

# Introduction to Solaris™ Common Desktop Environment

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THE NETWORK IS THE COMPUTER™



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# Introduction to Solaris Common Desktop Environment

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The Solaris™ Common Desktop Environment (CDE) is an easy-to-use interface that provides a consistent look and feel across UNIX® environments. SunSoft™, Inc., Hewlett-Packard Company, IBM Corporation, and Novell, Inc. each contributed “best-of-breed” technologies to establish a new standard for user and application interfaces based on the X Window System™ and Motif.

The SunSoft contribution to the CDE implementation includes its ToolTalk™ messaging protocol, DevGuide development tool, the mail and calendar tools from its OpenWindows™ DeskSet™ utilities, and drag-and-drop and data-typing capabilities.

While maintaining compliance with the CDE standards, Solaris CDE offers additional benefits to its users and developers. For example, you can use an image viewer to display, rotate, zoom, and convert images and PostScript™ files.

If you are used to the OpenWindows environment, you have access to the familiar backdrops, color palettes, and pop-up Workspace menu. You can also run OpenWindows applications without modification, with drag-and-drop interaction between OpenWindows applications and CDE applications.

Developers can use file conversion utilities to simplify the transition of their OpenWindows and Motif applications to CDE.

For more information on CDE, see <http://www.sun.com/solaris/cde/index.html> on the Internet.



## Features

The key features available to you within CDE are: CDE environment, desktop tools, and the CDE Development Environment.

### CDE Environment

The CDE environment consists of:

- Login Manager - A window for logging in to the desktop, available automatically as your workstation is booted.
- Session Manager - A service that starts your applications on the desktop at login, and “remembers” their state when you log out.
- Window Manager - A service that controls CDE application windows, and provides the Front Panel for the launch of CDE applications.

### Desktop Tools

You can start the following desktop tools from the Front Panel:



- File Manager - A desktop application where you can create, find, and use workspace objects: files, folders, and applications
- Calendar - An application that you use to schedule appointments and To Do items, set reminders, make and print appointment and To Do lists, browse other calendars, and schedule group appointments
- Mailer - An application for sending, receiving, and managing electronic mail (email) messages
- Text Editor - An editor for creating, revising, and checking the spelling of ASCII documents, such as memos, mail messages, or resource files
- Application Manager - A container for the applications and other tools available on your system
- Style Manager - A tool for customizing the appearance of the desktop, such as its colors, backdrop, and fonts
- Terminal - A window in which you enter operating system commands, execute UNIX commands, and copy and paste text
- Icon Editor - A tool for creating both bitmap and pixmap image files for use as icons or backdrops



- Print Manager - A tool for controlling print jobs and viewing print queue status
- Image Viewer - A tool that you use to view, edit, print, and translate the file formats of monochrome and color images, as well as multiple-page documents, such as PostScript files
- Workspace menus - A pop-up menu that contains items for managing the desktop workspace
- Online help - A help information system that you use to browse for information on the various desktop applications

## CDE Development Environment

The CDE 1.1 Development Environment is included as optional packages for users who develop software in CDE. These packages contain:

- Application Builder, a powerful tool for creating graphical user interfaces that use CDE application program interfaces (APIs)
- Demonstration programs in source form for Motif, ToolTalk messaging, and other CDE services
- Utility applications, man pages, and header files that help you develop applications in CDE

## Documentation

CDE documentation is provided for both the desktop user and the software developer.

## Media

CDE documentation is available in three kinds of media:

- An online viewing system for manuals, which provides a search utility. You can also print from the viewer.
- Online help volumes for the tools, which are displayed in the CDE Help Viewer. CDE help is uniformly presented in the forms of Overview, Tasks, Reference, and context-sensitive help. You can navigate by clicking on the hypertext links, which serve as cross-references to other parts of the volume.



- Hardcopy manuals, which you can purchase separately.

## Manual Names and Descriptions

This section contains a list of the manuals and a brief description of their contents.

### **Solaris Common Desktop Environment: Installation Guide**

*Solaris Common Desktop Environment: Installation Guide* shows you how to install SCDE locally, remotely, or from the SCDE installation directory.

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**Note** – This book applies only if you obtained CDE as a separate product. If you obtained CDE as part of the packages for the Solaris operating environment, refer to the Solaris installation documentation.

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### **Solaris Common Desktop Environment: User's Guide**

*Solaris Common Desktop Environment: User's Guide* outlines the basic features of CDE, and explains how to use the desktop and desktop applications, such as File Manager, Calendar, Mailer, and others.

### **Solaris Common Desktop Environment: Advanced User's and System Administrator's Guide**

*Solaris Common Desktop Environment: Advanced User's and System Administrator's Guide* shows advanced users and system administrators how to perform customizations that cannot be accomplished with the desktop user interface.

The topics include:

- Customizing system initialization, login, and session initiation
- Troubleshooting login and session startup problems
- Adding applications and providing interface representations for applications and their data



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- Configuring desktop processes, applications, and data across the network
  - Setting up miscellaneous configurations
  - Customizing desktop services such as window management, printing, colors, and fonts

### **Common Desktop Environment: Programmer's Overview**

*Common Desktop Environment: Programmer's Overview* provides a high-level view of CDE. Read this book first before you start application design and development if you are:

- An application developer who wants to build a new CDE application, or integrate an existing OSF/Motif or OPEN LOOK® application into the desktop
- An architect who is interested in designing a project that contains applications that run on the CDE desktop

### **Common Desktop Environment: Style Guide and Certification Checklist**

*Common Desktop Environment: Style Guide and Certification Checklist* provides application design style guidelines, and lists the requirements for CDE application-level certification. These requirements consist of the Motif Version 1.2 requirements with CDE-specific additions.

This book helps the application designer develop consistent applications and behaviors within applications.

### **Common Desktop Environment: Application Builder User's Guide**

*Common Desktop Environment: Application Builder User's Guide* describes the Application Builder, called App Builder for short, which is an interactive tool for developing CDE applications.

From this book, you learn how to create an interface by:

- Dragging and dropping “objects” from a palette
- Making connections between objects in the interface
- Using the application framework editor to integrate desktop services
- Generating C code



- Adding application code to the output to produce a finished application

### **Common Desktop Environment: Programmer's Guide**

*Common Desktop Environment: Programmer's Guide* details the elements of CDE, and explains how to use them, complete with code examples.

Part I, "Recommended Integration," describes how to integrate new applications with the Session Manager, fonts, and drag and drop. It also discusses how to display error messages.

Part II, "Optional Integration," describes how to integrate new applications with the Workspace Manager, CDE Motif widgets, actions, data types, and Calendar.

This book also introduces the APIs for the components referred to in Parts I and II.

### **Common Desktop Environment: Help System Author's and Programmer's Guide**

*Common Desktop Environment: Help System Author's and Programmer's Guide* describes how to:

- Develop online help for application software
- Integrate online help into a Motif application

This book is written for:

- Authors who design and create online help information
- Developers who build software applications that provide a fully integrated help facility

### **Common Desktop Environment: ToolTalk Messaging Overview**

*Common Desktop Environment: ToolTalk Messaging Overview* describes the ToolTalk components, commands, and error messages as convenience routines to enable your application to conform to Media Exchange and Desktop Services message set conventions.

This manual is for developers who create or maintain applications that use the ToolTalk service to interoperate with other applications.



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## Common Desktop Environment: Internationalization Programmer's Guide

*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.

This guide provides:

- Guidelines on how to write applications for worldwide distribution
- An overall view of internationalization topics that span different layers within the desktop
- Pointers to reference documentation

## Common Desktop Environment: Desktop KornShell User's Guide

*Common Desktop Environment: Desktop KornShell User's Guide* describes how to create Motif applications with Desktop Korn shell (`dtksh`) scripts. It contains example scripts of increasing complexity.

This guide is intended for developers who find a shell-style scripting environment suitable for a particular task.

## Common Desktop Environment: Product Glossary

*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.

## Solaris Common Desktop Environment: User's Transition Guide

*Solaris Common Desktop Environment: User's Transition Guide* describes the differences between the OpenWindows OPEN LOOK and CDE interfaces.

## Solaris Common Desktop Environment Motif Transition Guide

*Solaris Common Desktop Environment: Motif Transition Guide* provides guidelines on how to:

- Use Solaris 2.5 Motif or later for application development
- Port an OPEN LOOK or Motif application to CDE

