

HP DECwindows Motif for OpenVMS

Documentation Overview

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This overview provides information about DECwindows Motif for OpenVMS Version 1.6 documentation.

Revision/Update Information: This manual supersedes the *HP DECwindows Motif for OpenVMS Alpha Documentation Overview* for Version 1.5.

Operating Systems: OpenVMS I64 Version 8.3
OpenVMS Alpha Version 8.3

Software Versions: DECwindows Motif for OpenVMS I64
Version 1.6
DECwindows Motif for OpenVMS
Alpha Version 1.6

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Palo Alto, California

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Preface

This guide describes the contents, organization, and availability of the DECwindows Motif for OpenVMS Version 1.6 (DECwindows Motif) documentation on the OpenVMS I64 and OpenVMS Alpha platforms.

Intended Audience

This document is intended for DECwindows Motif users, programmers, and system managers.

Related Documents

For additional information about OpenVMS or DECwindows Motif products and services, visit the following web site:

<http://www.hp.com/go/openvms>

Reader's Comments

HP welcomes your comments on this manual. Please send comments to either of the following addresses:

Internet	openvmsdoc@hp.com
Mail	Hewlett-Packard Company OSSG Documentation Group, ZKO3-4/U08 110 Spit Brook Rd. Nashua, NH 03062-2698

How To Order Additional Documentation

For information about how to order additional documentation, visit the following World Wide Web address:

<http://www.hp.com/go/openvms/doc/order>

Documentation Summary

This chapter describes all the manuals that make up the extended DECwindows Motif documentation set. This set is currently a combination of industry-standard reference materials and DECwindows Motif product documentation available from HP.

Specifically, this chapter provides brief descriptions of the following types of documentation:

- Installation Documentation (see Section 1.1)
- User Documentation (see Section 1.2)
- New Desktop Documentation (see Section 1.3)
- Programming Documentation (see Section 1.4)

Manuals published by HP are available either in print from the DECwindows Motif documentation kit or online from the OpenVMS web site and layered product media. Information regarding the availability of industry-standard reference manuals can be obtained separately through their respective publishers. See Chapter 2 for additional information.

Documentation Summary

1.1 Installation Documentation

1.1 Installation Documentation

The DECwindows Motif installation documentation consists of manuals intended for system administrators.

Table 1–1 lists the installation documentation and the latest product version for which each document was updated.

Table 1–1 DECwindows Motif Installation Documentation

Title and Description	Software Version
<i>HP DECwindows Motif for OpenVMS Cover Letter</i> Describes the kit and contains any late-breaking information not included in the release notes.	DECwindows Motif Version 1.6
<i>HP DECwindows Motif for OpenVMS New Features</i> Describes the enhancements and features introduced with the current release of DECwindows Motif. This manual also describes features from previous releases not documented in other manuals. This manual should be reviewed before installing or using DECwindows Motif.	DECwindows Motif Version 1.6
<i>HP DECwindows Motif for OpenVMS Release Notes</i> Describes corrections, known problems, and restrictions introduced with the current release of DECwindows Motif. This manual also describes problems and restrictions from previous releases not documented in other manuals. This manual should be reviewed before installing or using DECwindows Motif.	DECwindows Motif Version 1.6
<i>HP DECwindows Motif for OpenVMS Installation Guide</i> Describes how to install the DECwindows Motif software.	DECwindows Motif Version 1.6
<i>HP DECwindows Motif for OpenVMS Documentation Overview</i> Lists and describes the contents and organization of the DECwindows Motif documentation set and provides information about the availability of the product documentation.	DECwindows Motif Version 1.6

1.2 User Documentation

The DECwindows Motif user documentation consists of manuals intended for general users and system administrators.

Table 1–2 lists the user and system management documentation and the latest product version for which each document was updated.

Table 1–2 DECwindows Motif User/System Management Documentation

Title and Description	Software Version
<i>Using DECwindows Motif for OpenVMS</i> Provides information about using DECwindows Motif techniques and features, customizing your environment, and advanced techniques such as using hyperapplications.	DECwindows Motif Version 1.1 ¹
<i>DECwindows Motif for OpenVMS Applications Guide</i> Describes how to start, use, and exit from DECwindows Motif applications.	DECwindows Motif Version 1.2 ¹
<i>HP DECwindows Motif for OpenVMS Management Guide</i> Provides information about setting up and maintaining the DECwindows Motif environment on both OpenVMS Alpha and OpenVMS I64 systems. It describes options for configuring the DECwindows client and server environments and provides tuning information when certain customization options are in effect.	DECwindows Motif Version 1.6 ¹

¹Refer to the latest version of the *HP DECwindows Motif for OpenVMS Release Notes* and *HP DECwindows Motif for OpenVMS New Features* for additional information on using DECwindows Motif.

1.3 New Desktop Documentation

This section provides information about the Common Desktop Environment manuals.

Table 1–3 lists the New Desktop documentation and the latest product version for which each document was updated.

Table 1–3 DECwindows Motif New Desktop Documentation

Title and Description	Software Version
<i>Getting Started With the New Desktop</i> This manual is designed for users of the New Desktop component of DECwindows Motif. It provides information for general users, system managers, and programmers. This manual describes the differences between the New Desktop environment and the Common Desktop Environment.	DECwindows Motif Version 1.2–4 ¹
<i>Common Desktop Environment: User's Guide</i> Describes the basic features of the Common Desktop Environment (CDE) and how to use the desktop and desktop applications.	DIGITAL UNIX Version 4.0 ¹

¹Refer to the latest version of the *HP DECwindows Motif for OpenVMS Release Notes* and *HP DECwindows Motif for OpenVMS New Features* for additional information on the New Desktop.

(continued on next page)

Documentation Summary

1.3 New Desktop Documentation

Table 1–3 (Cont.) DECwindows Motif New Desktop Documentation

Title and Description	Software Version
<i>Common Desktop Environment: Advanced User's and System Administrator's Guide</i> Covers advanced tasks in customizing the appearance and behavior of CDE.	DIGITAL UNIX Version 4.0 ¹
<i>Common Desktop Environment: Programmer's Overview</i> Provides a high-level view of the CDE development environment and the developer documentation set. Read this book before starting application design and development.	DIGITAL UNIX Version 4.0 ¹
<i>Common Desktop Environment: Programmer's Guide</i> Provides information about integrating an existing application into CDE or about developing a new application that uses the features and functionality of CDE.	DIGITAL UNIX Version 4.0 ¹
<i>Common Desktop Environment: Help System Author's and Programmer's Guide</i> Describes how to develop online help for CDE application software. It covers how to create help topics and how to integrate online help into an OSF/Motif application.	DIGITAL UNIX Version 4.0 ¹
<i>Common Desktop Environment: Style Guide and Certification Checklist</i> Provides application design style guidelines and the list of requirements for CDE application-level certification. CDE requirements consist of the OSF/Motif Version 1.2 requirements along with CDE-specific additions.	DIGITAL UNIX Version 4.0 ¹
<i>Common Desktop Environment: Internationalization Programmer's Guide</i> Provides information for internationalizing the desktop, enabling CDE applications to support various languages and cultural conventions in a consistent user interface.	DIGITAL UNIX Version 4.0 ¹
<i>Common Desktop Environment: Glossary</i> Provides a comprehensive list of terms used in CDE. It is a source and reference base for all users of CDE.	DIGITAL UNIX Version 4.0 ¹

¹Refer to the latest version of the *HP DECwindows Motif for OpenVMS Release Notes* and *HP DECwindows Motif for OpenVMS New Features* for additional information on the New Desktop.

1.4 Programming Documentation

DECwindows Motif for OpenVMS Version 1.6 is based on the X Window System, Version 11 Release 6.6 (X11R6.6) and incorporates Motif Version 1.2, an industry-standard interface to the X Window System. As such, DECwindows Motif contains the following layers of programming resources:

- **X Library (Xlib)** – the lowest-level interface to the X Window System, Xlib provides routines for creating windows, managing windows, performing graphic functions, and handling input events.
- **X Toolkit Intrinsic (Xt)** – Also known as the Intrinsic, Xt provides routines for combining existing widgets into a user interface and for creating new widgets.

Documentation Summary

1.4 Programming Documentation

- **OSF/Motif Toolkit (Xm)** – Xm provides routines for including Motif widgets within an application. The Motif Window Manager (MWM) and the User Interface Language (UIL) compiler are integral to Motif.
- **HP (Digital) Extensions to Motif Toolkit (DXm)** – DXm includes additional widgets and convenience routines to manipulate widgets. HP also provides non-C bindings for all levels of programming resources.

DECwindows Motif programming documentation covers each layer of programming resources. Industry-standard reference materials are discussed for Xlib, Xt, and Motif. HP documentation supplements the industry-standard documentation and provides additional information in the following areas:

- Reference information for DECwindows-specific widgets
- Non-C binding information
- Porting guidelines for moving applications from XUI-based interfaces to DECwindows Motif
- Additional style guidelines for both Motif and DECwindows-specific widgets
- Tutorial guides that supplement industry-standard reference manuals and that describe how to use DECwindows added-value features

The DECwindows Motif programming documentation is organized into three categories, which are further described in the following sections:

- Application programming (includes Xm and DXm)
- Xlib programming
- Device support and transport programming

1.4.1 Application Programming

If you are an application developer, you will need information about Xm, DXm, and Xt. You may also require information about non-C bindings and porting applications from XUI to Motif.

Table 1–4 lists the application programming documentation and the latest product version for which each manual was updated.

Table 1–4 DECwindows Motif Application Programming Documentation

Title and Description	Software Version
Industry-Standard Material	
<i>OSF/Motif Style Guide</i> (Prentice Hall) Describes the behavior and appearance of user interface components that comply with the OSF/Motif specification. Use this guide if you are an applications developer, a widget developer, a user interface developer, or a window manager developer.	OSF/Motif Release 1.2

(continued on next page)

Documentation Summary

1.4 Programming Documentation

Table 1–4 (Cont.) DECwindows Motif Application Programming Documentation

Title and Description	Software Version
Industry-Standard Material	
<i>OSF/Motif Programmer's Guide</i> (Prentice Hall) Describes how to write programs with the OSF/Motif Toolkit. The manual covers the following areas: <ul style="list-style-type: none">Motif widget setMotif Resource Manager (MRM)MWMUIL	OSF/Motif Release 1.2
<i>OSF/Motif Programmer's Reference</i> (Prentice Hall) Describes all OSF/Motif Toolkit, MWM, and MRM routines. The routines are documented as standard manual pages with the following parts: <ul style="list-style-type: none">• Syntax of the routine• Description of the routine, including the names and classes of all resources, the default values of the resources, the data types, and the method of access• Examples• Return values• Errors• Related information	OSF/Motif Release 1.2
Use this manual as your primary source of reference information for the Motif Toolkit.	
<i>X Window System Toolkit</i> (Digital Press) Documents Xt (more commonly known as the Intrinsics). The Intrinsics enable programmers to create a user interface from existing widgets and to create new widgets. The manual contains two main parts. The first part is a programming guide to using the Intrinsics. Each chapter in the guide covers a topic on two levels: one for application writers, the other for widget writers. The second part of the manual is the complete specification, which contains reference information for all Xt routines. Appendixes contain information about the following topics: <ul style="list-style-type: none">Resource file formatTranslation table syntaxCompatibility functionsIntrinsics error messagesDefined stringsParameter and return typesNaming conventionsX Registry	X Toolkit X11 Releases 5 to 7

(continued on next page)

Documentation Summary 1.4 Programming Documentation

Table 1–4 (Cont.) DECwindows Motif Application Programming Documentation

Title and Description	Software Version
HP Documentation	
<p><i>DECwindows Companion to the OSF/Motif Style Guide</i> Supplements material in the <i>OSF/Motif Style Guide</i> and provides guidelines for using the DECwindows-specific widgets.</p>	DECwindows Motif Version 1.2 ¹
<p><i>DECwindows Extensions to Motif</i> Provides reference information about DECwindows-specific widgets and the UIL extensions to support these widgets. The manual also describes additional convenience routines provided by DECwindows. The routine descriptions are for C bindings and include the same information as provided for the OSF/Motif routines. The UIL portion of the manual includes tables showing the complete DECwindows Motif widget set (OSF/Motif and DECwindows-specific widgets).</p>	DECwindows Motif Version 1.2 ¹
<p><i>DECwindows Motif Guide to Application Programming</i> Provides a tutorial for programmers using the DECwindows-specific widgets and additional convenience routines. DECwindows-specific widgets include the following:</p> <ul style="list-style-type: none"> Color mix Compound string text Help Print Structured visual navigation (SVN) <p>The manual contains many examples of how to use HP proprietary routines.</p>	DECwindows Motif Version 1.2 ¹
<p><i>DECwindows Motif for OpenVMS Guide to Non-C Bindings</i> Describes non-C bindings for all DECwindows Motif programming libraries. The bindings for Xlib are standard OpenVMS bindings that support all OpenVMS languages. The bindings for the Xt, Xm, and DXm are generic bindings that currently support Fortran and Pascal.</p>	DECwindows Motif Version 1.2 ¹
<p><i>Porting XUI Applications to Motif</i> Describes how to port applications developed for earlier XUI-based DECwindows to the DECwindows Motif platform. The manual documents the porting tools and provides additional guidelines.</p>	DECwindows Motif Version 1.0 ¹
<p>¹Refer to the latest version of the <i>HP DECwindows Motif for OpenVMS Release Notes</i> and <i>HP DECwindows Motif for OpenVMS New Features</i> for additional information on application programming.</p>	

Documentation Summary

1.4 Programming Documentation

1.4.2 Xlib Programming

Xlib programming documentation consists of three industry-standard reference manuals, and two HP programming guides.

Table 1–5 lists the Xlib programming documentation and the latest product version for which each manual was updated.

Table 1–5 DECwindows Motif Xlib Programming Documentation

Title and Description	Software Version
Industry-Standard Material	
<i>X Window System: Core Library and Standards</i> (Digital Press) Provides complete reference information about Xlib. The manual describes the following: <ul style="list-style-type: none">All Xlib Release 6 routinesThe Inter-Client Communication Conventions Manual (ICCCM), which covers conventions that clients should use to communicate with each otherX Logical Font Descriptions (XLFD), which specify server-independent conventions for font names and propertiesXlib routine and X protocol request equivalence tablesBitmap Distribution Format (BDF), which specifies font file formats	X Environment X11 Releases 6 and 6.1
<i>X Window System: Core and Extension Protocols</i> (Digital Press) Provides reference information about the core X Protocol and for many of the new language-independent extension protocols. The manual describes the following: <ul style="list-style-type: none">X Window System ProtocolX Display Manager ProtocolX Font Service ProtocolX Input Method ProtocolInter-Client Exchange ProtocolX Session Management ProtocolX Nonrectangular Window Shape ProtocolX Synchronization Extension ProtocolX Double Buffer Extension ProtocolX Keyboard Extension ProtocolX Input Device Extension ProtocolX Image Extension ProtocolX Big-Request Extension ProtocolXC-MISC Extension ProtocolX Record Extension ProtocolXTest Extension Protocol	X Environment X11 Releases 6 and 6.1

(continued on next page)

Documentation Summary

1.4 Programming Documentation

Table 1–5 (Cont.) DECwindows Motif Xlib Programming Documentation

Title and Description	Software Version
Industry-Standard Material	
<p><i>X Window System: Extension Libraries</i> (Digital Press) Provides reference information about the C language extension libraries provided that support the X Window System extension protocols. The manual describes the C functions available in each of the following libraries:</p> <ul style="list-style-type: none">Inter-Client Exchange libraryX Session Management libraryX Nonrectangular Window Shape libraryX Synchronization Extension libraryX Double Buffer Extension libraryX Keyboard Extension libraryX Input Device Extension libraryX Image Extension libraryX Record Extension libraryXTest Extension library	X Environment X11 Releases 6 and 6.1
<p><i>X and Motif Quick Reference Guide</i> (Digital Press) Contains C binding information for all Xlib, Xt, and Xm routines. The manual also contains summaries of widget resources and data structures, as well as information on X fonts and colors.</p>	X Environment X11 Release 5
HP Documentation	
<p><i>VMS DECwindows Guide to Xlib (Release 4) Programming: MIT C Binding</i> and <i>VMS DECwindows Guide to Xlib (Release 4) Programming: VAX Binding</i> Two HP Xlib programming guides are provided: one for MIT C style bindings and one for OpenVMS bindings that support the standard OpenVMS languages. These books serve as tutorials for Xlib programming and contain many sample programs. Examples are in C for the MIT C manual and in Fortran for the OpenVMS binding. Each book covers the following topics:</p> <ul style="list-style-type: none">Managing the client-server connectionWorking with windowsDefining graphics characteristicsUsing colorDrawing graphicsUsing pixmaps and imagesWriting textHandling eventsUsing the X Resource ManagerUsing grabsComplying with the Inter-Client Communications ConventionsCompiling fonts	DECwindows Motif Version 1.0 ¹
<p>¹Refer to the latest version of the <i>HP DECwindows Motif for OpenVMS Release Notes</i> and <i>HP DECwindows Motif for OpenVMS New Features</i> for additional information on Xlib programming.</p>	

Documentation Summary

1.4 Programming Documentation

1.4.3 Device Support and Transport Programming

Due to significant changes to the transport interface, to the range of supported devices, and the discontinuation of support for user-written transports, the following manuals have been archived and are no longer considered a formal part of the DECwindows Motif documentation set:

- *VMS DECwindows Device Driver Manual*
- *VMS DECwindows Transport Manual*

For support purposes, online versions of both manuals remain available from the DECwindows Motif section of the OpenVMS Documentation web site. See Chapter 2 for information on accessing this site.

For information on the DECwindows Motif transport interface, see the *HP DECwindows Motif for OpenVMS New Features* manual and the *HP DECwindows Motif for OpenVMS Release Notes*.

Ordering and Availability Information

This chapter describes ordering and availability information for the DECwindows Motif documentation.

2.1 Obtaining HP Documentation

Table 2–1 lists the limited set of DECwindows Motif manuals that are available in hardcopy format. These manuals are only available as a set; the individual part numbers are included for reference only.

Table 2–1 DECwindows Motif Hardcopy Documentation Set

Manual Title	Part Number
<i>HP DECwindows Motif for OpenVMS Cover Letter</i>	—
<i>HP DECwindows Motif for OpenVMS Release Notes</i>	—
<i>HP DECwindows Motif for OpenVMS New Features</i>	AA-RT2CC-TE
<i>HP DECwindows Motif for OpenVMS Documentation Overview</i>	AA-RT25C-TE
<i>HP DECwindows Motif for OpenVMS Installation Guide</i>	AA-RT26C-TE
<i>HP DECwindows Motif for OpenVMS Management Guide</i>	BA402-90001

To order a hardcopy documentation set, call the HP support channel for your geography and reference one of the following kits:

- DECwindows Motif for OpenVMS Alpha Documentation kit (QA-MV4AB-GZ)
- DECwindows Motif for OpenVMS I64 Documentation kit (BA402-MN)

Online versions of all the DECwindows Motif manuals are available from the following locations:

- OpenVMS Alpha Online Documentation Library
- OpenVMS I64 Online Documentation Library
- DECwindows section of the OpenVMS Documentation web site

The web site contains the most comprehensive listing of DECwindows Motif product documentation, including archived manuals. Visit the OpenVMS Documentation web site at <http://www.hp.com/go/openvms/doc>.

Ordering and Availability Information

2.2 Obtaining Third-Party Manuals

2.2 Obtaining Third-Party Manuals

HP no longer includes the third-party manuals listed in in Table 2–2 as part of the DECwindows Motif documentation set. You must order these manuals listed through their respective publishers or an authorized reseller.

Table 2–2 Third-Party Documentation Set

Manual Title	Author	Year	ISBN
Digital Press Manuals			
Digital Press is a division of Elsevier. For information about the Digital Press manuals, visit the web site for Elsevier at http://books.elsevier.com .			
<i>X Window System: Core Library and Standards</i>	Robert W. Scheifler James Gettys	1996	1-55558-154-4
<i>X Window System: Core and Extension Protocols</i>	Robert W. Scheifler James Gettys	1997	1-55558-148-X
<i>X Window System: Extension Libraries</i>	Robert W. Scheifler James Gettys	1997	1-55558-146-3
<i>X Window System Toolkit The Complete Programmer's Guide and Specification (Second Edition)</i>	Paul J. Asente Donna Converse Ralph R. Swick	1998	1-55558-178-1
<i>X and Motif Quick Reference Guide (Second Edition)</i>	Randi Rost	1993	1-55558-118-8
Prentice Hall Manuals			
Prentice Hall is now a unit of the Pearson Education. For information about the Prentice Hall manuals, visit the web site for Prentice Hall Professional Technical Reference at http://www.phptr.com .			
<i>OSF/Motif Style Guide Release 1.2</i>	Open Software Foundation	1992	0-13-643123-2
<i>OSF/Motif Programmer's Reference Release 1.2</i>	Open Software Foundation	1992	0-13-643115-1
<i>OSF/Motif Programmer's Guide Release 1.2</i>	Open Software Foundation	1992	0-13-643107-0

Other publishers have also produced documentation sets about the X Window system and Motif. Although the DECwindows Motif documentation set was not specifically designed to incorporate these manuals, they nonetheless provide useful information about X Windows and Motif. One popular set is from O'Reilly and Associates. Titles in the series include the following:

Volume 0: X Protocol Reference Manual
Volume 1: Xlib Programming Manual
Volume 2: Xlib Reference Manual
Volume 3M: X Window System User's Guide
Volume 4M: X Toolkit Intrinsic Programming Manual
Volume 5: X Toolkit Intrinsic Reference Manual
Volume 6A: Motif Programming Manual
Volume 6B: Motif Reference Manual, 2nd Edition
Volume 8: X Window System Administrator's Guide

For more information about these manuals, visit the Linux/UNIX section of the O'Reilly web site at <http://linux.oreilly.com>.