Using UIM/X with CDE

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Preface

Overview

This guide explains the special issues concerned with running UIM/X on your CDE desktop.

Who Should Use this Guide

This manual assumes you are familiar with the basics of UIM/X. Before using this manual, review the *UIM/X Beginner's Guide* and the *UIM/X User's Guide.*

This manual also assumes that you have some knowledge of programming, a general understanding of the X Window System, and familiarity with UIM/X and the CDE desktop. You should also know how to use common items such as menus, buttons, and scroll bars. If you are not familiar with these items, you may find it useful to review the *OSF/Motif User's Guide* and the *UIM/X Motif Developer's Guide*.

Before you begin, check with your system administrator to ensure that the software has been installed as described in the *UIM/X Installation Guide*.

Before You Read This Guide

This guide makes the following assumptions:

- You are familiar with the basic functions of selecting from menus and dialog boxes; opening, moving, resizing and closing windows, and clicking icons.
- You understand the functions of the three mouse buttons, which this guide refers to as the Select button (left button), the Adjust button (middle), and the Menu button (right). See “Using the Mouse” on page ix for more information.

The UIM/X Document Set and Related Books

This section lists the UIM/X document set, and provides a suggested list for further reading.

The following list is the complete UIM/X document set:

- *UIM/X Installation Guide*. Explains how to install and run UIM/X. Includes information on the files provided with UIM/X, backwards compatibility issues, and compiler considerations.
- *UIM/X Beginner's Guide*. Introduces UIM/X by presenting Novice Mode, the simplified Palette that enables new users to be productive immediately. Includes information on a number of important features for creating, testing, and running applications.
- *UIM/X Tutorial Guide***.** A series of step-by-step tutorials, teaching tools and techniques that will greatly assist you in developing your own applications. Features tutorials in Novice Mode, Standard Mode, and on advanced topics.
- *UIM/X User's Guide*. Explores the UIM/X features common to both Motif and cross-platform development. Includes discussions of how to use UIM/ X's editors to set properties, add behavior, etc.
- *UIM/X Motif Developer's Guide*. An in-depth guide to the widgets, features and capabilities of UIM/X as they relate specifically to Motif development.
- *UIM/X Advanced Topics***.** Describes how to customize UIM/X, including integrating new widget and component classes into the executable. Includes reference information of an advanced technical nature.
- *UIM/X Reference Manual*. A comprehensive list of properties, methods, and events, plus more, for Motif development. Designed for the experienced developer.

Suggested Reading

For more information on designing GUIs, see any of the following books:

- *OSF/Motif Style Guide release 1.2* (Prentice Hall, 1993, ISBN 0-13-643123-2)
- *Visual Design with OSF/Motif* (by Shiz Kobara, Addison-Wesley, 1991, ISBN 0-201-56320-7)
- *New Windows Interface: An Application Guide* (Microsoft Corporation, 1994, ISBN 1-55615-679-0)
- *Human Interface Guidelines: The Apple Desktop Interface* (Addison-Wesley, 1987, ISBN 0-201-17753-6)

How this Guide Is Organized

- *Chapter 1, "CDE Integration,"* covers the basic concepts of starting and running UIM/X on your CDE desktop.
- *Chapter 2, "CDE Widgets,"* describes the SGI Widgets category of the Palette.

Some Terms You Should Know

Certain basic terms recur throughout this guide, and it helps to understand them from the outset.

An *object* is a building block you can use to build an interface with UIM/X.

A *Motif widget* is an object whose appearance and behavior precisely follows the *OSF/Motif Style Guide*. The novice mode of UIM/X supports a number of popular Motif widgets, including Push Button, Label, Text Field, and more.

A compound object consists of several Motif widgets combined into one object for your convenience. The novice mode of UIM/X supports a number of compound objects, including Application Window and Group Box, that save you the time you might otherwise spend creating them.

An *interface* is a window or dialog box that you build up from objects with UIM/X. The novice mode of UIM/X supports four different types of interfaces: Application Window, Secondary Window, Message dialog box, and File Selection dialog box. Certain menu options refer to an interface, such as Save Interface; these act only on your selected interface.

A *project* contains all the interfaces (i.e., windows and dialog boxes) and their associated files for a certain GUI you are building with UIM/X. The program can automatically save and generate code for an entire project in one step. Certain menu options refer to a project, such as Save Project; these act on all the windows and dialog boxes in your project.

Conventions Used in this Guide

Typographic Conventions

The following table describes the typographic conventions used in this guide.

Typeface or Symbol	Meaning	Example
`AaBbCc12`	The names of commands, files, and directories; or onscreen output; or user input.	Edit your `.login` file. `%You have mail.` Use `ls -a` to list all the files.
AaBbCc12	A placeholder you replace with your actual value; or words to be emphasized; or book titles.	To delete a file, type `rm` *filename.* You *must* be `root` to do this. See Chapter 6 in the *User's Guide.*
File⇒Open	The Open option in the File menu.	Choose the File⇒Open command.
Alt+F4	Press both Alt and F4 at once.	Press Alt+F4 to exit.
Return	The key on your keyboard marked Enter, Return, or .	Press Return.

Installation Directories

Product installation directories can depend on the platform or the user's preferences. To keep things simple, this guide uses general names for product installation directories. The following table lists the name and the corresponding product installation directory:

Name	Description
uimx_directory	The UIM/X installation directory

Using the Mouse

Before starting the tutorial, take a moment to review the location and usage of your mouse buttons, as illustrated in the Figure P-1and the following table:

1: Select 2: Adjust 3: Menu

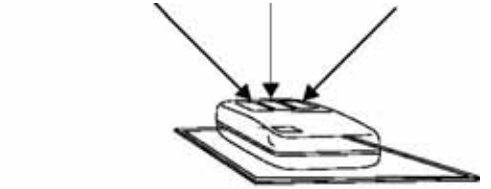


Figure P-1 The Mouse Buttons

Button:	Called:	Is used for:
1	Select	Selecting objects, menus, toggles, and options.
2	Adjust	Resizing and moving objects.
3	Menu	Displaying popup menus.

Throughout this book, you will use the mouse buttons along with the mouse pointer to make selections, move the input pointer, or position the text insertion point. You can perform any of the following mouse operations.

Operation	Description
Point to	Move the mouse to make the pointer go as directed.
Press	Hold down a mouse button.
Release	Release a mouse button after pressing it.
Click	Quickly press and release a mouse button without moving the mouse.
Drag	Move the mouse while pressing a mouse button.
Double-click	Click a mouse button twice in rapid succession without moving the mouse pointer.
Triple-click	Click a mouse button three times in rapid succession without moving the mouse pointer

In general, instructions for mouse operations include the name of the mouse button. The exceptions are Click, Double-click, and Drag. These common operations may be described without specifying a mouse button. For example:

- Click on the `applWindow1` icon in the Interfaces Area of the Project Window.
- Drag the Push Button icon from the Palette.

In these cases, use the Select button to click and double-click, and the Adjust button to drag.

Setting Application Defaults

Application Defaults configure the way UIM/X looks and set the default preferences for many of its operations. You can set the Application Defaults for all UIM/X users or for a single user. For more details on setting your Application Defaults see the *UIM/X User's Guide*.

For optimum performance, set the following resources in your Application Defaults:

```
Mwm*autoKeyFocus: falseMwm*clientAutoPlace:
falseMwm*focusAutoRaise:
falseMwm*focusFollowsPointer:
trueMwm*keyboardFocusPolicy: pointer
```

If you have a gray-scale monitor, you might try the following settings:

```
Mwm*activeBackground: #666666
(gray40)Mwm*activeForeground: #e5e5e5
(gray90)Mwm*background: #666666
(gray40)Mwm*foreground: #e5e5e5
(gray90)Uimx3_0*calculatedColors:
falseUimx3_0*background: #ededed
(gray93)Uimx3_0*BottomShadowColor: #000000
(black)Uimx3_0*foreground: #000000
(black)Uimx3_0*TopShadowColor: #ffffff
(white)Uimx3_0*XmText.background: #b3b3b3
(gray70)Uimx3_0*XmTextField.background: #b3b3b3
(gray70)
```

Note: The resources above prefixed with `Mwm` are specific to the Motif Window Manager. If you are using a different window manager, consult your Systems Administrator for the equivalent settings.

CDE Integration

1

Overview

This chapter discusses how to run and manage UIM/X under the CDE.

Running UIM/X Under the CDE

UIM/X is fully integrated with the Common Desktop Environment (CDE). You can start UIM/X and load files by working with desktop icons. The following table describes the different UIM/X icons.

Desktop Icon	Description
	UIM/X icon. To start UIM/X, double-click on this icon. You can also start UIM/X and load a file by dropping the file icon on this icon. After you start UIM/X, you can load files by dropping their icons on either the Interfaces Area or the Palettes Area of the Project Window.
	UIM/X interface file (`.i`). To start UIM/X and load the interface, double-click on this icon. You can also drop it on the UIM/X icon to start UIM/X and load the interface. To load the interface into UIM/X, drop the icon in the Interfaces Area or Palettes Area of the Project Window.
	UIM/X project file (`.prj`). To start UIM/X and load the project, double-click on the icon. You can also drop it on the UIM/X icon to start UIM/X and load the project. To load the project into UIM/X, drop the icon in the Interfaces Area or Palettes Area of the Project Window.
	UIM/X palette file (`.pal`). To start UIM/X and load the palette, double-click on the icon. You can also drop it on the UIM/X icon to start UIM/X and load the palette. To load the palette into UIM/X, drop the icon in the Palettes Area or the Interfaces Area of the Project Window.
	Dt Script interface file (`.i`). Dt Script is a simple dialog builder that generates dtksh code. It saves interfaces using the same interface file format as UIM/X. You can load Dt Script interface files the same way you load UIM/X interface files. When you load a Dt Script interface file, UIM/X discards any dtksh code contained in the file.

CDE Session Management

When you log onto your system, the CDE Session Manager reloads the UIM/X session you were running when you logged off, and reloads your project as it was, including unapplied changes.

The Session Manager allows you to choose between a `current` session, as described above, and a `home` session, which allows you to return to the same UIM/X session every time you log in. To choose the `home` session, click on the Return to Home Session toggle button in the Startup dialog of the CDE Style Manager.

You can also use the CDE Style Manager to manage your UIM/X sessions and change the colors and fonts used by UIM/X.

Starting UIM/X in a Different Workspace

You can start UIM/X in a workspace other than the one you are currently using. To do this, use the `-workspace` argument when you start UIM/X on the command line:

uimx_directory`/bin/uimx -workspace` *workspace_name*

CDE Widgets

2

Overview

This chapter describes the default UIM/X palette, as well as the widgets associated with CDE.

The Default Palette

The Ux Palette, shown in the figure below, is the default palette displayed when you start UIM/X. Its filename is `Uxcde.pal` and it is found in *uimx_directory*`/palettes`. This palette contains a new category called CDE Widgets, which are described in detail later in this chapter.

You can change the default palette that UIM/X displays on start-up by using resources. The UIM/X resource file contains the following resource specification:

```
Uimx3_0*UxStartingPalettes.value: Uxcde.pal
```

The `UxStartingPalettes` resource specifies the palette files loaded at start-up. These palette files are loaded before any files specified on the UIM/X command line. These palettes are not saved with projects saved by the user.

If you wish to have UIM/X start with the Ux Palette, but with no CDE Widgets category, change the `UxStartingPalettes` resource to look as follows:

```
Uimx3_0*UxStartingPalettes.value: Ux.pal
```

Note: You can load more than one palette file at once. To load more than one palette, you must insert \n between palette file names. For more information about working with palettes, see the *UIM/X User's Guide*.

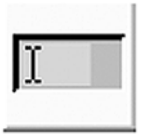
The Ux Palette is shown below. Some categories have been collapsed for display purposes:

Figure 2-1 The Ux Palette

CDE Widgets

The CDE Widgets provided by the Ux Palette are shown in the following table, along with their names, suggested uses, and how the end user activates them in your interface. While these CDE Widgets are not official Motif widgets, they still follow the *OSF/Motif Style Guide*. For more information about the

ComboBox and the Spin Box, see the *CDE Programmer's Guide*. For more information about the Help Dialog and the Help Quick Dialog, see the *CDEHelp System Author's and Programmer's Guide*.

Name	Icon	Suggested Uses
Combo Box		Purpose: To provide a choice from among two or more possibilities. Use a ComboBox to enable the end user to choose from a given list of possibilities. To activate a ComboBox, press and hold down its dropdown button, then select your choice from the list.
Help Dialog		Purpose: To allow the user to browse through a help volume. Use a Help Dialog to display online help. CDE Help features like Backtrack and Index are supported. Activate a Help Dialog by clicking on topics. Use the menu bar and push buttons to find the topics you want to consult.
Help Quick Dialog		Purpose: To allow rapid access to a help Dialog volume. Use a Help Quick Dialog to display online help. Activate a Help Quick Dialog by clicking its pushbuttons.
Spin Box		Purpose: Enables the user to cycle through the values presented in its text field. Use a Spin Box to allow the user to choose from and edit a list of values. Activate a Spin Box by clicking its arrow buttons and typing into its text field.

Note: You can integrate a DtTerm CDE widget by using the files in *uimx_directory*/`contrib/Terminal`.

Swidget Methods

The CDE Widgets each have a set of swidget methods. These swidget methods allow the developer to use connections to specify behavior for the CDE Widgets. The swidget methods for each method are listed in the following table:

CDE Widget	Swidget Methods
Help Dialog	SetDynamicHelpString SetHelpFile SetHelpString SetHelpTopic SetManPage
Help Quick dialog	SetDynamicHelpString SetHelpFile SetHelpString SetHelpTopic SetManPage
Spin Box	GetValues SetValues GetPosition SetPosition
Combo Box	GetItems SetItems GetSelectedItem SelectItem

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