirmation message to appear. If you set the logout confirmation to Off, you are not given the option of canceling the logout process. By default, you are prompted to end a session.

5

Using Integrated Applications

Several desktop applications and a suite of system management (**SysMan**) applications are integrated into the Common Desktop Environment (CDE). Most of these applications can be started from the Application Manager.

This chapter provides the following information:

- How to start applications

- How to run applications across your network

- An introduction to desktop applications

- An overview of system management applications

- How to use the SysMan Menu

- How to access the SysMan Station

5.1 Starting Applications

You can start many desktop and SysMan applications from either the Application Manager or from the command line. Use one of the following methods to start applications:

- To start an integrated application from the Application Manager:

    1. Click the Application Manager icon on the Front Panel.

    2. Double click the application group you want to access.

    3. Double click on the application that you want to start.

- To start an application from the command line, enter the command name. If the command location is not included in your `$PATH` variable, you must include the command's full pathname. For example, to start the Image Viewer application from the command line, you could type the following:

    $ **/usr/bin/X11/dximageview &**

    The ampersand (`&`) at the end of the command line runs the application in the background, letting you use the same terminal window to perform other tasks.

Section 1.3.4.1 tells you how to find reference pages for commands and applications. The reference page tells you what command invokes the application, explains options, and provides the location of the command.

Other system management applications can be started from the SysMan Menu or the SysMan Station.

- Section 5.5 explains how to use the SysMan Menu to get system management data and run selected system administration tasks.

- Section 5.6 introduces the SysMan Station, a tool to help your system administrator manage either single systems and clusters.

5.2 Running Applications Across the Network

To run an application that is not installed on your system, you need network access and an account on a remote system where that application is installed. You can run the remote application and display the output on your system as though the application was running locally. Before you can do this, you must do the following:

- Authorize remote access to your system

- Enable your display on the remote system
You can use the Host Manager to display remotely run applications. See the Host Manager online help volume for more information.

5.2.1 Authorizing Access to your System

To display remotely run applications on your local system, use the xhost command to provide the remote host access to your display before you log into the remote system. For example, if the host name of the remote machine is trenton, enter the following on your system:

$ **/usr/bin/X11/xhost +trenton**

The remote system named trenton is added to the list of hosts that have access to your machine. See the xhost(1X) reference page for more information.

5.2.2 Enabling the Display

Once you have authorized the remote system access to your local system, log into the remote system and specify where you want to display the remotely run application.

The command you enter to enable the display varies depending on the operating system of the remote host you are using, and the shell you are using.

Use one of the following methods to enable the display:

- If the remote host uses the C shell, enter the following at the system prompt:

  ```
  setenv DISPLAY local_sysname:0
  ```

- If the remote host uses the Bourne or Korn shell, enter the following at the system prompt:

  ```
  DISPLAY=local_sysname:0
  export DISPLAY
  ```

- If the remote host is an OpenVMS system and the OpenVMS network host is running DECnet, enter the following at the system prompt:

  ```
  set display/create/node=local_sysname
  ```

  If the OpenVMS network host is running Transmission Control Protocol/Internet Protocol (TCP/IP), you can use the TCP/IP network transport as follows:

  ```
  set display/create/transport=tcpip/node=local_sysname
  ```

  If the name of your system appears in lowercase in the OpenVMS TCP/IP database file, you must enclose the name of your local system in double quotes (`"local_sysname"`). If it does not, do not use quotes. Use the `hostname` command to see how your system name is entered into the database file.

In the previous examples, *local_sysname* is the host name of the machine where you want the remote application to display.

Once you have authorized access to your system and enabled the display, you can run the application from the remote machine by using the command name as described in Section 5.1. The application then displays on the system you specified.

5.3 Using Desktop Applications

Several desktop applications have been integrated into CDE. Your primary source of information about any of these applications is each application's online help volume. Table 5–1 highlights some of these applications.

_____ **Note** _____

The desktop applications available on your system may depend upon the software subsets that you have loaded. This section does not list all desktop applications available.

_____

Table 5–1 shows some of the desktop applications that are integrated into CDE.

Table 5–1: Desktop Applications

Application	Use of Application
DECterm	DECterm provides a video terminal emulator.
Differences	Provides a graphical display of differences between two files.
Image Viewer	Displays the contents of documents that are in specific formats such as GIF, JPEG, and TIFF.
Keyboard Options	Offers a choice of options that you can use to customize your keyboard.
Keycaps	Shows a graphical display of a keyboard with keycaps drawn according to the current server keymap and can be used to start the Keymaps application.
Input Method Options	Changes how keystrokes are interpreted by the operating system.

_____ **Note** _____

The Input Method Options application is located in `/usr/dt/bin` and is not included in the Application Manager under Desktop_Apps. To start this application, see Section 5.3.4.

Some of the applications described here are advanced tools that address special needs, and are not intended for everyday use.

5.3.1 Using DECterm

The DECterm application is a video terminal emulator. When DECterm is started, a window appears on your screen. Enter commands in this window as you would on any terminal attached to your system or use it for remote communications to other systems. To start DECterm, enter the following on your system:

```
$ /usr/bin/X11/dxterm
```

Figure 5–1 shows the DECterm application.

Figure 5–1: DECterm Application

5.3.1.1 Summary of Other DECterm Features

DECterm also lets you:

- Change the appearance of the DECterm window, for example, font size and window title

- Change the DECterm display features such as the type of cursor and the use of horizontal and vertical scroll bars

- Change DECterm general features like terminal type

- Compose characters

- Choose a National Replacement Character Set (NRCS)

- Change keyboard, graphic, and printer options

For more information on using the DECterm application, see the dxterm(1X)
reference page and the online help volume. To access the online help volume,
start DECterm, then select Help.

5.3.2 Using Visual Differences

Visual Differences is a graphical interface to the diff command. By using
Visual Differences, you can compare two ASCII text files line by line, and
then browse through a graphical display of these differences. Figure 5–2
shows the Visual Differences application.

Figure 5–2: Visual Differences Application
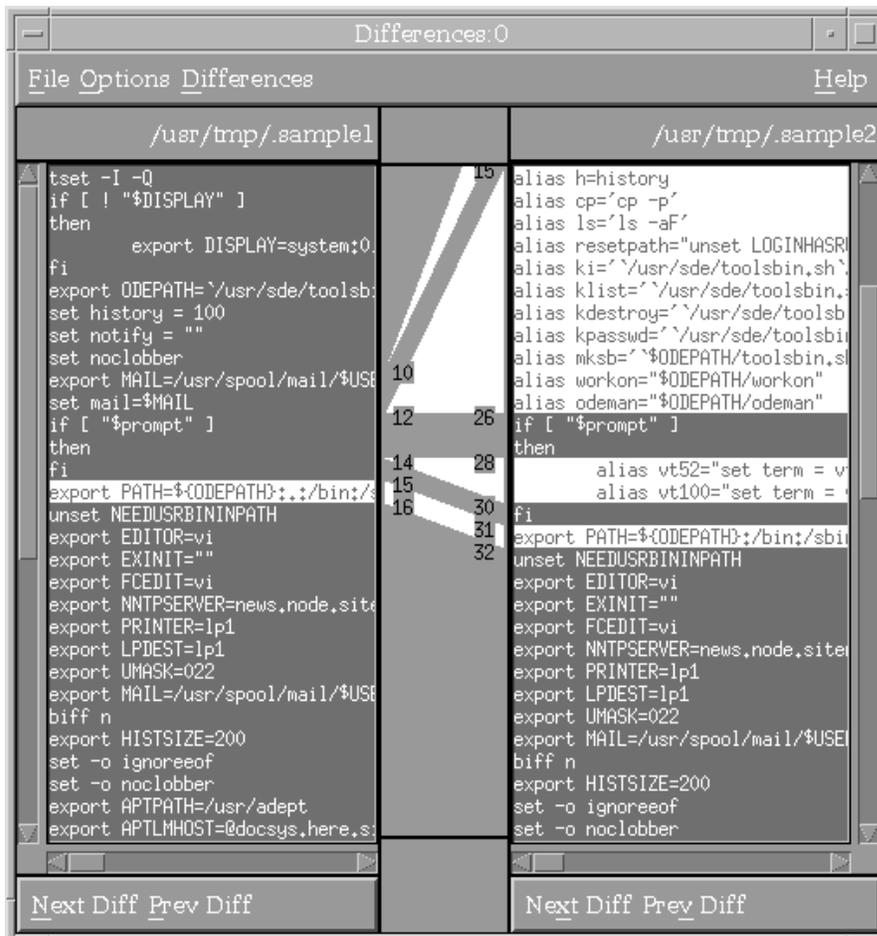
For information on using the Differences application, see the dxdiff(1X)
reference page and the online help volume. To access the online help volume,
start Differences, then select Help.

5.3.3 Using Image Viewer

The Image Viewer application can be used to view graphic files. The supported image types are GIF, JPEG, TIFF, and XPM. In the Image Viewer window, you can display images and manipulate the image views using either the toolbar icons or menus. Figure 5–3 shows the Image Viewer application.

Figure 5–3: Image Viewer Application

For information on using the Image Viewer application, see the `dximageview(1X)` reference page and the online help volume. To access the online help volume, start Image Viewer, then select Help.

5.3.4 Using Input Method Options

The Input Method Options application is a tool for advanced users. You can use this application to specify an input method and to change how keystroke characters are interpreted by the system. For example, Asian (multibyte) characters such as Japanese Kanji or Chinese Hanzi characters can be entered from the keyboard by using this application. To start this application, follow these steps:

1. Open a terminal emulator window.

2. Enter the following:

   ```
   % /usr/dt/bin/dtimsstart
   ```

Figure 5–4 shows the Input Method Options application.

Figure 5–4: Input Method Options Application
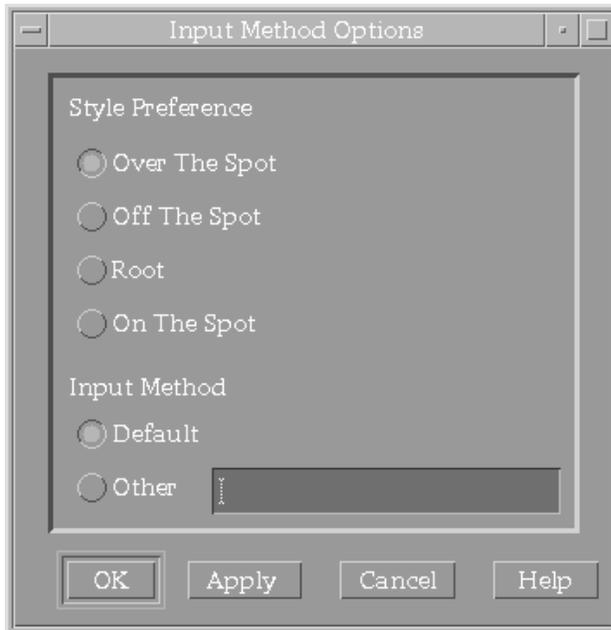
For information on using the Input Method Options application, see the dtimsstart(1) reference page and the online help volume. To access the online help volume, start Input Method Options, then select Help.

5.3.5 Using Keyboard Options

The Keyboard Options application is a tool for advanced users. Use this tool to customize keyboard settings. This tool is normally used after the initial setup of your system only to set options that cannot be specified during the installation. Figure 5–5 shows the Keyboard Options application.

Figure 5–5: Keyboard Options Application
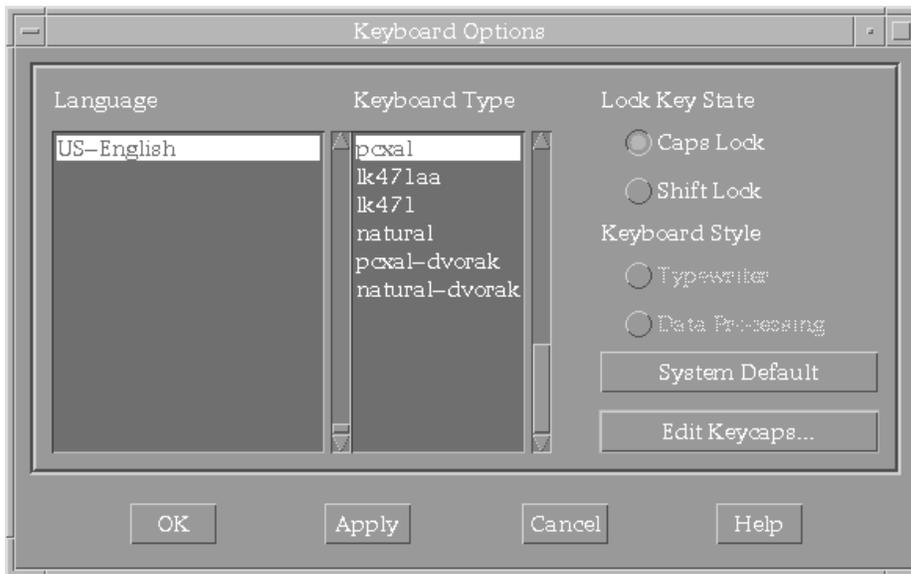
For information on using the Keyboard Options application, see the
dxkeyboard(1) and the online help volume. To access the online help
volume, start Keyboard Options, then select Help.

5.3.6 Using Keycaps

The Keycaps application is a tool for advanced users. Use this application to
display and edit keyboard mappings.

For information on using the Keycaps application, see the dxkeycaps(1X)
reference page and the online help volume. To access the online help volume,
start Keycaps, then select Help.

5.4 Using System Management Applications

A suite of system management (SysMan) applications provide a graphical
front-end to administrative commands for the person who administers your
system.

Section 5.1 describes how to access and start the SysMan applications. You
must have the appropriate privileges to use most of these applications. For
information on using each application, see that application's online help
volume. You can access the help volume by opening an application and
clicking on the Help menu.

The suite of SysMan applications is divided into several categories, shown in Figure 5–6:

Figure 5–6: SysMan Categories in Application Manager

- Configuration

  Use applications in this category to configure a system after installation. Ordinarily, you will not need to use these applications once your system is set up.

- Daily Administration

  Use applications in this category for frequently performed system administration tasks.

- Monitoring and Tuning

  Use applications in this category to monitor and tune your system after it is up and running.

- Software Management

Use applications in this category to install and manage additional software on your system.

- Storage Management

  Use applications in this category to monitor and manage file sytems.

- Tools

  Use applications in this category to display a variety of system statistics with the Display Window application. You can repeatedly display the same statistics to monitor progress or trends.

- SysMan Menu

  The SysMan Menu provides a hierarchical menu of system management tasks that can be used in several different user environments such as X Windows, web browsers, or character-based terminal displays. It can be started from the command line or from the CDE Application Manager. Authorized users also can invoke the SysMan Menu from the SysMan Applications Subpanel.

- SysMan Station

  The SysMan Station provides a graphical topological representation of the system and all its components, letting a system administrator visually select system components and then run SysMan applications that apply to that component. The system administrator can use the SysMan Station to manage both single systems and clusters. You must be logged in as `root` to access the SysMan Station.

_____ **Note** _____

The system management applications available on your system may depend upon the software subsets that you have loaded. This section does not list all of the system management applications available.

_____

To find information about the applications in each SysMan application group, do the following:

1. Click the Help Manager control from the CDE Front Panel.
2. Click System Management.
3. Click Welcome to SysMan.
4. Scroll down, and click on one of the SysMan application groups.

Each SysMan application in the application group is described along with restrictions, configuration dependencies, and links to additional information such as the application's online help volume and reference page. You also

can access the online help for any application by starting the application and selecting Help.

The following items, although not SysMan application categories, are also available from the Application Manager's System Administration selection.

- System Setup Checklist

  This opens the System Setup application, which launches Quick Setup and Custom Setup. You can use the System Setup Checklist after installation to configure your system with each of the Configuration Applications listed. A check mark next to an application icon indicates that the application has been run. For more information on the System Setup Checklist, refer to the online help volume and the *System Administration*.

- Welcome to SysMan

  Select this item for a shortcut to the *Welcome to SysMan* online help volume.

5.5 Using SysMan Menu

A system administrator uses the SysMan Menu to view system management data and run selected system administration tasks. You must have the appropriate privileges to run some of the tasks on the SysMan Menu.

_____ **Note** _____

Although many of the system administration tasks on the SysMan Menu may seem to duplicate those available from the Application Manager, the SysMan Menu also provides access to these tasks from the following platforms:

- Any local or remote character-cell terminal

- Any X11–compliant windowing environment, such as CDE or DECwindows

- Windows 95 or Windows NT running on a personal computer (PC)

Multiplatform access to the SysMan Menu is described in the *System Administration* manual.

_____

If you have the appropriate privileges, you can access the SysMan Menu in one of the following ways:

- From the command line:

  ```
  # /usr/sbin/sysman
  ```

The sysman(8) reference page discusses available options, including GUI and character-cell interfaces.

- From the CDE Front Panel:
  - Select the SysMan Menu icon from the Application Manager
  - Select the SysMan Menu icon from the SysMan Applications subpanel

To select and run a task from the SysMan Menu, first highlight the item that you want. Categories and tasks are displayed in the following manner:

- Categories that can be expanded are preceded by a plus (+) character
- Categories that are fully expanded are preceded by a minus (−) character
- Executable tasks are preceded by a pipe (|) character

To expand a category, do one of the following:

- Select an expandable category
- Highlight the category and choose the Select button

Continue to expand subcategories until the task title is displayed. You can use either selection method to start the actual task.

If you do not know where the task is located in the SysMan Menu hierarchy, you can do the following:

1. Select Find at the bottom of the SysMan Menu. The Find Task by Keyword dialog box is displayed.

2. Enter a keyword in the text entry field. Wildcard characters are permitted, and the search is case sensitive. For example, you could enter `*[Nn]etwork*` to locate tasks related to networks.

3. Select the task that you want from the displayed list.

For information on using SysMan Menu, see the sysman(8) reference page, the *System Administration* guide, and the online help volume. To access the online help volume, start SysMan Menu, then select Help.

5.6 Using SysMan Station

A system administrator uses the SysMan Station to manage both single systems and clusters. You must be logged in as root to see the SysMan Station icon, which displays on the Front Panel, the SysMan Applications subpanel, and in the Application Manager's System Management Applications group.

The SysMan Station provides a graphical representation of the system and all its components. It lets you visually select system components and then run SysMan applications that apply to that component. The SysMan Station provides a graphical representation of the system hierarchy from the host

down to individual devices such as disks and tapes. You can select devices
and then apply appropriate device management applications.

For information on using SysMan Station, see the `sms`(8) reference page, the
System Administration guide, and the online help volume. To access the
online help volume, start SysMan Station, then select Help.

Part 2

Migrating from DECwindows to CDE

6

Migrating to CDE

The Common Desktop Environment (CDE), based upon Motif and X11, was developed by major UNIX vendors to consolidate UNIX desktop interfaces and define a consistent user and development environment. These vendors formed the Common Operating System Environment (COSE) consortium.

CDE is built on existing technologies from the COSE founders and from the Open Software Foundation (OSF). CDE is not a replacement for Motif; it is another layer on top of Motif combining expanded programming utilities and a consistent user interface.

Under this version of the operating system, CDE is offered as a successor to the DECwindows Motif interface. This chapter discusses:

- Common components between CDE and DECwindows Motif

- Differences between CDE and DECwindows Motif

- Where to get more information about using CDE

6.1 Common Features Between CDE and DECwindows Motif

Both CDE and DECwindows Motif operate under the same premise. Each is comprised of four components that create your workspace environment. These include the X server, Window Manager, Session Manager, and client applications. The following sections highlight these components.

This section contains the following information:

- X Servers and Clients

- Session Manager

- Window Manager

- X Client Applications

6.1.1 X Servers and Clients

Both CDE and DECwindows Motif use the client/server method of computing. A component called the X server provides display services. The X server acts as an intermediary between applications and the workstation's display hardware. That is, it handles output from the clients to the display

and forwards input (from the keyboard or mouse) to the appropriate client for processing. X clients are applications that make use of the services provided by the X Window System.

X clients can run on your workstation or on another system. Because there is built-in networking capability, applications can run on one system and be displayed on another workstation that supports the X Window System protocol.

6.1.2 Session Manager

In both the CDE and DECwindows Motif interfaces, logging in to the system starts the Session Manager. The Session Manager is the top level interface to the operating system. The Session Manager handles the following:

- Sources appropriate files such as startup scripts

- Sets up search paths

- Gathers available applications and starts the session applications

- Starts the Window Manager

The CDE Session Manager that starts upon logging into the system is `/usr/dt/bin/dtlogin`, but the control is handed to `/usr/dt/bin/dtsession` after the session has started.

In the DECwindows Motif environment, the Session Manager started is `/usr/bin/X11/dxsession`.

6.1.3 Window Manager

For both CDE and DECwindows Motif, the Window Manager controls the appearance of window frame components, behavior of windows including the stacking order and focus behavior, key and button bindings, appearance of minimized windows, and behavior of menus.

The CDE Window Manager is often referred to as the Workspace Manager and is based on the OSF/Motif Window Manager. The default Window Manager for CDE is `/usr/dt/bin/dtwm`.

The DECwindows Motif Window Manager is `/usr/bin/X11/mwm`.

6.1.4 X Client Applications

This operating system includes many sample X client applications supplied by the X Consortium. Under the operating system, DECwindows Motif provides a set of desktop applications. Likewise, CDE brings a set of applications that provides several features not available in the DECwindows Motif interface.

Section 7.2 provides more information on using applications in the CDE interface.

6.2 Differences Between CDE and DECwindows Motif

Although CDE and DECwindows Motif consist of similar components, CDE offers many features not available in DECwindows Motif. The remaining chapters in this manual discuss how to manage your session using CDE as opposed to using the DECwindows Motif Session Manager menu. The following list highlights what is discussed in these chapters:

- Chapter 7 discusses differences in starting and ending a session and describes how to access applications using CDE.

- Chapter 8 discusses differences in customizing your environment by highlighting how to complete these actions using CDE as opposed to DECwindows Motif.

- Chapter 9 discusses internationalization issues such as selecting a language type, specifying keyboard types, and differences in the terminal emulator.

- Chapter 10 discusses how to migrate mail folders and calendar databases to a format that is understood by the CDE Mailer and CDE Calendar applications respectively.

- Appendix A discusses differences between the CDE Mail and DECwindows Mail applications.

6.3 Obtaining More Information

The CDE documentation set is available on line and in hardcopy. To view the CDE documentation set on line, you must use the Netscape Viewer. You can also obtain information about CDE by accessing the online help volumes and reference pages.

Section 1.3 tells you how to view the CDE documentation set on line and provides information about accessing online help and reference pages.

7

Using a New Session Manager

Differences exist between managing a Common Desktop Environment (CDE) session and managing a DECwindows Motif session. This chapter introduces methods you can use to manage your environment and access applications, and addresses differences between CDE and DECwindows Motif.

By using CDE, you benefit from an environment that offers the same features found in DECwindows Motif and more. The following sections describe the major features of starting and ending a CDE session, and provides information on managing your environment as you did using the DECwindows Motif Session Manager.

This chapter contains the following information:

- Starting and Exiting a Session
- Accessing Applications

7.1 Starting and Exiting a Session

The CDE Login Screen provides a set of options that were not available through the DECwindows Motif Login Screen. From the CDE Login Screen, you can select a session type and a language type.

There are three types of sessions that you can select:

- A Regular Desktop Session starts the CDE Session Manager. This is the default session.

- A Failsafe Session starts a single terminal window and the Window Manager.

- A Command-Line Session suspends the desktop and provides a way for you to work in the base operating system environment.

The default language is set by your system administrator; however, by using the Options menu from the login screen you can also access other languages that are installed on your system. The default language is restored when you end your session.

_____ **Note** _____

CDE ignores any `xnlLanguage` settings in your `.Xdefaults` file. This variable typically is set in an earlier DECwindows

session, where you made a selection from the session manager's language menu and saved that setting. CDE ignores this to prevent overriding any language that you select in the Options menu from the login screen.

By default, CDE provides automatic save and restore of your session. All applications that are opened when you exit a session, which support save and restore, are opened when you log in again. For some applications, all the work from the previous session is restored, while for others only the main screen of the application is restored.

For information on customizing the start and end of a session as you were able to do using the DECwindows Motif Session Manager, see Section 8.1.

_____ **Note** _____

The remaining chapters in this manual discuss a Regular Desktop session only. See the *Common Desktop Environment: User's Guide* for detailed information on starting a Failsafe or Command-Line session.

7.2 Accessing Applications

From the CDE Front Panel, you can start several applications. Most of these applications are equivalent to those found in the DECwindows Motif Session Manager Application menu (see Table 7–2) and can be started from the Front Panel, Application Manager, File Manager, and of course, a terminal emulator window.

The Front Panel is the narrow window at the bottom of your screen. It contains a set of applications and controls, which can be compared to the DECwindows Motif Session Manager menu as it provides a similar set of services. That is, you can start an application by clicking on its icon, pause a session by clicking on the Lock icon, or exit a session by clicking on the Exit icon. Section 7.2.1 describes all of the applications and controls located on the Front Panel.

The icon-based File Manager, available from the Front Panel, provides a view and easy navigation of a directory hierarchy. When used with drag and drop actions, you can manipulate directories and files and interact with other applications. You can also launch applications using the File Manager.

The Application Manager, available from the Front Panel, is a special directory for applications and other tools on your system. Using the Application Manager, you can launch applications, add other applications to

the Application Manager, or place an application on the backdrop or on the Front Panel for easier access.

This chapter contains the following information:

- Managing Applications from the Front Panel.
- Starting Applications from the Application Manager.
- Running Applications with the File Manager.
- Using DECwindows Motif Applications.

7.2.1 Managing Applications from the Front Panel

In addition to the Application Manager and the File Manager, the Front Panel employs some other concepts that are not available in the DECwindows Motif environment. This includes the use of subpanels and workspaces.

Any Front Panel icon that has an arrow above it indicates that a subpanel is available. A subpanel contains a menu of applications and controls that you can use further to manage your desktop session. Click on any arrow to display a subpanel menu.

A workspace is the screen display area, which includes the Front Panel. Using the Workspace Switch (buttons numbered one through four) on the Front Panel, you can set up and move between multiple work areas in the same session. Each workspace includes the Front Panel. You can have up to 64 workspaces. Click on any workspace button to change workspaces.

To start an application from the Front Panel, click on the application icon. To start an application from a subpanel:

- Click on the subpanel arrow to display a list of options
- Click on the application icon

7.2.1.1 Adding an Application to a Subpanel

Any application icon that resides in the File Manager or Application Manager can be added to a subpanel. To add an application to a subpanel:

1. Open the File Manager or Application Manager and display the application icon you want to add.

2. Open the subpanel where the application icon is to be added.

3. Drag the icon from the File Manager or Application Manager and drop it on the subpanel's Install Icon.

Any application icon that is added to a subpanel displays the same behavior as when it resided in the File Manager or Application Manager.

7.2.1.2 Adding a Subpanel Control to the Front Panel

You can add a copy of a subpanel control to the Front Panel for easier access.
To copy a subpanel control to the Front Panel:

1. Open the subpanel that contains the application icon you want to copy.

2. Point to the application icon you want to add and click on mouse button 3
    to display its pop-up menu.

3. Choose Copy to Main Panel from the pop-up menu.

7.2.1.3 Replacing a Control in the Front Panel

To replace a control in the Front Panel easily, exchange it with a subpanel
control.

1. Open the subpanel of the control you want to replace. If the control does
    not have a subpanel control, you can create it:

    a. Point to the control in the Front Panel and click on mouse button 3.

    b. Select Add Subpanel from the pop-up menu.

    c. Display the new subpanel.

    d. Add the control you want to place on the Front Panel to the
        subpanel as described in Section 7.2.1.2.

2. Point to the control in the subpanel and click on mouse button 3 to
    display the pop-up menu.

3. Choose Copy to Main Panel from the pop-up menu.

If you had to create a subpanel and you do not want to retain it, point to the
Front Panel control icon and click on mouse button 3. You can then select
the Remove Subpanel option.

If you are an advanced user, you can also create or edit a Front Panel
configuration file that changes the characteristics of the Front Panel.
See the *Common Desktop Environment: Advanced User's and System
Administrator's Guide* for more information.

7.2.1.4 Removing Front Panel Customizations

You can remove Front Panel customizations made by using the Install Icon
control or using the Front Panel pop-up menus:

1. Open the Application Manager.

2. Double click on the Desktop_Tools application group.

3. Double click on Restore Front Panel.

This procedure does not affect customizations made using Front Panel configuration files.

7.2.2 Starting Applications from the Application Manager

The Application Manager contains a set of built-in application groups. Each application group is a directory that contains one or more icons that you can use to open applications. An icon group can also contain other application files such as data files, templates, and "read me" files. Table 7–1 shows the default built-in application groups in the Application Manager.

Table 7–1: Built-In Application Groups

Group	Description
Conversion_Tools	Contains applications to migrate the DECwindows Calendar to the CDE Calendar, and to convert mail folders from `dxmail` format to CDE's `dtmail` format.
Desktop_Apps	Contains the desktop applications such as the File Manager, Style Manager, and Calendar applications.
Desktop_Tools	Contains commonly used tools for the desktop administration such as the `vi` Text Editor, Check Spelling, and Reload Application.
Information	Contains frequently used help volumes.
System_Admin	Contains the tools used by the system administrator to manage the system.

You can have additional application groups. The previous table lists those known groups available by default.

To start an application from the Application Manager:

1. Double click on the application group where the application is located.

2. Double click on the application.

You can also create personal application groups as described in the *Common Desktop Environment: User's Guide*.

7.2.3 Running Applications with the File Manager

The File Manager is predominately used to create, find, and manage desktop objects such as files, folders, and applications. If an application uses data files, you also can start an application from the File Manager using the application's data file.

Use one of the following methods to start an application using its data file:

- Double click on the application's data file. For example, double clicking on a bitmap file (`*.bm`) starts the Icon Editor application.

- Point to an application's data file, click on mouse button 3 and then choose Open from the pop-up menu.

You can also use the drag and drop features with the File Manager to interact with applications. For example, drag a file from the File Manager and drop it on the Print Manager to print a file or drag a help volume with an `.sdl` extension and drop it onto the Help Manager to open a help volume.

7.2.4 Using DECwindows Motif Applications

Most of the applications available with the previous version of DECwindows Motif have equivalents available in CDE. Those that do not have equivalents in CDE have been integrated into the desktop and are available through the Application Manager.

Table 7–2 lists the DECwindows Motif applications, followed by the recommended application to use, its executable name, and its location. DECwindows Motif applications that are not integrated into CDE are still available in `/usr/bin/X11`.

Table 7–2: Recommended Applications to Use in CDE

DECwindows Application Name	Recommended Application Name	Executable	Location
Bookreader	Netscape Browser[a]	netscape	Front Panel (Personal Applications subpanel)
	CDE HelpViewer[a]	dthelpview	Front Panel (Help Manager)
Calculator	CDE Calculator	dtcalc	Front Panel
Calendar	CDE Calendar[b]	dtcm	Front Panel
Image Viewer	Image Viewer[c]	dximageview	Application Manager
Clock	CDE Clock[d]		Front Panel
DECterm	CDE Terminal	dtterm	Front Panel[e]
Differences	Differences[f]	dxdiff	Application Manager
Mail	CDE Mailer[b]	dtmail	Front Panel
Notepad	CDE Text Editor	dtpad	Front Panel

Table 7–2: Recommended Applications to Use in CDE (cont.)

DECwindows Application Name	Recommended Application Name	Executable	Location
Paint	CDE Icon Editor	dticon	Front Panel (Personal Applications subpanel)

[a] See Section 1.3 for information on the documentation set and online help.
[b] Migration tools are available that you can use to convert your DECwindows Motif mail folders and calendar database to a format that can be understood by the CDE mail and calendar applications. See Chapter 10 for information on using these converters.
[c] Image Viewer (dximageview) is recommended. A desktop application, it has been integrated into CDE, it is available from the Application Manager. See Section 5.3.3 for more information.
[d] CDE Clock is an indicator only; it does not perform actions. To set an alarm, use the CDE Calendar application.
[e] Starting the CDE Terminal from the Front Panel consumes considerable system resources. If you are opening several terminal emulator windows, start a new terminal emulator from an existing terminal emulator window. To do this, select the Window menu, then choose the New option.
[f] The application Differences is a desktop application that is integrated into CDE. See Section 5.3.2 for more information.

The following DECwindows applications have been retired from this version of the operating system. The replacement applications are listed in Table 7–3.

Table 7–3: Retired DECwindows Applications

Retired DECWindows Applications	Replacement Applications
dxprint	dtlp
dxcalendar	dtcm
dxcalc	dtcalc, xcalc
dxclock	Front Panel, xclock
dxpaint	dticon/dtstyle, bitmap
dxnotepad	dtpad
dxbook	dthelpview, Netscape
dxcardfiler	N/A
dxsession	xdm, dtsession
dxvdoc	ghostview
dxmail	dtmail, xmh, exmh, Netscape mail

8

Customizing Your Environment

You cannot migrate to a new user interface without expecting changes. The Common Desktop Environment (CDE) offers you tools and methods to customize your environment that differ from those used in the DECwindows Motif environment. This chapter briefly describes how to customize your session.

This chapter contains the following information:

- Customizing Your Startup Environment
- Changing Session Manager Settings
- Customizing Window Patterns and Colors
- Changing Your Security Settings
- Customizing the Keyboard Settings
- Specifying a Session Language
- Customizing Mouse and Pointer Behavior
- Saving and Restoring Settings
- Modifying Resource Files

8.1 Customizing Your Startup Environment

Using CDE, you can add frequently used applications to the Front Panel and subpanels. See Section 7.2.1 for information on adding applications to the Front Panel and subpanels. The applications that are started automatically at startup are determined by the options you set when using the Style Manager Startup control.

When you click on the Style Manager Startup control, a dialog box appears. You have the option at login to resume your current session, return to your home session or ask me at logout the next time you log out:

- Resuming the current session restores your session to the state present at logout.
- Resuming a home session returns to the same state each time. That is, any settings you specified during your current session are ignored.

- When you select ask me at logout, the startup session uses a specific set of session resources when you are using a particular display, such as logging in from a remote workstation. To set up a display-specific session:

    1. Create a `$HOME/.dt/`*`display`* directory, where *`display`* is a real unqualified hostname such as `host:0`. Using `host.site.com:0` is not valid.

    2. Copy the entire contents of the `$HOME/.dt/sessions` directory to the new `$HOME/.dt/`*`display`* directory. Include all files and subdirectories.

    The session resources in the `$HOME/.dt/`*`display`* directory are used when you log in with `$DISPLAY` set to *`display`*, for example, `host:0`.

See the *Common Desktop Environment: User's Guide* for information on adding applications and setting a login session. See the *Common Desktop Environment: Advanced User's and System Administrator's Guide* for information on setting a display-specific session.

8.2 Changing Session Manager Settings

When using CDE, the Front Panel always is displayed unless you start a Failsafe session, or a Command-Line Login session. To turn the Front Panel into an icon after logging into the system, use the window or menu controls.

To turn Logout Confirmation on or off, use the Style Manager Startup control.

You cannot change the Lock (Pause) screen message as you could with DECwindows Motif.

8.3 Customizing Window Patterns and Colors

This section describes how you can do the following:

- Choose a different window manager
- Specify a screen saver
- Change background patterns
- Select solid foreground and background
- Choose window foreground, background, highlight and border colors

Changing these options when using CDE differs. The following sections discuss how to change the window manager, specify a screen saver and lock background, select a background pattern, and how to change colors.

8.3.1 Changing the Window Manager

When you start a CDE session, the default window manager,
`/usr/dt/bin/dtwm` is started. Unlike the DECwindows Motif environment,
specifying an alternate window manager is an advanced feature. You edit
resource files to change the Window Manager in CDE. See the *Common
Desktop Environment: Advanced User's and System Administrator's Guide*
for further information.

8.3.2 Specifying a Screen Saver and Lock Screen Background

A screen saver extends the life of your monitor by blanking the screen after a
specified amount of time. By default, the monitor blanks the display after
10 minutes. Moving the mouse causes the display to resume. A screen lock
background is displayed when you pause a session from the CDE Front
Panel.

You can customize what is displayed by using the Style Manager Screen
control. Refer to Section 4.3.2.

8.3.3 Selecting a Background Pattern

In CDE, you can specify a background pattern for each of your workspaces
using the Style Manager Backdrop control. The Backdrop control opens
a dialog box, which offers a scrollable lists of background selections. You
can also display the root window by selecting No Backdrop from the list of
options.

8.3.4 Changing Screen and Window Colors

When using the CDE Style Manager, colors are set by using the Style
Manager Color control. The Color control sets screen, window, workspace,
and Front Panel colors according to your display type. Depending on your
display type, you may have 2, 4, or 8 color buttons that you can use to control
the color of windows, window borders, workspaces, text and list areas, and
Front Panel background. See the *Common Desktop Environment: User's
Guide* for information on color controls and selecting color palettes.

8.4 Changing Your Security Settings

To change your security settings, use the Host Manager application or the
`xhost` command. The Host Manager displays icons for all hosts known
to the local system and for those hosts that you specify. By using the
Host Manager, you can set the DISPLAY environment variable and run
applications from a remote system.

To start the Host Manager from the Application Manager:

1. Double click on System_Admin.

2. Double click on DailyAdmin.

3. Double click on the Host Manager application.

See the Host Manager online help for more information. To view the online help, click on the Help menu from within the application.

For information about the xhost command, see the xhost(1X) reference page.

8.5 Customizing the Keyboard Settings

When using CDE, keyboard settings can be changed by using the Style Manager controls and the Keyboard Options application. The following sections discuss these methods.

This section contains the following information:

• Using Style Manager to Adjust Keyboard Settings

• Using Keyboard Options to Adjust Keyboard Settings

• Changing PC-Style Keyboards

8.5.1 Using Style Manager to Adjust Keyboard Settings

By using the Style Manager controls, the following keyboard settings can be adjusted:

• Beep (Bell) Volume

Sets the volume, tone and duration of the warning beep (bell) or turns the beep off. The warning beep notifies you of system messages, or warns you when you type incorrect key combinations in applications such as the vi text editor.

• Keyclick Volume and Auto Repeat

Sets the click volume of keys as you type or turns off the click volume. You can also set whether or not a key repeats for as long as it is pressed. To adjust the click volumes of keys and to turn auto repeat on or off, use the Style Manager Keyboard control. A dialog box appears that you can use to change the keyclick volume and auto repeat of keys.

_____ **Note** _____

Not all keyboards let you change the key click volume or the beep (bell) volume, tone, or duration.

_____

8.5.2 Using Keyboard Options to Adjust Keyboard Settings

The Keyboards Options application has been migrated and integrated into the CDE interface. It offers further options that you can use to control keyboard settings. Use this application to set the following:

- Keyboard Type
- Language Type
- Lock Key State

By using the Keyboard Options application, you can also start the Keycaps application and save and load settings for future sessions. For more information on the Keyboard Options and Keycaps applications, see Chapter 5.

8.5.3 Changing PC-Style Keyboards

Several workstations come with personal computer (PC)-style keyboards. Currently, these keyboards have one of the following model numbers, although more models may be produced in the future:

- PCXAL
- LK443
- LK444

Other workstations come with keyboards such as the LK201 or LK401.

The two styles of keyboards differ both in the functions assigned to certain keys and in the number of function keys. For example, the PC-style keyboards have only 12 function keys (F1 through F12); the LK201/LK401 keyboards have 20 function keys (F1 through F14, Help, Do, and F17 through F20).

This operating system provides a script that automatically performs mappings to allow you to switch keyboard styles. This script, /usr/examples/pc_to_lk_keys.sh, uses the xmodmap utility to edit the keyboard modifier map and keysym table. (For details about the utility, see the xmodmap(1X) reference page.)

If you have a PC-style keyboard, you can run the script to map most of the keys on the two keypads to the right of the main keyboard, as well as a few keys in the top function key row, to the corresponding keys on the LK201/LK401 keyboards. For example, by running the script, you change the function of the keypad Insert key on the PC-style keyboard to perform the keypad Find function from the LK201/LK401 keyboards.

Similarly, if you have an LK201/LK401 style keyboard, you can run the same script, this time with the -u flag, to map the keypad keys to the corresponding PC-style keys.

A copy of the script is located in the following file on your system:

```
/usr/examples/pc_to_lk_keys.sh
```

To run the script, at the system prompt enter the name of the file as if you were entering a command. The first command line in the following example changes PC-style keys to LK201/LK401 keys. The second command line changes LK201/LK401 keys to PC-style keys.

```
% /usr/examples/pc_to_lk_keys.sh
% /usr/examples/pc_to_lk_keys.sh -u
```

To have the script run automatically each time you log on to your workstation, use an editor to create or modify the .xsession file in your home directory to read as follows:

```
#!/bin/sh
/usr/examples/pc_to_lk_keys.sh
dxsession
```

This changes PC-style keys to LK201/LK401 keys. The same .xsession file, but with -u flag added to the end of the second line, changes LK201/LK401 keys to PC-style keys.

Now, whenever you log in, your keyboard is set automatically to the different keyboard style.

Table 8–1 shows the keys on the LK201/LK401 keyboard and their corresponding equivalents on the PC-style keyboard.

Table 8–1: LK201/LK401 Key Functions and Their PC-Style Equivalents

Key on the LK201/LK401 Keyboards	Equivalent Key or Function on a PC-Style Keyboard
Help	Print Screen
Do/Menu	Scroll Lock
Insert	Home
Find	Insert
Remove	Page Up
Next	Page Down
Select	Delete
Prev	End
Keypad 0	Ins, Keypad 0

Table 8–1: LK201/LK401 Key Functions and Their PC-Style Equivalents (cont.)

Key on the LK201/LK401 Keyboards	Equivalent Key or Function on a PC-Style Keyboard
Keypad 1	End, Keypad 1
Keypad 2	Down arrow, Keypad 2
Keypad 3	PgDn, Keypad 3
Keypad 4	Left arrow, Keypad 4
Keypad 5	Keypad 5
Keypad 6	Right arrow, Keypad 6
Keypad 7	Home, Keypad 7
Keypad 8	Up arrow, Keypad 8
Keypad 9	PgUp, Keypad 9
Keypad . (period)	Keypad Del
Keypad -	Keypad + (addition)
Keypad ,	No equivalent PC-style keypad key
Keypad Enter	Keypad Enter
PF1	Num Lock
PF2	Keypad / (division)
PF3	Keypad * (multiplication)
PF4	Keypad − (subtraction)

_____ **Note** _____

The PC-style keyboard has a key labeled ← in the position where the key marked ⌫ is located on the LK201/LK401 keyboard. On both styles of keyboard, this key deletes the character to the left of the cursor when pressed. On the PC-style keyboard, you can use the Delete key on the near keypad to delete either the character that the block cursor is on or the character to the left of the line cursor. In keyboard mappings, the ← and ⌫ keys perform the backspace function. The Delete key on the PC-style keyboards performs the delete function.

8.6 Specifying a Session Language

By using CDE, you can specify a language type each time you log into the system. You cannot change the language during the session.

The default language is set by your system administrator. To set the session language from the login screen, click on the Options menu, then click on the Language menu item and select a language group. You can select from a list of languages that have been installed on your system. The default language is restored when you end your session.

––––––––––––––––––––– **Note** –––––––––––––––––––––

CDE ignores any `xnlLanguage` settings in your `.Xdefaults` file. CDE ignores this to prevent overriding any language that you select in the Options menu from the login screen.

––

8.7 Customizing Mouse and Pointer Behavior

When using CDE, mouse and pointer behavior is adjusted by using the Style Manager Mouse control. CDE offers some adjustments not available in the DECwindows Motif environment; however when using CDE, you cannot adjust the color or shape of the pointer.

Use the Mouse control to adjust the following:

- Handedness (Button Arrangement)

  Specifies how mouse buttons are to be interpreted. By default, mouse buttons are arranged for use by a right-handed person. That is, mouse button 1 is on the left and mouse button 3 is on the right. You can specify that mouse button 1 be the left-most button and mouse button 3 be the right-most button for a left-handed person.

- Button 2

  Specifies the behavior of mouse button 2. Mouse button 2 can be set to Transfer or Adjust mode. When using the Transfer setting, mouse button 2 is used to drag and drop list or text items (if supported by the application).

  When using the Adjust setting, mouse button 2 extends lists selections in a multiple-select list or extends text selection fields; list items are dragged and dropped by using mouse button 1.

- Pointer Acceleration

  Provides a slider that you can use to vary how fast the pointer moves across the screen. For example, a setting of 2 causes the pointer to move twice as fast as the mouse moves.

- Mouse Double Click Timeout

  Specifies how the system interprets two successive clicks of the mouse. That is, it sets the time in which you must click a mouse twice to signal a double click action. For example, double clicking on certain icons starts an application.

- Mouse and Pointer Threshold

  Specifies the minimum number of pixels you must move the mouse before the pointer moves at the specified accelerated speed.

8.8 Saving and Restoring Settings

Any changes that you make during a session can be saved. When you change options or settings using the Style Manager, each control provides a dialog box that you can use to OK or Apply changes. Using the CDE Style Manager Startup control gives you the opportunity to specify whether these are the settings you return to in your next session.

The CDE Style Manager Startup control specifies whether you return to your current session, home session, or a display-specific session.

8.9 Modifying Resource Files

The *Common Desktop Environment: Advanced User's and System Administrator's Guide* describes the resource files you can modify to change your environment. This section briefly highlights those files you edited previously under DECwindows Motif and explains whether or not they remain applicable:

- The `.xsession` file is still valid in the new environment.

- The `.Xdefaults` file can still be used; however, automatic startup of applications is not valid.

- The `.mwmrc` file has been replaced by the `$HOME/.dt/dtwmrc` file.

- The `.X11start` file has been replaced by the `$HOME/.dt/session/sessionetc` file.

Under DECwindows Motif, the system administrator often edited files in `/usr/lib/X11/xdm`. Equivalents in CDE can be found in `/usr/dt/config`. These files include `Xaccess`, `Xservers`, `Xsession` and `Xsetup/Xsetup -0`.

9

Using Internationalization Features

This chapter provides information on using internationalization features. Migrating to the Common Desktop Environment (CDE) affects those who used internationalization features in the DECwindows Motif environment. Differences exist in the following:

- Selecting language types
- Specifying a keyboard type, loading keymaps, and selecting input methods
- Using the terminal emulator
- Using mail

The following sections explain these differences and provide information on how to accomplish the same tasks using CDE:

9.1 Selecting a Language Type

In the CDE environment, you change the language type at any time using the Option menu. The default language is set by your system administrator; however, you can select a language at the start of a session or set resources in CDE's `Xconfig` file. The language that you select cannot be modified during the session. Information on setting a language from the login screen is documented in Section 2.3.1.

_____ **Note** _____

CDE ignores any `xnlLanguage` settings in your `.Xdefaults` file. CDE ignores this to prevent overriding any language that you select in the Options menu from the login screen.

_____

To set the default session by editing the `Xconfig` resource file:

1. Create the directory `/etc/dt/config` if it does not exist. You must have root privileges to create this directory.

2. Copy the file `/usr/dt/config/Xconfig` to the directory you created in Step 1.

3. Edit the file `/etc/dt/config/Xconfig` and add the language you want to use as your default. For example, if you want to use Japanese, add the following line:

   ```
   defaultLanguage: ja_JP.eucJP
   ```

If you do not want to use this language during each session, you can override it by selecting another from the CDE Login Screen Options menu.

No matter which method you use to select a language, each application you start after logging into the system is displayed in the language selected.

9.2 Specifying a Keyboard Type, Keyboard Attributes and Input Methods

When using CDE, you must use the Keycaps, Keyboard Options, and Input Methods applications to change these characteristics.

The Keyboard Options application is used to select a localized keymap and to set the lock key state. From this application, you can also start the Keycaps application, which is used to change keycaps mappings. See Section 5.3.5 for information on using this application.

The Keycaps application is used to select a keyboard type, simulate key events, and to display and edit keyboard mappings. To use the Keycaps application, see Section 5.3.6.

The Input Methods application is used to change how keystroke characters are interpreted by the system. For example, Asian (multibyte) characters such as Japanese Kanji or Chinese Hanzi characters can be entered from the keyboard using this application. See Section 5.3.4 for more information on this application.

_____ **Note** _____

For Asian Languages, the CDE Session Manager automatically starts the appropriate input method server when you log into the system. To disable this feature, edit your `.dtprofile` file and set `DTSTARTIMS` to `False`.

_____

9.3 Using the Terminal Emulator

The default terminal emulator in the CDE interface is `dtterm`. The `dtterm` terminal emulator does not have the following features:

- Bidirectional support (needed for Hebrew language support)

- Zero-width character support (needed for Thai language support)

- Ruled-line support (needed for Japanese language support)

Because these features are not supported, using the DECwindows Motif terminal emulator, `dxterm`, is recommended where such support is needed. You can access `dxterm` from the Application Manager. In certain locales, `dxterm` is available from the Text Editor Personal Applications subpanel. You can also start the `dxterm` terminal emulator from a `dtterm` terminal emulator window or add it to the Front Panel or a subpanel as described in Section 7.2.1.

See the *Common Desktop Environment: User's Guide* for instructions on using the `dxterm` terminal emulator.

9.4 Using Mail

When using the CDE mail application, `dtmail`, you do not have to turn on codeset conversion support. It is turned on automatically through the `/usr/dt/config/svc/OSF1.lcx` configuration file, which contains the needed information.

10

Migrating Mail and Calendar

This chapter provides information on how to migrate mail and calendar to CDE. Many people have mail folders and calendar databases that they want to continue to use in their new environment. Changing to a new application often means losing this information. To ease the complexity of migrating, you can use the tools described in this chapter to convert your existing `dxmail` and `dxcalendar` folders and databases into a format that is understood by the CDE mail and calendar applications.

The *Common Desktop Environment: User's Guide* provides details on using the CDE Mail and Calendar applications. See Appendix A for information on the differences between the MH/`dxmail` and `dtmail` mail handlers.

This chapter describes how you can do the following:

- Convert Mail Formats
- Convert Calendar Databases

10.1 Converting Mail Formats

The CDE mail application is completely integrated with the environment and thus offers more flexibility than continuing to use the `dxmail` application. For example, files can be dragged from other CDE applications and dropped onto the mail application for further action.

The CDE mail application also supports Multimedia Internet Messages Extension (MIME). Support for MIME lets you send and receive mail messages in formats other than ASCII text. For example, you can send and receive messages that are in video format.

Before you convert your mail formats to a format that can be read by the CDE mail application, you should understand how mail is stored by both applications. You can then convert your mail from the `dxmail` format to the `dtmail` format by using the `mailcv` utility or the CDE File Manager.

This section provides information on the following:

- Understanding How Mail Is Stored
- Converting Mail Using the Mail Conversion Utility
- Converting Mail Using the File Manager

10.1.1 Understanding How Mail Is Stored

The `dxmail` and `dtmail` applications store information differently. For this reason, you must convert your `dxmail` folders to a format that can be read by the `dtmail` application.

10.1.1.1 Storing MH/dxmail

To store mail, the MH/`dxmail` application creates a mail hierarchy with a top level directory. The location of this directory is defined in your `$HOME/.mh-profile`. This profile not only specifies the location of your top level directory, it also includes other information about the setup of your mail. Usually, the path for the top level directory is set to `$HOME/Mail`. If you changed this path, you can verify its location by using the `mhpath` command with the `+` flag. You need to know the location of your top level directory to convert mail folders.

_____ **Note** _____

To use the `mhpath` command, the MH subsets must be installed on your system.

_____

Under your top level directory `Mail`, you may have several other directories (folders) or files. Messages are stored in folders numerically and in sequential order. Each message corresponds to an individual file as follows:

Mail

/inbox	/drafts	/meetings		/personal	
1,2,3	1,2	/group	/unit	1,2,3	/gardening
		1,2,3	1,2,3		1,2,3

In the previous example, there are four folders directly under the top level directory `Mail`. Individual messages are stored numerically. For example, under the folder `Inbox`, there are three files that contain individual mail messages. They are numbered `1`, `2`, and `3`. Some directories have subdirectories such as `meetings`, which includes subdirectories for `group` and `unit`. Mail messages are further grouped under these directories numerically.

10.1.1.2 Storing CDE Mail

The CDE mail application `dtmail` has no set structure for how messages are stored. You can create mail folders in any directory that you can access, and you can store more than one message in a mail folder using the UNIX "From" format. Mail messages stored in the same mail folder are concatenated with

each message separated by a UNIX "From" header. Mail utilities such as `mailx` use this format and can also read these messages. The following is a sample mail hierarchy that can be created with the `dtmail` application. In this example, messages are stored into mail folders that have a `.mbe` extension.

```
MailBox

inbox.mbe    drafts.mbe   /meetings                  /status

                          /group       /unit         jan.mbe feb.mbe

                          wkly.mbe     mthly.mbe
```

In the previous example, the top level directory, `MailBox`, is displayed. Under this top level, there are both directories and mail folders. The mail folders can contain one or more mail messages. A mail directory can contain both mail folders and other subdirectories. Messages are concatenated in the order they are saved.

10.1.2 Converting Mail Using the Mail Conversion Utility

The `mailcv` utility is a command line interface that you can use to convert an entire directory or an individual folder. There are several flags available that you can use to control how mail is converted. In addition, the `mailcv` utility can be used to detect errors that may have occurred when you stored messages. See the `mailcv`(1) reference page for information about the mail conversion utility.

By default, all messages created by the `dxmail` application are converted, including any corrupt messages. See Section 10.1.2.4 for information on corrupt messages.

10.1.2.1 Converting an Entire Mail Directory

To convert an entire mail directory (folder) by using the `mailcv` utility:

1. Change to your top level mail directory. By default, this is `$HOME/Mail`.

2. Type the `mailcv` command with the `-A` flag to specify that you want to convert the entire directory and subdirectories. You must specify the current directory name and the name of the new directory that is to be created as follows:

    ```
    % mailcv -A $HOME/Mail $HOME/NewMail
    ```

    This example creates a new top level directory called `NewMail`. It then creates the subdirectories that correspond to the `dxmail` folder structure and all mail messages are converted.

10.1.2.2 Converting an Individual Folder

To convert an individual folder using the `mailcv` utility:

1. Change to the directory that contains the MH folder and message files you want to convert.

2. Type the `mailcv` command with the `-f` flag to specify that you want to convert a folder to the UNIX From format. You must specify the current name of the folder followed by a new name for the folder as follows:

   `% mailcv -f inbox Inbox`

   This example creates a new folder called `Inbox`. If a new folder name is not specified, a new folder is created using the name of the current folder followed by the extension `.mbe`.

   If the folder you are converting contains subfolders, the subfolders are not converted. Use the steps described to convert each folder or subfolder.

10.1.2.3 Using Flags to Control Mail Conversion

The `mailcv` command offers several command flags that you can use when converting mail folders and directories. The flags are described in detail in the `mailcv` reference page.

Using the `mailcv` command, you can specify flags to:

- Stops the conversion of a folder if a corrupted message is found. A message is corrupted if it is missing one of the primary RFC 822 headers that include: From, Date, and Reply-To. An error message is displayed indicating the number and folder name of the corrupted message and no further messages are copied into the folder.

- Delete MH/`dxmail` folders and messages after they have been converted. However, if the folder contains other messages not in MH format, the folder is not deleted.

- Skip over any corrupt messages and continue with the conversion of messages that have the correct mail headers.

- Write to standard output the folder and message number that is being converted.

10.1.2.4 Converting Corrupt Mail Messages

If you do not use the `mailcv` utility with the flags that handle corrupted messages, the messages headers are converted as follows:

- From field is set to `USER@UNKNOWN`

- Date field is set to `Mon, 01 Jan 1999 09:00:00 -000`

10.1.3 Converting Mail Using the File Manager

The CDE File Manager provides a graphical display of directories and files.
Using the CDE File Manager, you can convert the whole mail hierarchy
or you can convert a single folder.

Although the CDE File Manager calls the `mailcv` utility to complete the
conversion, it does not provide you the option of specifying flags to detect
mail header errors. To detect errors before converting your mail directories,
use the `mailcv` utility's command line interface. If you do not address
corrupt files, the corrupt files are converted as described in Section 10.1.2.4

10.1.3.1 Converting the Entire Mail Hierarchy

To convert the entire mail hierarchy from the CDE File Manager:

1. Start the CDE File Manager.

2. Change to the directory that contains the MH folders to be converted.

3. Point to the MH mail folder icon, then click on mouse button 3 to
    display the Action menu.

4. Select the Mail Convert menu item from the Action menu. A dialog
    box appears. You must enter a new pathname for the new directory
    hierarchy. Click OK after entering the new directory name.

After you select a new location for the directory hierarchy, the `mailcv` utility
begins the conversion. Depending on the size of the mail hierarchy, the
conversion may take some time. When it is complete, your mail is accessible
from the CDE mail application.

10.1.3.2 Converting an Individual Folder

To convert a single folder from the CDE File Manager:

1. Start the CDE File Manager.

2. Set your path to the MH pathname where the top level mail directory
    is located. Use the `mhpath` command with the + flag if you are unsure
    of the location.

_____ **Note** _____

To use the `mhpath` command, the MH subsets must be
installed on your system.

_____

After setting your path, the CDE File Manager displays the Mail
directories (folders). Each is represented by an icon.

3. Change to the folder that you want to convert.

4. Select the Mail Convert menu item from the Action menu. A dialog box appears. You must enter a new folder name for the new folder. Click OK after entering the new name.

After you select a new location for the folder, the `mailcv` utility begins the conversion. Subfolders in the folder you are converting are not converted. Depending on the size of the folder, the conversion may take some time. When it is complete, your mail is accessible from the CDE mail application.

10.2 Converting Calendar Databases

The `dxcaltodtcm` application converts a calendar database file that has been created with the `dxcalendar` application to a format that can be used by the CDE calendar application, `dtcm`.

To convert a `dxcalendar` database:

1. Invoke the `dxcalendar` command with the `-migrate` option.

   ```
   $ dxcalendar -migrate
   ```

   A text file called `$HOME/dwc_db_migration.data` is created. This file contains your calendar entries.

2. Run the CDE Calendar application, `dtcm`, and set the hour display to `12`.

3. Invoke the `dxcaltodtcm` application to read the created text file and add the entries to the CDE calendar database.

The `dxcalendar` command is in `/usr/bin/X11` and the `dxcaltodtcm` command is in `/usr/dt/bin`.

_____ **Note** _____

Because some features of the DECwindows Calendar are not available in the CDE Calendar, some loss of information is possible in converting a calendar database. See the dxcaltodtcm(1) reference page for a list of restrictions.

_____

A

Differences in Mail Handlers

There are differences in how the CDE mail application and the DECwindows Motif mail application manage mail operations. This appendix discusses:

- Features present in the CDE mail application, but not present in the DECwindows Motif mail application

- Absence of MH features in the CDE mail application

- Differences between MH/DXmail and the CDE mail applcation

A.1 Features Available in the CDE Mail Application

This section highlights some of the features available in the CDE mail application that are not available in the MH/DXmail application:

- Provides minimal compliance for the Multipurpose Internet Messages Extension (MIME) standard. See the Internet Message RFCs for a description of MIME.

- Turns vacation notification on or off from within the `dtmail` application.

- Provides a Spell Checker to check spelling when composing messages.

- Supports search and substitution of text when composing a message.

- Supports use of templates (composed text) that you can include in mail messages.

- Offers a Comprehensive Options dialog box that you can use to do the following:

  - Set aliases

  - Specify predefined headers during compose

  - Specify the removal of headers during read operations

  - Set message numbers

  - Indent an included message during a reply operation

  - Set an auto log of send messages

  - Specify a top level directory for mailfolders, and others files

- You can use the CDE Mailer as a Post Office Protocol (POP) client to connect to network mail servers offering POP services. If you choose this option, you can also select APOP authentication (if supported by

your network mail server) to encrypt your user ID and password during communications with your mail server.

A.2 Features Not Available in the CDE Mail Applications

The following list highlights some differences between the DECwindows Motif mail and CDE mail applications:

- User's view of folders

  The dxmail application provides a window that lists all available mailboxes (folders) for each user. The dtmail application does not provide this feature. To view mail folders under CDE, you must use the File Manager. Thus, if you maintain your mail in one directory, you can use the features of the File Manager with dtmail to open folders and so forth, or manage your mail directories. See the *CDE User's Guide* for information on the File Manager and using datatypes.

- Personal Editors

  The dtmail application does not support the ability to specify an editor of your choice when composing mail.

- Modifying read messages

  The dtmail application does not provide the ability to modify a message when in read mode. To modify a message, forward the message to yourself. Then, in the Compose window, edit, then send the message.

- Signatures

  The dtmail application does not provide the ability to specify a Signature. The GECOS field specified in the /etc/passwd file is used instead.

A.3 Differences Between MH and the CDE Mail Applications

Unlike the dtmail application, the dxmail application uses the Rand Corporation Mail Handler (MH) to process mail. Table A–1 lists the availability of MH attributes in the CDE mail application.

Table A–1: Differences in Mail Handlers

MH Command	Use of Command	Available in CDE Mail
alex	Extracts addresses from message headers	No
ali	Lists mail aliases	Yes
anno	Annotates messages	No
ap	Parses addresses RFC 822-style	Yes

Table A–1: Differences in Mail Handlers (cont.)

MH Command	Use of Command	Available in CDE Mail
burst	Explodes and digests into messages	No
comp	Composes a new message	Yes
conflict	Searches for alias/password conflicts	No
dist	Redistributes a message to additional addresses	Yes
dp	Parses dates RFC 822-style	Yes
folder	Sets or lists current folder/message	Yes
forw	Forwards message	Yes
inc	Incorporates new mail	Yes (reads new mail)
install-mh	Initializes the MH environment	No
mark	Marks messages	No
mhl	Produces formated listings of MH messages	No
mhmail	Sends or reads mail	Yes
mhpath	Prints full pathnames of MH messages and folders	No
msgchk	Checks for messages	Yes
msh	Starts MH shell	Not applicable
next	Shows the next message	Yes
packf	Compresses a folder into a single file	Not applicable
pick	Selects messages by content	Partially available
post	Delivers a message	Yes
prev	Shows the previous message	Yes
prompter	Prompting editor front end	No
rcvstore	Incorporates new mail asynchronously	Not applicable
refile	Files messages in different folder	Yes
repl	Replies to a message	Yes
rmf	Removes a folder	No
rmm	Removes messages	Yes
scan	Produces a scan listing that has one line per message	Yes
send	Sends a message	Yes

Table A–1: Differences in Mail Handlers (cont.)

MH Command	Use of Command	Available in CDE Mail
slocal[a]	Receives mail hooks	Yes
show	Shows (lists) messages	Yes
sortm	Sorts messages	Yes
whatnow	Prompting front-end for send	No
whom	Reports who receives a message when sent	No

[a] Available only if the MH subset is installed.

Index

X

How to Order Tru64 UNIX Documentation

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800-344-4825. In other countries, contact your local Compaq subsidiary.

If you have access to Compaq's intranet, you can place an order at the following
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http://asmorder.nqo.dec.com/

If you need help deciding which documentation best meets your needs, see the Tru64
UNIX *Documentation Overview*, which describes the structure and organization of
the Tru64 UNIX documentation and provides brief overviews of each document.

The following table provides the order numbers for the Tru64 UNIX operating system
documentation kits. For additional information about ordering this and related
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Name	Order Number
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Tru64 UNIX Documentation Kit	QA-6ADAA-GZ
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Reader's Comments

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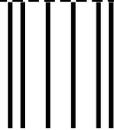Telephone _____
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