DECwindows Motif Version 1.2–3 for OpenVMS Installation Guide

Order Number: AA–Q1EAB–TE

January 1995

This manual describes the POLYCENTER Software Installation utility and the VMSINSTAL installation procedure for installing DECwindows Motif Version 1.2–3 for OpenVMS software.

Revision/Update Information:	This is a new manual.
Operating System:	OpenVMS AXP Version 1.5 VMS Version 5.5–2
Software Version:	DECwindows Motif Version 1.2–3 for OpenVMS Alpha DECwindows Motif Version 1.2–3 for OpenVMS VAX

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Preface

Intended Audience

This manual is intended for anyone who plans to install DECwindows Motif Version 1.2–3 for OpenVMS software.

Document Structure

This manual contains the following chapters and appendixes:

- Chapter 1 discusses how to prepare for installing DECwindows Motif Version 1.2–3 for OpenVMS software.
- Chapter 2 presents the procedure for installing DECwindows Motif Version 1.2–3 for OpenVMS software using the POLYCENTER Software Installation utility. You can optionally use this utility to install DECwindows Motif software on OpenVMS Version 6.1 systems. Note that you must install DECwindows Motif software on OpenVMS 6.2 (or higher) systems using the POLYCENTER Software Installation utility.
- Chapter 3 discusses how to install DECwindows Motif Version 1.2–3 for OpenVMS software using the VMSINSTAL procedure.
- Chapter 4 provides startup procedures. This chapter also includes a sample Installation Verification Procedure (IVP).
- Chapter 5 discusses tuning, customizing the environment, removing unwanted files, and reporting errors.
- Appendix A presents a sample DECwindows Motif installation using the POLYCENTER Software Installation utility on an OpenVMS Alpha system.

- Appendix B shows a sample Product Authorization Key (PAK) registration and a sample product installation using the VMSINSTAL procedure on an OpenVMS VAX system.
- Appendix C lists the software components for the DECwindows Motif Version 1.2–3 for OpenVMS product.

Associated Documents

In addition to this manual, the following documents are useful when installing DECwindows Motif Version 1.2–3 for OpenVMS software:

- *DECwindows Motif Version 1.2–3 for OpenVMS Release Notes*
- DECwindows Motif Version 1.2–3 for OpenVMS Software Product Description (SPD)
- *Managing DECwindows Motif for OpenVMS Systems*
- *OpenVMS System Manager's Manual*
- *OpenVMS System Management Utilities Reference Manual*
- *A Comparison of System Management on OpenVMS AXP and OpenVMS VAX*

Conventions

In this manual, every use of OpenVMS Alpha means the OpenVMS Alpha operating system, every use of OpenVMS VAX means the OpenVMS VAX operating system, and every use of OpenVMS means both the OpenVMS Alpha operating system and the OpenVMS VAX operating system.

In this manual, every use of DECwindows and DECwindows Motif refers to DECwindows Motif for OpenVMS software.

The following conventions are used to identify information specific to OpenVMS Alpha or to OpenVMS VAX:

Alpha	The Alpha icon denotes the beginning of information specific to OpenVMS Alpha.
VAX	The VAX icon denotes the beginning of information specific to OpenVMS VAX.

◆	The diamond symbol denotes the end of a section of information specific to OpenVMS Alpha or to OpenVMS VAX.

The following conventions are also used in this manual:

Ctrl/*x*	A sequence such as Ctrl/*x* indicates that you must hold down the key labeled Ctrl while you press another key or a pointing device button.
Return	In examples, a key name enclosed in a box indicates that you press a key on the keyboard. (In text, a key name is not enclosed in a box.)
. . .	Horizontal ellipsis points in examples indicate one of the following possibilities: • Additional optional arguments in a statement have been omitted. • The preceding item or items can be repeated one or more times. • Additional parameters, values, or other information can be entered.
. . .	Vertical ellipsis points indicate the omission of items from a code example or command format; the items are omitted because they are not important to the topic being discussed.
( )	In command format descriptions, parentheses indicate that, if you choose more than one option, you must enclose the choices in parentheses.
[ ]	In command format descriptions, brackets indicate optional elements. You can choose one, none, or all of the options. (Brackets are not optional, however, in the syntax of a directory name in an OpenVMS file specification or in the syntax of a substring specification in an assignment statement.)
{ }	In command format descriptions, braces surround a required choice of options; you must choose one of the options listed.

boldface text	Boldface text represents the introduction of a new term or the name of an argument, an attribute, or a reason (user action that triggers a callback). Boldface text is also used to show user input in Bookreader versions of the manual.
italic text	Italic text emphasizes important information and indicates complete titles of manuals and variables. Variables include information that varies in system messages (Internal error *number*), in command lines (/PRODUCER=*name*), and in command parameters in text (where *device-name* contains up to five alphanumeric characters).
UPPERCASE TEXT	Uppercase text indicates a command, the name of a routine, the name of a file, or the abbreviation for a system privilege.
-	A hyphen in code examples indicates that additional arguments to the request are provided on the line that follows.
numbers	All numbers in text are assumed to be decimal unless otherwise noted. Nondecimal radixes—binary, octal, or hexadecimal—are explicitly indicated.

1
Preparing to Install the Software

This chapter describes the preparation and requirements for installing DECwindows Motif Version 1.2–3 for OpenVMS software using either the POLYCENTER Software Installation utility or the VMSINSTAL procedure. Your Bill of Materials (BOM) and Indented Bills Report (BIL) specify the number and contents of your media. Verify the contents of your kit with this information. If your kit is damaged or if you find that parts are missing, contact your Digital representative.

Note

Digital strongly recommends that you read the release notes before proceeding with the installation. The DECwindows Motif Version 1.2–3 for OpenVMS product provides online release notes. For information about accessing the release notes:

- If you install the software using the POLYCENTER Software Installation utility, see Section 2.2.1.
- If you use the VMSINSTAL procedure to install the software, see Section 3.1.4.

This chapter presents information about the following topics:

- Section 1.1, License Registration
- Section 1.2, Supported Hardware
- Section 1.3, Prerequisites for the Installation Procedures
- Section 1.4, Required Operating System Software
- Section 1.5, OSF/Motif Release 1.1.3 and XUI Programming Support

- Section 1.6, Saving Customized Bookreader Files
- Section 1.7, Product and Device Names
- Section 1.8, Installation Procedure Requirements

1.1 License Registration

Before you install and run DECwindows Motif Version 1.2–3 for OpenVMS software on a newly licensed node or cluster, you must first register a License Product Authorization Key (License PAK) using the License Management Facility (LMF). The License PAK is provided along with the kit if you ordered the license and media together; otherwise, it is provided separately to a location based on your license order.

If you are installing DECwindows Motif Version 1.2–3 for OpenVMS software as an update on a node or cluster already licensed for this software, you have already completed the License PAK registration requirements.

You must register and load your license for DECwindows Motif Version 1.2–3 for OpenVMS before you run the Installation Verification Procedure (IVP) and use the software.

To register a license, log in to the system manager account (SYSTEM). Then choose one of the following options to register the license:

- Invoke the SYS$UPDATE:VMSLICENSE.COM procedure. When the procedure prompts you for information, respond with data from your License PAK.
- At the DCL prompt, enter the LICENSE REGISTER command with the appropriate qualifiers that correspond to License PAK information.

If you plan to use DECwindows Motif Version 1.2–3 for OpenVMS software on more than one node in a VMScluster, load the license on the other nodes after you complete this installation.

For complete information about using LMF, see the *OpenVMS License Management Utility Manual*.

See Appendix B for a sample installation of a PAK.

1.2 Supported Hardware

DECwindows Motif Version 1.2–3 for OpenVMS software can be installed on any supported Alpha or VAX processor. For a complete list of supported hardware, see the DECwindows Motif Version 1.2–3 for OpenVMS Software Product Description (SPD) for OpenVMS systems.

1.3 Prerequisites for the Installation Procedures

Before you can install and configure DECwindows Motif Version 1.2–3 for OpenVMS software, you must have the required versions of the OpenVMS operating system software, sufficient memory, and a license. (Refer to Section 1.1 for information about registering a License Product Authorization Key (PAK).)

Use the POLYCENTER Software Installation utility or the VMSINSTAL procedure to install your DECwindows Motif software according to the operating system information that follows.

Operating System	Installation Method
OpenVMS Alpha Version 6.2 (or higher) OpenVMS VAX Version 6.2 (or higher)	POLYCENTER Software Installation utility
OpenVMS Alpha Version 6.1 OpenVMS VAX Version 6.1	POLYCENTER Software Installation utility **or** the VMSINSTAL procedure
OpenVMS Alpha Version 1.5 through OpenVMS Alpha Version 6.0	VMSINSTAL procedure
VAX VMS Version 5.5–2 through OpenVMS VAX Version 6.0	VMSINSTAL procedure

1.4 Required Operating System Software

The DECwindows Motif Version 1.2–3 for OpenVMS software requires OpenVMS Alpha Version 1.5 (or higher) and VMS Version 5.5–2 (or higher) operating systems. If your system is not running one of these versions before you attempt to install DECwindows Motif Version 1.2–3 for OpenVMS, the installation fails.

A minimum of 12MB of memory is required for OpenVMS VAX systems; 16MB of memory is highly recommended. A minimum of 32MB of memory is required for OpenVMS Alpha systems; additional memory is highly recommended.

The OpenVMS operating system provides two subsets of components to support DECwindows Motif Version 1.2–3 for OpenVMS. To use DECwindows Motif Version 1.2–3 for OpenVMS software, your system should be running a version of the OpenVMS system that includes the following components:

- DECwindows Motif transports and base-system support

  This support is required to install DECwindows Motif Version 1.2–3 for OpenVMS and to run DECwindows Motif Version 1.2–3 for OpenVMS applications. During the installation of OpenVMS, you are prompted to specify whether you want to install this option.

  To determine whether this option was installed during the installation of OpenVMS, enter the following command:

  ```
  $ DIR SYS$LIBRARY:DECW$TRANSPORT_COMMON.EXE
  ```

  Use the DECwindows tailoring utility (DECW$TAILOR) to tailor on the DECwindows base support files using the DECwindows save sets that are provided with the OpenVMS kit as follows:

  ```
  $ RUN SYS$UPDATE:DECW$TAILOR.EXE
  ```

  See Section 5.3.2 for more details about this process.

- DECwindows X11 display server for OpenVMS, fonts, and device drivers, which are necessary to display DECwindows Motif Version 1.2–3 for OpenVMS applications or any other X11 applications on your Alpha or VAX system

  During the installation of OpenVMS, you are prompted to specify whether you want to install this option.

  To determine whether this option was installed during the installation of OpenVMS, enter the following command:

  ```
  $ DIR SYS$SYSTEM:DECW$SERVER_MAIN.EXE
  ```

If the DECW$SERVER_MAIN.EXE file is not on your system, you cannot display DECwindows Motif Version 1.2–3 for OpenVMS applications on your Alpha or VAX system. However, you can run DECwindows Motif Version 1.2–3 for OpenVMS applications that display on a DECwindows X11 display server that runs on another system. The DECwindows Motif Version 1.2–3 for OpenVMS installation procedure asks whether you want to continue the installation without workstation support.

Use the DECwindows tailoring utility (DECW$TAILOR) to tailor on the device-support files and the 75 or 100 dots-per-inch (dpi) font files using the DECwindows Motif save sets provided with the OpenVMS kit as follows:

```
$ RUN SYS$UPDATE:DECW$TAILOR.EXE
```

See Section 5.3.2 for a more detailed description of this process.

Note

See the release notes and cover letter for the version of the OpenVMS operating system that you are running for more information about the DECwindows X11 display server.

1.5 OSF/Motif Release 1.1.3 and XUI Programming Support

The X Window and OSF/Motif libraries that are provided with DECwindows Motif Version 1.2–3 for OpenVMS software are incompatible with those libraries provided with previous versions. Run-time compatibility is preserved, but the OSF/Motif Release 1.1.3 and XUI programming environments are not compatible.

Programming in the XUI and OSF/Motif Release 1.1.3 environments that was provided in previous versions of DECwindows Motif is no longer supported in the DECwindows Motif Version 1.2–3 for OpenVMS product. However, the installation procedure gives you the option of saving the XUI and OSF/Motif Release 1.1.3 programming files that already exist on your system. If you choose to save these programming files, they are moved to subdirectories where you can access them for programming. Specifically, the installation creates a subdirectory called [.DECW$113] in each of the directories

listed in Table 1–1 and moves the previous files into the new [.DECW$113] subdirectory.

Table 1–1 Directories for Previous XUI or OSF/Motif Programming Environments

Directory	Contents	New Location
DECW$INCLUDE	C header files	SYS$SYSROOT:[DECW$INCLUDE.DECW$113]
SYS$SYSTEM	UIL compiler	SYS$SYSROOT:[SYSEXE.DECW$113]
SYS$LIBRARY	Non-C language bindings	SYS$SYSROOT:[SYSLIB.DECW$113]

Refer to Section 2.3.2.5 and Section 3.1.6 for additional information about saving previous programming environments.

Note

The process for using the saved programming environment is documented in the programmer chapter of the release notes.

1.6 Saving Customized Bookreader Files

The installation procedure replaces the following file with a new version:

SYS$SYSROOT:[DECW$BOOK]LIBRARY.DECW$BOOKSHELF

If you customized this file and want to save it, copy the file to another directory or rename the file prior to the installation of DECwindows Motif Version 1.2–3 for OpenVMS software so that it is not deleted.

To copy your customized file to another directory, create the directory and define a global symbol in the file DECW$PRIVATE_APPS_SETUP.COM.

To create a Bookreader directory called SYS$COMMON:[DECW$BOOK_LOCAL], perform the following steps:

1. Create the directory and assign world read access as follows:

```
$ CREATE/DIRECTORY/PROTECTION=WORLD:R -
_$ SYS$COMMON:[DECW$BOOK_LOCAL]
```

2. Copy the LIBRARY.DECW$BOOKSHELF file to the new directory as follows:

```
$ COPY SYS$SYSROOT:[DECW$BOOK]LIBRARY.DECW$BOOKSHELF -
_$ SYS$COMMON:[DECW$BOOK_LOCAL]*/LOG
```

3. If the SYS$MANAGER directory does not contain the DECW$PRIVATE_APPS_SETUP.COM command file, copy the template file to a command file as follows:

```
$ COPY SYS$MANAGER:DECW$PRIVATE_APPS_SETUP.TEMPLATE -
_$ SYS$MANAGER:DECW$PRIVATE_APPS_SETUP.COM/LOG
```

4. Edit the DECW$PRIVATE_APPS_SETUP.COM file and define the global symbol DECW$BOOK to point to your Bookreader directory by adding the following line to the file:

```
$ DECW$BOOK == "SYS$COMMON:[DECW$BOOK_LOCAL]"
```

5. Restart DECwindows Motif using the following command:

```
$ @SYS$MANAGER:DECW$STARTUP RESTART
```

For more information about customizing your DECwindows Motif environment, see *Managing DECwindows Motif for OpenVMS Systems*.

1.7 Product and Device Names

During the installation, you must tell the system what product is being installed and which drive contains the distribution media. Refer to a product with its facility name and version; refer to a drive with its device name. Use the following format to enter product and device names:

- *facunvvv*

  Represents the facility name and version number of the product being installed, also known as the installation name. The following table explains the format of *facunvvv*.

Variable	Definition
fac	Product name code (1 to 36 alphanumeric characters)
u	Update character ‘‘u’’ (1 character)

Variable	Definition
n	Update version number (1 digit)
vvv	Major version number (3 digits)

For the DECwindows Motif Version 1.2–3 for OpenVMS installation, use the installation name DWMOTIFAXPU3012 for OpenVMS Alpha systems and DWMOTIFVAXU3012 for OpenVMS VAX systems.

- *ddcu*

  Specifies the device name of the source drive that holds the distribution media.

For additional information about device names on your system, see the upgrade and installation supplement for your Alpha or VAX processor.

1.8 Installation Procedure Requirements

The POLYCENTER Software Installation utility and the VMSINSTAL procedure are used to install OpenVMS updates and layered software products, including DECwindows Motif Version 1.2–3 for OpenVMS software.

This section discusses the requirements for installing your DECwindows Motif Version 1.2–3 for OpenVMS software.

The installation procedure checks the following:

- Whether you are logged in to an appropriately privileged account
- Whether any other users are logged in to the system
- Whether you have the minimum required system account quotas and limits
- Whether you have the minimum required disk space
- Whether you have the minimum required system parameter values

Prepare to install DECwindows Motif Version 1.2–3 for OpenVMS software by logging in to a privileged account, such as the system manager (SYSTEM) account. See Section 1.8.1 for the prerequisite privileges. Although Digital prefers that you perform the installation using the operator console or other hardcopy

terminal, you can perform the installation from a DECterm window.

1.8.1 Process Privileges

To install DECwindows Motif Version 1.2–3 for OpenVMS software, you must be logged in to an account that has the SETPRV privilege or the following privileges:

- CMKRNL
- WORLD
- SYSPRV

The installation procedures turn off the BYPASS privilege at the start of the installation and turns it back on when the installation is completed.

1.8.2 Process Account Quotas

The installation procedure requires that the installation account has the minimum quotas shown in Table 1–2.

Table 1–2 Process Quotas for the Installing Account

Quota Name	Value (OpenVMS VAX)	Value (OpenVMS Alpha)
ASTLM	24	250
BIOLM	18	150
BYTLM	32,768	64,000
DIOLM	18	150
ENQLM	30	2,000
FILLM	20	100

Use the OpenVMS AUTHORIZE utility to verify and to change process quotas for the installation account in the user authorization file (UAF). (Some sites may restrict the use of the AUTHORIZE utility to certain accounts or users.) For example, to change the BYTLM quota for the *account-name* installation account, enter the following commands:

```
$ SET DEFAULT SYS$SYSTEM
$ RUN AUTHORIZE
UAF> SHOW account-name
UAF> MODIFY account-name /BYTLM = 18000
UAF> SHOW account-name
UAF> EXIT
$ LOGOUT
```

After you change the quotas for the installation account, log out of the installation account and log in again for the new quotas to take effect. You can then proceed with the installation.

User account quotas are stored in the file SYS$SYSTEM:SYSUAF.DAT. For more information about modifying account quotas, see the description of the AUTHORIZE utility in the *OpenVMS System Management Utilities Reference Manual*.

1.8.3 Disk Space

Use Table 1–3 to determine the amount of free disk space that is required on the system disk to install DECwindows Motif components. However, because you can choose not to install all the components, your actual disk space requirement may be less.

To determine the number of free blocks on the system disk, enter the following command at the DCL prompt:

```
$ SHOW DEVICE SYS$SYSDEVICE
```

Table 1–3 Required Disk Space by Component

Component	Alpha	VAX
Base kit	68,500	45,000
Programming environment	12,600[1]	12,100[1]
C, C++	7,000	6,500
Fortran	2,500	2,500
Pascal	3,100	3,100
Example programs	13,200	11,300
Translated-image support	34,000	Not applicable

[1]This number includes all programming language support. The actual number of blocks required may be fewer depending on the language support you select.

(continued on next page)

Table 1–3 (Cont.) Required Disk Space by Component

Component	Alpha	VAX
Total disk space required:	128,300	68,400

The installation procedure checks for free disk space on the system disk. If sufficient space is not available, the installation procedure provides the following options:

- Install fewer optional files.
- Restart the installation and specify another disk to use as an alternate working device. See Section 1.8.3.1 for information about using an alternate working device.
- Terminate the installation, create more free disk space on the system disk, and restart the installation.
- Continue the installation and risk running out of disk space.

Note

If you run out of free disk space during the installation, the installation procedure fails.

1.8.3.1 Using an Alternate Working Device

If you install your DECwindows Motif software using the VMSINSTAL procedure, you can use the alternate working device (AWD) option to specify another disk to temporarily store the files while they are being unpacked from the save sets on the distribution media. Once the save sets are unpacked, the installation procedure adds or replaces the files that are necessary for the installation of DECwindows Motif Version 1.2–3 for OpenVMS software from the AWD to the system disk.

If this installation is to upgrade an existing DECwindows Motif environment, then the AWD option allows you to perform an installation with fewer free blocks on the system disk than are otherwise required.

The installation procedure creates a temporary working directory either on the AWD device or by default in the following location:

```
SYS$SYSROOT:[SYSUPD.facunvvv]
```

If you use the AWD option, you can specify a directory. Specifying a directory is optional, but the following guidelines apply:

- If you specify an existing directory, the installation procedure creates a working directory as a subdirectory within the directory that you specify (for example, [WORK.*facunvvv*]). The installation procedure deletes the working subdirectory after the installation is completed.
- If you do not specify a directory, the installation procedure creates a working directory on the specified device with a directory specification of [000000.*facunvvv*]. The installation procedure deletes the working directory after the installation is completed.
- If you specify a nonexistent directory, the installation procedure creates both the specified directory and a working directory as subdirectories within the directory that you specify. The installation procedure deletes only the working directory and not the originally specified directory after the installation is completed. You must delete the specified directory manually.

Use the following format to invoke the VMSINSTAL procedure and specify the AWD option:

```
$ @SYS$UPDATE:VMSINSTAL facunvvv dkcu OPTIONS N,AWD=ddcu:[dir]
```

Use the following definitions for the variables in the command line:

- For *facunvvv*, supply the product name and version number.

  For the DECwindows Motif Version 1.2–3 for OpenVMS installation, the value of *facunvvv* is DWMOTIFAXPU3012 for Alpha systems and DWMOTIFVAXU3012 for VAX systems.
- For *dkcu*, give the device name of the source drive that holds the distribution media.
- For *ddcu*, give the device name of the alternate working device.

- For *dir*, specify the name of the directory on the alternate working device where the product subdirectory will be created. The default is [000000].

For example, to install the DECwindows Motif Version 1.2–3 for OpenVMS product from the compact disc onto an OpenVMS Alpha system using DKA2 as the alternate working device, enter the following command:

```
$ @SYS$UPDATE:VMSINSTAL DWMOTIFAXPU3012 source-drive -
_$ OPTIONS N,AWD=DKA2:
```

1.8.3.2 Using the Distributed File Service

You can specify a temporary working directory on a disk that uses the Distributed File Service (DFS).

If you use a DFS-mounted disk as your alternate working device, the installation procedure erroneously reports that there are –1 free blocks on the alternate working device. This error occurs because the DFS client (the installation procedure, in this case) cannot determine the amount of free disk space on the DFS-mounted disk.

Before using a DFS-mounted disk, manually determine its free disk space. Log in to the system on which the disk is mounted, and enter the SHOW DEVICE command as follows:

```
$ SHOW DEVICE
```

1.8.4 System Parameters

Table 1–4 lists the minimum required system parameter values for the installation. Depending on the kinds of programs and applications running at your site, you might need higher values for some settings.

Table 1–4 Minimum Required System Parameter Values

System Parameter	Alpha Value	VAX Value
GBLSECTIONS	600[1]	420[1]
GBLPAGES	90,000[1]	62,000[1]
GBLPAGFIL	1,024	6,024
SWPOUTPGCNT	512	500
MAXBUF	8,192	2,048
VIRTUALPAGECNT	73,536	50,000
CHANNELCNT	255	255
PROCSECTCNT	64	40
PQL_DPGFLQUOTA	—	32,768
PQL_MPGFLQUOTA	32,768	—
PQL_MASTLM	100	100
PQL_MBIOLM	100	100
PQL_MBYTLM	100,000	40,000
PQL_MDIOLM	100	100
PQL_MENQLM	300	200
PQL_MFILLM	100	100
PQL_MPRCLM	10	8
PQL_MWSDEFAULT	1,024	512
PQL_MWSQUOTA	2,048	1,024
PQL_MWSEXTENT	8,192	2,048
CLISYMTBL	265	265
GH_RES_CODE	1,024[2]	—
GH_RSRVPGCNT	512	—
IMGRES_PAGES	2,000[2]	—

[1]If you have installed other software that uses global pages or global sections, you might need a higher minimum value. When you boot your system and DECwindows Motif starts, the values of free GBLPAGES and GBLSECTIONS are checked for your system. If you do not have sufficient values for GBLPAGES and GBLSECTIONS, the DECwindows Motif startup procedure prints a warning and provides a recommended value for these parameters.

[2]This system parameter is available only on OpenVMS Alpha Version 6.2 (or higher) systems.

(continued on next page)

Table 1–4 (Cont.) Minimum Required System Parameter Values

System Parameter	Alpha Value	VAX Value
WINDOW_SYSTEM	1	1
NPAGEDYN	670,000	735,000
PAGEDYN	289,000	274,000
WSMAX	12,000	4,096

Caution

If you do not ensure that your system has the necessary amount of global pages and global sections for the installation, the DCL tables can become corrupted.

1.8.5 Additional System Maintenance Procedures

This section explains how to use the System Generation utility (SYSGEN) and the AUTOGEN utility to prepare your system for the DECwindows Motif Version 1.2–3 for OpenVMS installation. The AUTOGEN utility uses system configuration data to automatically set system parameters.

1.8.5.1 Checking System Parameter Values

To check the values of your system parameters, invoke the SYSGEN utility by entering the following command at the DCL prompt:

```
$ RUN SYS$SYSTEM:SYSGEN
SYSGEN>
```

At the SYSGEN prompt, enter the SHOW command to display the value of a system parameter. The following command displays the value for the MAXBUF system parameter:

```
SYSGEN> SHOW MAXBUF
```

After checking the parameters with the SHOW command, enter the EXIT command at the SYSGEN prompt to return to DCL level.

If the current values are less than the values in Table 1–4, increase the system parameter settings. Section 1.8.5.3 describes the procedures for using the AUTOGEN utility to increase these values.

If the current values are less than the values in Table 1–4, increase the system parameter settings. Section 1.8.5.3 describes the procedures for using the AUTOGEN utility to increase these values.

1.8.5.2 Calculating the Amount of Free Global Pages and Global Sections

If your system parameter values are equal to or greater than the minimum values specified in Table 1–4, then you can continue with the product installation. However, to install and run DECwindows Motif Version 1.2–3 for OpenVMS software, you must have sufficient free global pages and global sections for the DECwindows Motif software and the file SYS$LIBRARY:DCLTABLES.EXE.

First determine how many free global pages and global sections exist on your system and how many are required to reinstall a new version of SYS$LIBRARY:DCLTABLES.EXE. Then, if necessary, use the AUTOGEN utility to increase the values of the GBLPAGES and GBLSECTIONS system parameters.

Enter the following DCL command to determine the number of global pages required for SYS$LIBRARY:DCLTABLES.EXE:

```
$ DIR/SIZE SYS$LIBRARY:DCLTABLES.EXE
```

This command returns the size (in blocks) of the file SYS$LIBRARY:DCLTABLES.EXE. As an approximation, use this figure as the number of global pages needed for the file.

Enter the WRITE command with the F$GETSYI lexical function to find the number of free global pages and global sections. The following example shows how to obtain this information at your terminal, which is the default for SYS$OUTPUT:

```
$ WRITE SYS$OUTPUT F$GETSYI("CONTIG_GBLPAGES") Return
15848
$ WRITE SYS$OUTPUT F$GETSYI("FREE_GBLSECTS") Return
24
```

See Table 1–5 to determine whether the amount of free global pages and global sections is sufficient. If these values are not sufficient to continue with the installation, then see Section 1.8.5.3, which describes the procedures for increasing these values using the AUTOGEN utility.

Table 1–5 Required Number of Free Global Pages and Global Sections

Currently Running DECwindows Motif		
System Parameter	**Alpha Value**	**VAX Value**
GBLPAGES	12,000	6,000
GBLSECTIONS	20	20

Not Currently Running DECwindows Motif		
System Parameter	**Alpha Value**	**VAX Value**
GBLPAGES	64,000	22,000
GBLSECTIONS	170	120

1.8.5.3 Changing System Parameter Values Using the AUTOGEN Utility

Use the AUTOGEN utility to change system parameters. AUTOGEN automatically adjusts values for parameters that are associated with the values you reset manually. To change system parameters with AUTOGEN, edit the file SYS$SYSTEM:MODPARAMS.DAT.

To change a parameter value listed in this file, delete the current value associated with that parameter and enter the new value.

To add a new parameter, add a line to the file and include both the name of the parameter and its value. For example:

```
MIN_MAXBUF = 8192
```

To modify incremental adjustments to parameters, such as global pages and global sections, use ADD_. The following example increases the global page setting by 20000:

```
ADD_GBLPAGES = 24000
```

Table 1–6 lists the system parameters that you need to adjust incrementally.

Table 1–6 Recommended System Parameter Values to Use with the ADD_ Option

System Parameter	Alpha Increment	VAX Increment
SYSMWCNT	—	195
GBLSECTIONS	180	130
GBLPAGES	44,000	24,000
GBLPAGFIL	768	5,000
NPAGEDYN	150,000	305,000
PAGEDYN	76,000	64,000

Note

When you set the page-file quota, do not use a value that exceeds the amount of page-file space available on the system.

After you enter all your changes, exit from the file and execute the AUTOGEN utility to recalculate your system parameters. Enter the following command to recalculate your system parameters and reboot the system:

```
$ @SYS$UPDATE:AUTOGEN GETDATA REBOOT
```

When you specify REBOOT, the AUTOGEN utility performs an automatic system shutdown and then reboots the system. Any users logged in to the system are immediately disconnected during the shutdown. The automatic reboot puts the new parameter values into effect.

For details about using AUTOGEN, see the section about the AUTOGEN utility in the *OpenVMS System Manager's Manual* and the AUTOGEN section in *OpenVMS System Management Utilities Reference Manual*.

1.8.6 Backing Up Your System Disk

Digital recommends that you back up your system disk before you install any software. At the beginning of the installation, the installation procedures asks whether your system disk is backed up. Use the backup procedures that are established at your site. For details about performing a system disk backup, see the section on the Backup utility in the *OpenVMS System Management Utilities Reference Manual*.

1.8.7 Notifying Other Users

To ensure that you are the only user logged in to the system, follow these steps:

1. Notify current users to log out. Enter the following command:

```
$ REPLY/ALL/BELL/SHUTDOWN "Log out for the installation of -
_$ DECwindows Motif Version 1.2-3 for OpenVMS please..."
```

2. Enter the following command to prevent nonprivileged users from logging in to the system:

```
$ SET LOGINS/INTERACTIVE=0
```

2

Using the POLYCENTER Software Installation Utility

This chapter describes how to install and configure DECwindows Motif Version 1.2–3 for OpenVMS software using the POLYCENTER Software Installation utility. The DECwindows Motif Version 1.2–3 for OpenVMS product supports POLYCENTER Software installations using the Digital Command Language (DCL) interface.

Specifically, this chapter presents information about the following topics:

- Section 2.1, Accessing Help Information
- Section 2.2, Preparing to Install the DECwindows Motif Version 1.2–3 for OpenVMS Software
- Section 2.3, Installing the Software
- Section 2.4, Recovering from Errors

Refer to the *OpenVMS System Manager's Manual* for complete details about installing and managing software products on your system. In addition to getting started information, the *OpenVMS System Manager's Manual* also provides information about several useful topics, such as:

- Removing installed products
- Reconfiguring installed products
- Copying software kits to new locations
- Retrieving product information
- Discussing differences between the POLYCENTER Software Installation utility and the VMSINSTAL procedure

Refer to Section 1.4 for information about prerequisite software and licences.

Note

You must use the POLYCENTER Software Installation utility to install your DECwindows Motif software on OpenVMS Version 6.2 (or higher) systems.

Caution

If you do not have a satisfactory backup copy of your system disk, do not attempt to install DECwindows Motif Version 1.2–3 for OpenVMS software. Back up the system disk (as described in the OpenVMS upgrade and installation supplement for your Alpha or VAX processor) before you install DECwindows Motif Version 1.2–3 for OpenVMS software.

Before beginning the installation procedure, review Chapter 1 for information about installation preparations and requirements.

2.1 Accessing Help Information

Online help is available with the installation utility for all PRODUCT commands and qualifiers. For help on a specific command, enter the DCL command HELP followed by the command and product name.

Refer to the following documents for information about tasks and PRODUCT commands and qualifiers:

- *OpenVMS System Manager's Manual*
- *OpenVMS System Management Utilities Reference Manual*
- *OpenVMS DCL Dictionary*

2.2 Preparing to Install the DECwindows Motif Version 1.2–3 for OpenVMS Software

Before you initiate the installation procedure, perform the following tasks:

- Extract the DECwindows Motif Version 1.2–3 for OpenVMS release notes.
- Notify system users that you are about to install the product.

2.2.1 Extracting and Printing the Product Release Notes

To extract a copy of the *DECwindows Motif Version 1.2–3 for OpenVMS Release Notes*, enter the PRODUCT EXTRACT RELEASE_NOTES command followed by the product name, DWMOTIF, at the DCL prompt:

```
$ PRODUCT EXTRACT RELEASE_NOTES DWMOTIF
```

Once you extract the release notes to a file, then you can print the file. Note that you do not need to install the product before you extract the release notes.

The *DECwindows Motif Version 1.2–3 for OpenVMS Release Notes* are also available in Bookreader and ASCII (.TXT) formats in the documentation directory on the DECwindows Motif Version 1.2–3 for OpenVMS CD–ROM. Refer to the *DECwindows Motif Version 1.2–3 for OpenVMS CD–ROM User's Guide* for information about accessing the release notes and other DECwindows Motif documentation.

2.2.2 Notifying System Users

Inform users on the system that you plan to install a product and that they must log out during the installation. To make sure that you are the only user logged in to the system, follow these steps:

1. Notify current users to log out. Enter the following command at the DCL prompt:

   ```
   $ REPLY/ALL/BELL/SHUTDOWN "Log out for the installation of -
   _$ DECwindows Motif Version 1.2-3 for OpenVMS please..."
   ```

2. Enter the following command at the DCL prompt to prevent nonprivileged users from logging in to the system:

```
$ SET LOGINS/INTERACTIVE=0
```

If possible, give users an estimated time when they can log in to the system again.

2.3 Installing the Software

The sections that follow take you through the stages of installing your DECwindows Motif Version 1.2–3 for OpenVMS software using the POLYCENTER Software Installation utility. Refer to Chapter 1 for information about account quotas, disk space, and system parameters.

Refer to the *OpenVMS System Manager's Manual* for complete information about responding to questions that the POLYCENTER Software Installation utility asks during product installation. For example, when you respond to questions, you can do the following:

- Enter a value and press the Return key to select options.
- Press the Return key to accept default values.
- Confirm your responses.

  After you respond to questions by selecting options or accepting default values, the installation utility displays a summary of your answers.

  Then a question displays asking whether you are satisfied with your answers and whether you want to continue with the installation. If you decide to change your responses, type No and press the Return key. You can then either reenter your responses or answer No and exit from the installation utility.
- Stop the installation by pressing Ctrl/Y.

  Note that this option is not recommended.

2.3.1 Software Kit Names

The names of the DECwindows Motif Version 1.2–3 for OpenVMS kits are as follows:

- OpenVMS Alpha kit: DEC–AXPVMS–DWMOTIF–V0102–3–1.PCSI
- OpenVMS VAX kit: DEC–VAXVMS–DWMOTIF–V0102–3–1.PCSI

When you install DECwindows Motif Version 1.2–3 for OpenVMS software, the installation procedure looks for the product kits in the PCSI$SOURCE directory. The appropriate kit is installed according to whether you are installing the software on an OpenVMS Alpha or VAX system.

Note

The PCSI_INSTALLATION.COM command procedure determines the system and version on which you are installing the DECwindows Motif software. See Section 2.3.2 for information about this command procedure.

2.3.2 Starting the Installation

Run the PCSI_INSTALLATION.COM command procedure, which is part of the POLYCENTER Software installation save set, at the DCL level to start the installation. Enter the following command at the DCL prompt:

```
$ @PCSI_INSTALLATION
```

This command procedure includes the following phases of the installation:

- Running preinstallation procedures
- Installing the save sets
- Running postinstallation procedures

The sections that follow discuss the steps and activities that take place once you execute the PCSI_INSTALLATION command procedure.

As the installation progresses, the installation utility displays a percentage that indicates how much of the installation is completed. For example:

```
Portion Done: 0%
...10%
...20%
...30%
```

When the installation is successfully completed, an informational message displays by the installation procedure. The following information is displayed after DECwindows Motif Version 1.2–3 for OpenVMS Alpha is successfully installed:

```
Portion Done: 0%
...10%
...20%
...30%
...40%
...50%
...60%
...70%
...80%
...90%
...100%
The following product has been installed:
DEC AXPVMS DWMOTIF V1.2-3
```

A similar message displays following successful installations on OpenVMS VAX systems.

2.3.2.1 Displaying the Copyright Message

The installation utility displays the following copyright message:

```
DECwindows Motif V1.2-3 for OpenVMS installation procedure.

Copyright Digital Equipment Corporation 1988, 1995. All rights reserved.

Restricted Rights: Use, duplication, or disclosure by the U.S. Government
is subject to restrictions as set forth in subparagraph (c)(1)(ii) of DFARS
252.227-7013, or in FAR 52.227-19, or in FAR 52.227-14 Alt. III, as
applicable.

This software is proprietary to and embodies the confidential technology
of Digital Equipment Corporation. Possession, use, or copying of this
software and media is authorized only pursuant to a valid written license
from Digital or an authorized sublicensor.
```

2.3.2.2 Determining System Information

The installation utility checks and stores information about the supported version of your OpenVMS Alpha or OpenVMS VAX system. For example:

```
**** Supported OpenVMS Alpha Version 6.1 DETECTED ****
```

Refer to Section 1.4 for information about system prerequisites.

The information that displays if your version of the OpenVMS operating system does not meet the criteria depends on the OpenVMS system:

Alpha

On OpenVMS Alpha systems, the following warning displays:

```
WARNING: This kit may be installed only on OpenVMS Alpha Version 6.1
         systems or higher.♦
```

VAX

On OpenVMS VAX systems:

```
WARNING: This kit may be installed only on OpenVMS VAX Version 6.1
         systems or higher.♦
```

2.3.2.3 Verifying Sufficient Allocation for the GBLPAGES and CLISYMTBL Values

The installation utility checks to ensure that adequate values are allocated for GBLPAGES and CLISYMTB system parameters:

- On OpenVMS Alpha systems, the minimum value for the GBLPAGES system parameter is 90,000; on OpenVMS VAX systems, the minimum value is 62,000.

If your setting is not sufficient, the installation fails and the following message displays on OpenVMS Alpha systems:

```
The SYSGEN parameter GBLPAGES is too low.  It must be at least 90000 for
OpenVMS Alpha.  Please increase GBLPAGES to a minimum of 90000 and
reinstall DECwindows. See the installation guide for information on setting
system parameters.
```

A similar message displays on OpenVMS VAX systems.

- On OpenVMS systems, the minimum value for the CLISYMTBL system parameter is 265.

  The installation fails and the following message displays if your setting is not sufficient:

```
The SYSGEN parameter CLISYMTBL is too low.  It must be at least 265.  Please
increase CLISYMTBL to a minimum of 265 and reinstall DECwindows. See the
installation guide for information on setting system parameters.
```

2.3.2.4 Verifying DECwindows Motif Support Files

The installation procedure verifies that DECwindows Motif applications and run-time support files are installed on the operating system (for example, transport and font files, which are required for running DECwindows Motif software).

```
**** DECwindows Motif application and run-time support files DETECTED ****
```

If the files are not installed, the following message displays:

```
The DECwindows Motif application and run-time support files have not been
installed.

You can use the DECwindows tailoring facility to tailor on the device
support files and the 75DPI and/or the 100DPI font files using the
DECwindows save sets which are shipped with the OpenVMS kit as follows:

     $ RUN SYS$UPDATE:DECW$TAILOR

The installation of DECwindows Motif cannot continue.
```

The installation procedure checks for the presence of support files that are needed to use the system as a workstation or as a workstation boot server. If the support files are installed, the following message displays:

```
**** DECwindows device support files DETECTED ****
```

If the files are not installed, users are warned with the following message that their systems cannot be a workstation or a workstation boot server:

```
The DECwindows device support files for using this machine as a workstation
or as a boot node for workstations have not been installed.

You can use the DECwindows tailoring facility to tailor on the device
support files and the 75DPI and/or the 100DPI font files using the
DECwindows save sets, which are shipped with the OpenVMS kit, as follows:

   $ RUN SYS$UPDATE:DECW$TAILOR
```

Then the installation procedure asks the following question:

```
Do you wish to continue with this installation without the workstation
support?
```

If you answer No (default) and press the Return key, the installation is stopped. Then you can run the DECW$MOTIF_ TAILOR utility and tailor on the necessary support files. Once you install the necessary support files, restart the installation procedure.

If you answer Yes and press the Return key, the installation continues.

Refer to Section 5.2 for information about using the DECW$MOTIF_ TAILOR utility.

2.3.2.5 Saving the Programming Environment

The installation procedure checks whether the OSF/Motif Release 1.1.3 programming environment exists on your system. If it is present, the installation procedure displays the following information and asks whether you want to save the OSF/Motif Release 1.1.3 programming environment:

```
The DECwindows Motif programming environment was installed with a previous
version of this kit. This environment is incompatible with the OSF/Motif
Release 1.2 environment provided with DECwindows Motif Version 1.2. The XUI
programming environment is also no longer included in DECwindows Motif
Version 1.2-3.

If you intend to continue developing programs for XUI or OSF/Motif Release
1.1.3, then save this environment.  Please refer to the installation
guide for more details and information on accessing these files in their
new location.

If you do not choose to save the XUI and OSF/Motif Release 1.1.3
programming environment, those files will be removed from the system disk.
```

If the OSF/Motif Release 1.1.3 and the XUI programming environments currently exist on your system, the following question displays:

```
Save the OSF/Motif Release 1.1.3 and XUI programming environment?
```

If you answer Yes and press the Return key to save the OSF/Motif Release 1.1.3 and XUI programming environments, a subdirectory called [.DECW$113] is created. The files that support that programming environment are moved to the [.DECW$113] subdirectory.

If you answer No and press the Return key, the files are deleted.

Refer to Section 1.5 for information about accessing files related to the OSF/Motif Release 1.1.3 programming environment.

2.3.2.6 Asking About Rebooting the System

In this step of the installation, the installation utility tells you if the DECwindows Motif Version 1.2–3 for OpenVMS product will not start because of incorrect system parameters. (See Section 1.8.4 for a list of the minimum required system parameter values.)

If your system parameters are incorrect, the procedure asks whether you want to reboot the system using the AUTOGEN utility after installing the software. Or, if you prefer, a procedure can instruct you on how to reboot your system when a reboot is necessary.

Note

Alpha

On OpenVMS Alpha Version 6.2 systems, the installation of DECwindows Motif Version 1.2-3 software requires a system reboot after the installation. If you do not allow a system shutdown, the installation procedure is aborted.♦

The installation utility displays the following message:

```
The installation of DECwindows Motif Version 1.2-3 on systems with OpenVMS
Alpha Version 6.2 (or higher) requires a system reboot after the
installation. If you do not allow a system shutdown, the installation
procedure will aborted.
```

The installation utility displays the following message:

```
DECwindows Motif will not start if your system parameters are not set
correctly.

o If you allow a system shutdown, the installation procedure reboots
  the system at the end of the installation. If your system parameters
  are incorrect, the installation runs AUTOGEN prior to the system
  reboot.

o If you do not allow a system shutdown, the installation procedure
  continues; you are informed at the end of the installation whether you
  need to modify your system parameters to start DECwindows Motif.
```

The installation utility asks the following question:

```
Will you allow a system reboot after this product is installed?
```

If you answer Yes (default) and press the Return key, the system is rebooted after the installation, if necessary.

If you answer No and press the Return key, the installation continues. The installation utility tells you whether you need to modify your system parameters to start the DECwindows Motif Version 1.2–3 for OpenVMS product.

2.3.2.7 Installing the Product

Next, the POLYCENTER Software Installation utility installs the DECwindows Motif Version 1.2–3 for OpenVMS software. The utility displays messages and asks a series of questions. For example:

```
To answer the following question, enter the directory specification
of the DECwindows Motif for OpenVMS POLYCENTER Software
Installation utility kit.

Where is the PCSI kit located?
```

Alpha

On an OpenVMS Alpha system, the following message displays:

```
The DECwindows Motif V1.2-3 for OpenVMS ALPHA PCSI kit not found
Type Control C to exit installation procedure or reenter kit location.
```

Then the following question displays again:

```
Where is the PCSI kit located?♦
```

VAX

On OpenVMS VAX systems, the following message displays if the installation utility cannot locate the DECwindows Motif software in the PSCI$SOURCE directory:

```
The DECwindows Motif V1.2-3 for OpenVMS POLYCENTER
Software Installation kit cannot be located.
Type Ctrl/C to exit the installation procedure or reenter the
directory specification of the kit.♦
```

If you enter the correct directory specification, the installation utility locates the software and proceeds with the installation.

If you press Ctrl/C, the following message displays:

```
Terminating installation of DECwindows Motif V1.2-3 for OpenVMS
```

2.3.2.8 Continuing the Installation

Once the installation utility locates the kit, the procedure asks whether you want to continue with the installation.

```
Do you want to continue? [Yes]
```

If you enter Yes (default) and press Return, the installation procedure displays the following information, which includes previously displayed copyright information. Note that this example shows the message that displays on OpenVMS Alpha systems:

```
*** DEC AXPVMS DWMOTIF V1.2-3: DECwindows Motif V1.2-3 for OpenVMS AXP
    Copyright Digital Equipment Corporation 1988, 1995. All rights reserved.
    Digital Equipment Corporation
    This product uses the PAK: DW-MOTIF
    Do you want all the default values for this product? [YES]
    DECwindows Motif runtime support files [YES]
    Programming Support (C Language) [YES]
    Fortran programming support [YES]
    PASCAL programming support [YES]
    Programming examples [YES]
    Translated Image Support (OSF/Motif V1.1.3) [NO]
    Do you want to view the values? [NO]
```

If you answer Yes to view the default values, the following information is displayed, followed by a question asking whether you are satisfied with these default values (default is Yes):

```
DEC AXPVMS DWMOTIF V1.2-3: DECwindows Motif V1.2-3 for OpenVMS AXP
    DECwindows Motif run-time support files: Yes
    Programming Support (C Language): Yes
    Fortran programming support: Yes
    Pascal programming support: Yes
    Programming examples: Yes
    Translated-Image Support (OSF/Motif Release 1.1.3): No

Are you satisfied with the values? [Yes]
```

If you are not satisfied with the values, type No to the question: Are you satisfied with the values? Then press Return; you can now change your responses to these questions.

2.3.2.9 Executing the Installation Procedure

Once you select the programming and translated-image support options, the installation utility begins the software installation. A message is displayed that shows you when the product installation begins and when it is completed, as in the following example.

```
%PCSIUI-I-DONEASK, execution phase starting
The following product will be installed:
DEC AXPVMS DWMOTIF V1.2-3
%PCSI-I-VOLINFO, estimated space information for volume DISK$AXP_V61
-PCSI-I-VOLSPC, 129661 required; 1567533 available; 1437872 net

Portion Done: 0%
...10%
...20%
...30%
...40%
...50%
...60%
...70%
...80%
...90%
...100%
The following product has been installed:
DEC AXPVMS DWMOTIF V1.2-3
```

2.3.2.10 Locating the Installation Verification Procedure (IVP)

The installation procedure tells you the location of the IVP, which you should run after the installation is successfully completed and DECwindows Motif is restarted. The following message displays:

```
Run the Installation Verification Procedure (IVP) after the installation
is completed and DECwindows Motif is restarted. The IVP is located in the
following directory: SYS$TEST:DECW$IVP.COM.
```

Refer to Section 4.2 for information about running the IVP.

2.3.2.11 Verifying the System Parameters

The installation procedure checks to ensure the following:

- Correct settings for the system parameters
- Detection of the required AUTOGEN file, DECW$AUTOGEN.COM

The installation procedure checks whether a system reboot is necessary. The following message displays:

```
Checking to see if your system parameters are correctly set....
```

Note

Alpha

On OpenVMS Alpha Version 6.2 systems, you cannot restart your DECwindows Motif software; you must reboot the system.♦

If your system parameters are set correctly, the installation procedure displays status information and tells you how to restart or start your DECwindows Motif Version 1.2–3 for OpenVMS software. If the parameters are not set correctly, the following message displays:

```
The installation procedure determined that some system parameter values
require modification to start the DECwindows Motif Version 1.2-3 for
OpenVMS software. To set your parameters correctly, run AUTOGEN using
the following DCL command:

$ @SYS$UPDATE:AUTOGEN GETDATA REBOOT CHECK_FEEDBACK

This procedure adjusts your system parameters and reboots the system.
```

The installation procedure displays messages similar to the following:

```
%DECW-W-BADVALUE, SYSGEN parameter GBLSECTIONS is 250, should be at least 600
%DECW-W-BADVALUE, Free GBLSECTIONS is 89, should be at least 210
%DECW-W-BADVALUE, SYSGEN parameter GBLPAGFIL is 128, should be at least 1024
%DECW-W-BADVALUE, SYSGEN parameter PROCSECTCNT is 32, should be at least 64
.
.
.
%AUTOGEN-I-BEGIN, GETDATA phase is beginning.
.
.
.
%AUTOGEN-I-END, GENPARAMS phase has successfully completed.
%AUTOGEN-I-BEGIN, GENFILES phase is beginning.
%AUTOGEN-I-REPORT, AUTOGEN has produced some informational messages which
        have been stored in the file SYS$SYSTEM:AGEN$PARAMS.REPORT. You may
 wish to review the information in that file.
%AUTOGEN-I-END, GENFILES phase has successfully completed.
%AUTOGEN-I-BEGIN, SETPARAMS phase is beginning.

%AUTOGEN-I-SYSGEN, parameters modified
%AUTOGEN-I-END, SETPARAMS phase has successfully completed.
%AUTOGEN-I-BEGIN, REBOOT phase is beginning.

The system is shutting down to allow the system to boot with the
generated site-specific parameters and installed images.

The system will automatically reboot after the shutdown and the
upgrade will be complete.
```

When you run AUTOGEN, the system parameters are reset correctly and the system is rebooted.

2.4 Recovering from Errors

An error during installation can occur if one or more of the following conditions exists:

- The operating system version is incorrect.
- The prerequisite software version is incorrect.
- Quotas necessary for successful installation are inadequate.
- Process quotas required by the installation utility are inadequate.
- The OpenVMS Help library is currently in use.

3
Using the VMSINSTAL Procedure

This chapter explains how to install DECwindows Motif Version 1.2–3 for OpenVMS software using the VMSINSTAL procedure. Included is a step-by-step description of the installation procedure, information about error recovery, and instructions for accessing the release notes.

Using the VMSINSTAL procedure, the DECwindows Motif Version 1.2–3 for OpenVMS installation takes approximately 45 minutes, depending on the processor type. The VMSINSTAL procedure installs the DECwindows Motif Version 1.2–3 for OpenVMS product on your system disk.

Note

A Product Authorization Key (PAK) for DECwindows Motif Version 1.2–3 for OpenVMS must be registered and loaded before starting the DECwindows Motif Version 1.2–3 for OpenVMS installation.

Caution

If you do not have a satisfactory backup copy of your system disk, do not attempt to install DECwindows Motif Version 1.2–3 for OpenVMS software. Back up the system disk (as described in the OpenVMS upgrade and installation supplement for your Alpha or VAX processor) before you install DECwindows Motif Version 1.2–3 for OpenVMS software.

Before beginning the installation procedure, review Chapter 1 for information about installation preparations and requirements.

This chapter presents information about the following topics:

- Section 3.1, Installation Procedure
- Section 3.2, Recovering from Errors
- Section 3.3, Accessing the Release Notes

3.1 Installation Procedure

The DECwindows Motif Version 1.2–3 for OpenVMS installation procedure consists of a series of questions and informational messages. Enter a question mark (?) for help at any time during the installation. See Appendix B for a sample VMSINSTAL installation of DECwindows Motif on an OpenVMS VAX system.

To stop the installation procedure, press Ctrl/Y. When you press Ctrl/Y, the installation procedure deletes all files created up to that point and then exits. You can then restart the installation.

3.1.1 Invoking the VMSINSTAL Procedure

To start the installation, invoke the VMSINSTAL command procedure from a privileged account, such as the SYSTEM account. The VMSINSTAL.COM file is located in the SYS$UPDATE directory.

When the system prompts you with a question during the installation procedure, the default answer is often listed in brackets ([ ]).

Perform the following steps to run the VMSINSTAL procedure and install DECwindows Motif Version 1.2–3 for OpenVMS software:

1. Locate the DECwindows Motif Version 1.2–3 for OpenVMS distribution media.
2. If your system is not already running, start up the system and log in to a privileged account, such as the system manager (SYSTEM) account.
3. Place the distribution media in the source drive. If your DECwindows Motif Version 1.2–3 for OpenVMS distribution kit contains more than one piece of media, place the first piece in the drive. During the installation procedure, you will be prompted to load the next piece of media. The paper labels on the media indicate the order in which you load them.

4. Start the VMSINSTAL procedure. On the command line, specify the product name (that is, the facility name): DWMOTIFAXPU3012 for OpenVMS Alpha systems or DWMOTIFVAXU3012 for OpenVMS VAX systems.

   Specify OPTIONS N to access the release notes, which are included in your media kit. The *DECwindows Motif Version 1.2–3 for OpenVMS Release Notes* can be displayed or printed before the installation begins. Enter the following command at the DCL prompt:

   ```
   $ @SYS$UPDATE:VMSINSTAL DWMOTIFxxxU3012 ddcu: OPTIONS N
   ```

   Note

   The example in this chapter describes a product installation on OpenVMS systems. This example substitutes *xxx* wherever Alpha or VAX normally appears. Substitute the correct letters for your system (Alpha or VAX) in place of *xxx*.

   For *ddcu*, specify the device name of the source drive that holds the distribution media. See Section 1.7 for more information about the format of product and device names. Also, see the OpenVMS upgrade and installation supplement for your Alpha or VAX processor.

   For example, if you install DECwindows Motif Version 1.2–3 for OpenVMS from a magnetic tape cartridge in drive MUA0:, enter the following command to invoke the VMSINSTAL command procedure:

   ```
   $ @SYS$UPDATE:VMSINSTAL DWMOTIFxxxU3012 MUA0: OPTIONS N
   ```

   If you install DECwindows Motif Version 1.2–3 for OpenVMS using the alternate working device (AWD) option described in Chapter 1, invoke the VMSINSTAL command procedure as follows:

```
$ @SYS$UPDATE:VMSINSTAL DWMOTIFxxxU3012 ddcu: OPTIONS N,AWD=ddcu:[dir]
```

   The first instance of *ddcu* is the device name of the source drive that holds the distribution media. The second instance of *ddcu* is the device name of the AWD, which is the target device. The variable *dir* is the name of the directory on the

alternate working device in which the product subdirectory is created. The default directory is [000000].

For example, if you are installing DECwindows Motif Version 1.2–3 for OpenVMS from a magnetic tape cartridge in drive MUA0: using alternate working device DUA2: and directory [INSTALL], enter the following command:

```
$ @SYS$UPDATE:VMSINSTAL DWMOTIFxxxU3012 MUA0: OPTIONS N,AWD=DUA2:[INSTALL]
```

If the command to execute the VMSINSTAL procedure fails, check to see if any of the following conditions occurred:

- You entered the product name incorrectly. VMSINSTAL displays the following message:

```
%VMSINSTAL-E-NOPRODS, None of the specified products were found
```

- You specified an incorrect name for the source drive. VMSINSTAL displays an ''invalid device'' error message and prompts you until you enter the name of a source device that exists on the system. Remember to enter a colon (:) after the device name.

The VMSINSTAL procedure displays messages similar to the following:

```
   OpenVMS xxx Version 6.1 Software Product Installation Procedure

It is 20-Jan-1995 at 08:02
Enter a question mark (?) at any time for help.
```

3.1.2 Confirming System Backup

The VMSINSTAL procedure asks the following question:

```
* Are you satisfied with the backup of your system disk [Yes]?
```

If you made a backup copy of your system disk, press the Return key and proceed to Section 3.1.3.

If you did not make a backup copy of the system disk, do the following:

1. Enter No and press the Return key. The VMSINSTAL procedure exits and returns you to DCL level.
2. Back up the system disk as described in the OpenVMS upgrade and installation supplement for your Alpha or VAX processor.

3. After you make a backup copy of the system disk, restart the installation procedure from step 4 in Section 3.1.1.

3.1.3 Mounting Distribution Media

The VMSINSTAL procedure asks you where you will mount the distribution volumes:

```
* Where will the distribution volumes be mounted:
```

Enter the directory specification in the following format:

```
devicename:[directory]
```

Then the procedure tells you to enter the name of the product (facility name); enter the name (for example, DWMOTIFVAXU3012).

```
Enter the names of the product to be processed from the first distribution
volume set.
* Product: DWMOTIFxxxU3012
```

When the installation begins, the VMSINSTAL procedure displays informational text similar to the following:

```
The following products will be processed:
  DWMOTIFxxx V1.2-3

   Beginning installation of DWMOTIFxxxU3012 Version 1.2-3 at 08:04
%VMSINSTAL-I-RESTORE, Restoring product save set  A...
```

3.1.4 Choosing a Release Notes Option

If you specify OPTIONS N during step 4 in Section 3.1.1, the VMSINSTAL procedure prompts you to select a release notes option:

```
Release notes included with this kit are always copied to SYS$HELP.

    Additional Release Notes Options:

 1.  Display release notes
 2.  Print release notes
 3.  Both 1 and 2
 4.  None of the above

* Select option [2]:
```

Enter the number of the option you want:

- Option 1 displays the release notes on the terminal.

- Option 2 prints the release notes (default).
- Option 3 displays and prints the release notes.
- Option 4 allows you to continue with the installation if you do not want to display or print the release notes.

Note

Digital recommends that you read the release notes before continuing the installation.

If you choose option 1, the release notes display on the terminal. You are prompted to press Return to continue reading the release notes. If you want to end the display and continue the installation, press Ctrl/C. After you press Ctrl/C, you are asked whether you want to continue with the installation; you are informed that the release notes have been moved to SYS$HELP.

Caution

Do not press Ctrl/Y; if you do, the installation ends.

If you choose option 2 or 3, you are prompted for the name of the print queue. If you do not specify a print queue, the release notes are queued to SYS$PRINT by default.

3.1.5 Continuing the Installation

After the VMSINSTAL procedure processes your release notes option, the following message displays:

```
* Do you want to continue the installation [No]?
```

If you want to continue with the installation, enter Yes and press Return. If you want to end the installation, press the Return key.

Regardless of the release notes option you select, the VMSINSTAL procedure copies the release notes to the SYS$HELP directory. See Section 3.3 for information about how to access the release notes once they are copied to the SYS$HELP directory.

```
%VMSINSTAL-I-RELMOVED, Product's release notes have been moved to SYS$HELP.

      *** Installing DECwindows Motif for OpenVMS xxx software ***

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3.1.6 Preserving the OSF/Motif Release 1.1.3 Programming Environment

If DECwindows Motif is already installed on your system, the OSF/Motif Release 1.1.3 programming environment is incompatible with DECwindows Motif Version 1.2–3 for OpenVMS software. (Note that the OSF/Motif Release 1.2 programming environment is overwritten with the OSF/Motif Release 1.2.3 Toolkit when you install the DECwindows Motif Version 1.2–3 for OpenVMS software.)

The installation procedure asks whether you want to preserve the OSF/Motif Release 1.1.3 programming environment:

```
  The DECwindows Motif programming environment was installed with a
  previous version of this kit.  This environment is incompatible with the
  OSF/Motif Release 1.2.3 environment provided with DECwindows Motif Version
  1.2-3. The XUI programming environment is also not included in
  DECwindows Motif Version 1.2-3.

  If you intend to continue developing programs for XUI or OSF/Motif
  Release 1.1.3 you should save this environment.  Please refer to the
  installation guide for more details and information on accessing these
  files in their new location.

  If you do not choose to save the XUI and OSF/Motif Release 1.1.3
  programming environment, those files will be removed from the system
  disk.

* Do you want to save the OSF/Motif Release 1.1.3 and XUI
* programming support files [No]?
```

If you want to preserve the XUI and OSF/Motif Release 1.1.3 programming environment, type Yes and press the Return key. The installation procedure creates subdirectories that contain the OSF/Motif Release 1.1.3 programming files so that they can be used for programming at a later time.

See Section 1.5 for information about how to reference the previous version of the programming support files.

3.1.7 Installing the Entire Kit

You can install the entire DECwindows Motif Version 1.2–3 for OpenVMS software kit, or you can install part of the kit. The DECwindows Motif base kit is always installed; the DECwindows Motif Version 1.2–3 for OpenVMS programming environment is optional.

The procedure asks you whether you want to install the entire kit:

```
  You can install the DECwindows Motif kit completely or in selected
  portions.  A complete installation requires as many as 68,400 blocks.
  If you choose to perform a partial installation, you can select
  (tailor) the programming support files that support your DECwindows
  Motif application development.  Whether you perform a complete or partial
  installation, this kit provides support for running DECwindows Motif
  applications on OpenVMS compute servers.

* Do you want to install the entire kit [Yes]?
```

If you want to install the entire kit, press the Return key and verify your kit selections (see Section 3.1.9). If you choose not to install the entire kit, enter No and continue with questions about installing programming support (see Section 3.1.8).

3.1.8 Choosing Programming Support Files

The installation procedure asks whether you want to install programming support:

```
  This installation procedure provides support files for developing
  DECwindows Motif applications in several programming languages.  These
  files are needed only to develop applications and are not required to run
  DECwindows Motif applications.  The free disk space requirement for each
  programming support file ranges from 3000 to 8000 blocks.

* Do you want to install DECwindows Motif programming support [Yes]?
```

Press the Return key to install programming support. The following message displays:

```
  Support files are supplied for the following OpenVMS programming languages:

        Fortran, Pascal

  In addition, support files are supplied for programming in the C language
  using conventions and standards developed at the Massachusetts Institute
  of Technology.
```

If you choose not to install programming support, enter No and proceed to the instructions in Section 3.1.9. The installation procedure asks whether you want to install all of the programming support files:

```
* Do you want to install all programming language support files [Yes]?
```

Press the Return key if you want to install all the languages. If you do not want to install all the languages, enter No and press the Return key. Each language then displays. Enter Yes for each language that you want to install.

The installation procedure asks whether you want to install DECwindows Motif programming example files:

```
* Do you want to install DECwindows Motif programming examples [Yes]?
```

Press the Return key if you want to install the programming example files. If you enter No, the example files are not installed.

Alpha

On OpenVMS Alpha systems, the procedure asks whether you want to install DECwindows Motif translated-image support:

```
  This installation procedure provides support files for running your
  DECwindows Motif OpenVMS VAX applications on OpenVMS Alpha systems using
  the DECmigrate product.  These files support applications developed
  for the OSF/Motif Release 1.1.3 toolkit.

  These files are not required to run DECwindows Motif OpenVMS Alpha
  applications.  The free disk space requirement for these support files
  is approximately 32,000 blocks.

* Do you want to install DECwindows Motif for OpenVMS Alpha
* translated image support [Yes]
```

Press the Return key if you want to install translated-image support. If you enter No, translated-image support is not installed. ♦

3.1.9 Verifying Kit Selections

The components of the kit that you selected now display; you can verify that these choices are correct. A message similar to the following displays:

```
  You have selected the following portions of the kit:
 o  DECwindows Motif applications and run-time Libraries
 o  DECwindows Motif for OpenVMS Alpha translated image support
 o  DECwindows Motif programming examples
```

```
  o  DECwindows Motif programming support

         Fortran, Pascal
   MIT C language programming conventions

  o  OSF/Motif Release 1.1.3 and XUI saved programming support

* Are these selections correct [Yes]?
```

Press the Return key if the choices are correct. If you want to change your selections, enter No and press the Return key. You are prompted by the previous questions again, beginning with whether you want to install the entire kit (see Section 3.1.7). After you repeat the selection procedure and are satisfied with your selections, enter Yes and press the Return key.

3.1.10 Verifying Disk Space

The installation procedure checks whether your system disk contains a sufficient number of free blocks.

1. If the blocks are available, the installation continues (see Section 3.1.11).
2. If you do not have sufficient system disk space to install the portions you chose, the installation displays a message similar to the following:

```
  Your system disk has only 25364 free blocks, and
  you have selected to install approximately 76050 blocks.

                          * * * N O T E * * *

  The installation procedure has determined that you do not have enough
  disk space to complete the installation.  However, it may be possible
  to continue successfully if you are installing DECwindows Motif on a
  system that already has DECwindows Motif installed.

* Do you want to reselect which DECwindows Motif options to install [Yes]?
```

If you press the Return key, you can reselect the DECwindows Motif options beginning with those described in Section 3.1.7. If you enter No, the procedure asks whether you want to continue the installation:

```
* Do you want to continue the installation anyway [Yes]?
```

Caution

If you press the Return key, the installation continues. However, if you exceed the amount of available disk space, the installation fails.

If you enter No, the installation ends. You can then either free up blocks on the system disk and restart the installation or start the installation again using the AWD option. (See Section 1.8.3.1 for information about using the AWD option.)

3. If you specify an alternate working device that does not have sufficient disk space to install the portions you have chosen, the installation displays a message similar to the following:

```
Your specified alternate working directory device has only 68977
free blocks, and this installation will require approximately 76050 blocks.

You should either reselect which DECwindows Motif options to install, or
restart this installation using an alternate working directory device with
more free blocks.

                *  *  *  NOTE  *  *  *

Although the installation procedure estimates you do not have enough disk
space to complete the installation, it may be possible to continue
successfully if you are installing DECwindows Motif on a system which
already has DECwindows installed.

* Do you want to reselect which DECwindows Motif options to install [Yes]?
```

If you press the Return key, you can reselect the DECwindows Motif options beginning with those described in Section 3.1.7. If you enter No, the procedure asks whether you want to continue the installation:

```
* Do you want to continue the installation anyway [Yes]?
```

If you press the Return key, the installation continues.

Caution

If you lack sufficient free disk space for installation on the alternate working device, the installation procedure ends.

If you enter No, the installation procedure ends. Restart the installation once you set up an alternate working device with sufficient disk space. (See Section 1.8.3.1 for more information about using the AWD option.)

3.1.11 Verifiying License Registration

The installation procedure continues and displays license information similar to the following:

```
  A registered and loaded product authorization key for DW-MOTIF is
  required to run any DECwindows Motif for OpenVMS application. If you
  answer No to the next question, the installation of DECwindows Motif for
  OpenVMS will be terminated.

        Product:      DW-MOTIF
        Producer:     DEC
        Version:
        Release Date:

* Does this product have an authorization key registered and loaded ?
```

Type Yes to continue with the installation if your authorization key is registered and loaded. If you enter No, the following message displays and the installation ends:

```
Installation of DECwindows Motif cannot continue because you do
not have a registered and loaded authorization key.
```

See Section 1.1 for more information about license registration. After you register and load your authorization key, restart the DECwindows Motif Version 1.2–3 for OpenVMS installation beginning at step 4 in Section 3.1.1.

3.1.12 Performing a System Reboot

The installation procedure suggests that you perform a system reboot to ensure successful installation of DECwindows Motif Version 1.2–3 for OpenVMS software:

```
  DECwindows Motif will not start if your system parameters are not
  correct.

  o If you allow a system shutdown, the installation procedure will
    reboot the system at the end of the installation.  If your system
    parameters are incorrect, the installation will run AUTOGEN prior
    to the system reboot.

  o If you do not allow a system shutdown, the installation procedure
    will continue, and you will be informed at the end of the
    installation whether you need to modify your system parameters in
    order to start DECwindows Motif.
```

```
    To complete the installation of this product, you should reboot
    the system.  If it is not convenient to reboot at this time, then
    enter No to the following question.

    If you enter No, the installation procedure will continue.

* Will you allow a system reboot after this product is installed [Yes]?
```

If you entered No to the shutdown question, no further questions are asked.

If you answered Yes to the shutdown question, the VMSINSTAL procedure displays the following questions about the shutdown:

```
* How many minutes for system shutdown [0]?
* Do you want to do an automatic system reboot [Yes]?

  No further questions will be asked.
```

Caution

To avoid confusion with file versions when activating an image or application, perform the necessary procedures to restart the DECwindows Motif Version 1.2–3 for OpenVMS software as indicated during the installation in Section 3.1.14.

3.1.13 Reading Informational Messages

The VMSINSTAL procedure lists the directories that are created and the save sets that are restored. The VMSINSTAL procedure prints out a message indicating that the files will be moved to their target directories.

- If you perform the installation using media other than 9-track magnetic tape, messages similar to the following display:

```
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
VMI$ROOT:[DECW$INCLUDE.DECW$113].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
VMI$ROOT:[SYSEXE.DECW$113].
%VMSINSTAL-I-SYSDIR, This product creates system disk directory
VMI$ROOT:[SYSLIB.DECW$113].
%VMSINSTAL-I_RESTORE, Restoring product save set B ...
%VMSINSTAL-I_RESTORE, Restoring product save set C ...
%VMSINSTAL-I_RESTORE, Restoring product save set D ...
%VMSINSTAL-I-RESTORE, Restoring product save set E ...
%VMSINSTAL-I-RESTORE, Restoring product save set F ...
%VMSINSTAL-I-RESTORE, Restoring product save set G ...
%VMSINSTAL-I-RESTORE, Restoring product save set H ...
%VMSINSTAL-I-RESTORE, Restoring product save set I ...
%VMSINSTAL-I-RESTORE, Restoring product save set J ...
%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...
```

- If you perform the installation using 9-track magnetic tape, some of the files are compressed into text libraries. The installation procedure informs you that the data is being decompressed and displays messages similar to the following:

```
%VMSINSTAL-I_RESTORE, Restoring product save set B...
%VMSINSTAL-I_RESTORE, Restoring product save set C...
%VMSINSTAL-I_RESTORE, Restoring product save set D...
%VMSINSTAL-I_RESTORE, Restoring product save set E...
%VMSINSTAL-I-RESTORE, Restoring product save set F ...
%VMSINSTAL-I-RESTORE, Restoring product save set G ...
%VMSINSTAL-I-RESTORE, Restoring product save set H ...
%VMSINSTAL-I-RESTORE, Restoring product save set I ...
Decompressing H_E_DECW$INCLUDE
Decompressing H_E_SYSLIB
%VMSINSTAL-I_RESTORE, Restoring product save set J...
%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...
```

The installation procedure then informs you that a spurious error message will be displayed, which you can safely ignore:

```
You can ignore the following NCP error message(s).

%NCP-I-SUCCESS,  Success
Object = X$X0
%NML-I-RECDELET, Database entry deleted
```

You are notified that you should run the Installation Verification Procedure (IVP) after the installation is completed and after you start the DECwindows Motif software. (See Section 4.2 for more information about running the IVP.)

```
The Installation Verification Procedure (IVP) should be run after the
installation has been completed and DECwindows Motif has been restarted.
The IVP can be found in SYS$TEST:DECW$IVP.COM.
```

3.1.14 Using the AUTOGEN Utility to Set System Parameters

The installation procedure might automatically run AUTOGEN, depending on which type of system you are using:

- A nonworkstation system

  If you install DECwindows Motif Version 1.2–3 for OpenVMS on a nonworkstation system (that is, an OpenVMS host system), the following message displays:

  ```
  This system is not a workstation.
  It will not be necessary to run AUTOGEN.
  ```

- A workstation system that runs DECwindows Motif Version 1.2–3 for OpenVMS software with correct system parameters

  If you install DECwindows Motif Version 1.2–3 for OpenVMS on a workstation system and your system parameters are correct, the following message displays:

```
The installation procedure has determined that your system parameters are
set correctly and that it will not be necessary to run AUTOGEN or reboot
the system.

If your system is already running DECwindows Motif, restart DECwindows
Motif with the following DCL command:

     $ @SYS$MANAGER:DECW$STARTUP RESTART

If your system is NOT already running DECwindows Motif, start DECwindows
Motif with the following DCL command:

     $ @SYS$MANAGER:DECW$STARTUP

                         * * * N O T E * * *

If you are installing DECwindows Motif from your workstation console, log
off after you enter the command to start DECwindows Motif.
```

- A workstation system that runs DECwindows Motif Version 1.2–3 for OpenVMS software with incorrect system parameters

  If you install DECwindows Motif Version 1.2–3 for OpenVMS on a workstation system and your system parameters need to be reset, the following message displays:

```
  The installation of DECwindows Motif has determined that some of your
  system parameter values will require modification in order to start
  DECwindows Motif Version 1.2-3 for OpenVMS.  To set your parameters
  correctly, run AUTOGEN using the following DCL command:

        $ @SYS$UPDATE:AUTOGEN GETDATA REBOOT CHECK_FEEDBACK

  This will adjust your system parameters and reboot the system.
```

- A workstation system that runs DECwindows Motif Version 1.2–3 for OpenVMS with incorrect system parameters, and you answered Yes to a system shutdown

```
  The OpenVMS AUTOGEN procedure will now be run to set your system
  parameters. After that, your system will be automatically rebooted.

  After the system has been rebooted, successful installation of the
  workstation software will be indicated by the appearance of the
  Start Session window.

%AUTOGEN-I-BEGIN, GETDATA phase is beginning.
   .
   .
   .
%AUTOGEN-I-BEGIN, GENPARAMS phase is beginning.
   .
   .
   .
%AUTOGEN-I-BEGIN, GENFILES phase is beginning.
   .
   .
   .
%AUTOGEN-I-BEGIN, SETPARAMS phase is beginning.
   .
   .
   .

        Installation of DWMOTIFxxxU3 V1.2 completed at 16:39

%VMSINSTAL-I-SHUTDOWN, This product requires that the system be rebooted.

        SHUTDOWN -- Perform an Orderly System Shutdown
                    on node NODE01
   .
   .
   .
```

3.1.15 Completing the Installation Procedure

When the installation is completed, a message similar to the following displays:

```
Installation of DWMOTIFxxxU3 V1.2 completed at 16:39
VMSINSTAL procedure done at 16:39
```

These messages indicate that the installation procedure completed successfully.

Alpha

On OpenVMS Alpha systems, two additional messages similar to the following display when you install DECwindows Motif:

```
Adding history entry in VMI$ROOT:[SYSUPD]VMSINSTAL.HISTORY
Creating installation data file: VMI$ROOT:[SYSUPD]DWMOTIFAXPU3012.VMI_DATA
```

On OpenVMS Alpha systems, the file VMI$ROOT:[SYSUPD]VMSINSTAL.HISTORY contains an entry for each product that you installed using the VMSINSTAL procedure. This entry contains the following information:

- Product name
- Product version
- Installation date
- Installation status
- Whether an IVP is available
- Node name on which the product is installed
- Name of installer

An additional file is created on OpenVMS Alpha systems and contains the following installation data:

- File names that are created, deleted, modified, or renamed
- Names of the accounts that are created or modified♦

Your system automatically shuts down if AUTOGEN is run; you must then reboot your system. See the upgrade and installation supplement for your Alpha or VAX processor for instructions on how to reboot your system.

Note

If you upgrade your system with a higher version of OpenVMS at a later time, you might need to reinstall the DECwindows Motif Version 1.2–3 for OpenVMS software.

3.2 Recovering from Errors

Errors can occur during the installation if any of the following conditions exist:

- Incorrect OpenVMS operating system version
- Insufficient quotas
- Insufficient values for system parameters)
- OpenVMS help library is currently in use
- Product license is not registered and loaded

For descriptions of the error messages generated by these conditions, see the documents listed in the *Associated Documents* section in the Preface. These documents may help you diagnose errors and decide what corrective actions to take.

3.3 Accessing the Release Notes

During the installation, the VMSINSTAL procedure copies the *DECwindows Motif Version 1.2–3 for OpenVMS Release Notes* to the SYS$HELP:DECW$MOTIFU3012.RELEASE_NOTES file. Once you return to DCL level, you can print this file or display it at a terminal. Refer to Section 3.1.4 for more information about accessing the release notes.

4

After Installing the Software

This chapter discusses the tasks that you need to perform after the DECwindows Motif Version 1.2–3 for OpenVMS installation is completed:

- Section 4.1, Starting the DECwindows Motif Software
- Section 4.2, Running the IVP
- Section 4.3, Choosing an Alternative Console

If the DW–MOTIF license that is installed on your system is not valid, appropriate messages display on your console terminal and DECwindows Motif is not automatically started. If this situation occurs, log in to the system, install the valid license, and start your DECwindows Motif software. For complete information on installing licenses using LMF, see the *OpenVMS License Management Utility Manual*.

4.1 Starting the DECwindows Motif Software

DECwindows Motif Version 1.2–3 for OpenVMS software can be started only if your system parameters are correct. Proceed to one of the following sections if your system parameters are correct:

- Section 4.1.1, Standalone Systems
- Section 4.1.2, VMScluster Systems

If your system parameters are not correct, then use one of the following methods to adjust them accordingly:

- Invoke the AUTOGEN utility:

```
$ @SYS$UPDATE:AUTOGEN GETDATA REBOOT CHECK_FEEDBACK
```

- Attempt to start the DECwindows Motif software. The DECwindows Motif startup procedure checks your system parameters; if they are too low, the following question is displays:

```
Some SYSGEN parameters must be reset for DECwindows to start.   If you type
YES, AUTOGEN will change these parameters and reboot your system.  If you type
NO, AUTOGEN will not run or cause a reboot, but DECwindows will not start.
       To run AUTOGEN at a later date, enter the following command:
            $ @SYS$UPDATE:AUTOGEN getdata reboot check_feedback
Do you want the system to run AUTOGEN for you [Yes]?
```

After the system is rebooted and the startup is completed, the Start Session dialog box displays.

The DECwindows Motif Version 1.2–3 for OpenVMS software is now installed and running on your system.

Run the Installation Verification Procedure (IVP) as described in Section 4.2 to verify that the installation of DECwindows Motif Version 1.2–3 for OpenVMS software is complete and accurate.

4.1.1 Standalone Systems

Perform one of the following procedures to start your DECwindows Motif software on a standalone system:

- If your system is not running DECwindows Motif, then start DECwindows Motif with the following command:

  ```
  $ @SYS$MANAGER:DECW$STARTUP
  ```

- If your system is currently running DECwindows Motif, then restart DECwindows Motif with the following command:

  ```
  $ @SYS$MANAGER:DECW$STARTUP RESTART
  ```

  Note

  If your system has a workstation display, then the command to restart DECwindows Motif will end your current session. The Start Session dialog box displays on your terminal, and you must log back in to continue using DECwindows Motif.

The DECwindows Motif Version 1.2–3 for OpenVMS software is now installed and running on your system.

Run the IVP as described in Section 4.2 to verify that the installation of DECwindows Motif Version 1.2–3 for OpenVMS is complete and accurate.

4.1.2 VMScluster Systems

Starting DECwindows Motif Version 1.2–3 for OpenVMS on nonsatellite and satellite nodes is described in the sections that follow.

4.1.2.1 Starting Nonsatellite and Boot Nodes

To start DECwindows Motif Version 1.2–3 for OpenVMS software on each of the nonsatellite nodes within your VMScluster, perform one of the following procedures:

- If your system is not running DECwindows Motif, then start DECwindows Motif with the following command:

  ```
  $ @SYS$MANAGER:DECW$STARTUP
  ```

- If your system is currently running DECwindows Motif, then restart DECwindows Motif with the following command:

  ```
  $ @SYS$MANAGER:DECW$STARTUP RESTART
  ```

Note

If the nonsatellite node or boot node has a workstation display, then the command to restart DECwindows Motif will end your current session. The Start Session dialog box displays on your terminal; log in again to continue using DECwindows Motif.

The DECwindows Motif Version 1.2–3 for OpenVMS software is now installed and running on your system. Run the IVP as described in Section 4.2 to verify that the installation of the DECwindows Motif Version 1.2–3 for OpenVMS product is complete and accurate.

4.1.2.2 Starting Satellite Nodes

To start the DECwindows Motif Version 1.2–3 for OpenVMS software that is installed on the boot node, perform one of the following procedures on each satellite node in the VMScluster that will run DECwindows Motif Version 1.2–3 for OpenVMS software:

- If the node is not running DECwindows Motif, then start DECwindows Motif with the following command:

  ```
  $ @SYS$MANAGER:DECW$STARTUP
  ```

- If the node is currently running DECwindows Motif, then restart DECwindows Motif with the following command:

  ```
  $ @SYS$MANAGER:DECW$STARTUP RESTART
  ```

Once DECwindows Motif is started or restarted on each node in the VMScluster, then the installation is considered complete. Now run the IVP as described in Section 4.2.

4.2 Running the IVP

Run the IVP, SYS$TEST:DECW$IVP.COM, after you install and start the DECwindows Motif Version 1.2–3 for OpenVMS product. This procedure contains four tests, which verify that the software installation is complete and accurate.

First, the IVP procedure attempts to run two display-oriented tests. When you invoke the IVP, it identifies your type of hardware.

- If you are using a workstation, you are asked where the display-oriented tests should display. Your current workstation is the default.
- If you are not using a workstation, the procedure prompts you for a display name.

Press Ctrl/Z at the prompt if you do not want to run the display-oriented tests. The IVP runs these tests only if the images exist on the system. If the IVP does not find the images, a message displays to inform you that the tests will not be run.

Note

If you are invoking the IVP from a LAT Xterminal using LAT software, enter the following command first:

```
$ SET DISPLAY/CREATE/NODE=LAT_nnnnnnnnnnn/TRANSPORT=LAT
```

Substitute your actual LAT terminal number for *nnnnnnnnnn*.

Enter the default at the _Display: prompt.

Next, the IVP runs two nondisplay-oriented tests.

- The first of these tests invokes the Motif UIL compiler. If you did not install programming support, the IVP informs you that this test will not be run because the Motif UIL image does not exist. If this test is run, you are notified of its completion status.
- The last test converts a text file to DDIF format and then converts it back to text, comparing the original text file with the result. If the files match, the test is successful. You are notified of its completion status.

Example 4–1 shows you how to run the IVP.

Example 4–1 Sample IVP

```
$ @SYS$TEST:DECW$IVP

  Copyright Digital Equipment Corporation 1988, 1995.  All rights reserved.

       DECwindows Motif for OpenVMS Installation Verification Procedure (IVP)

    This IVP is intended to test some of the functionality of DECwindows Motif
    for OpenVMS and to provide a quick method of verifying the installation.

    This machine is not a workstation.  Please provide the nodename of a
    workstation on which to display the IVP tests.  You must be sure that this
    account and node have security access to the display node, or the IVP will
    fail.

    To skip the display-oriented tests, press Ctrl/Z at the following prompt.

_Display: NODE33::0.0
```

(continued on next page)

Example 4–1 (Cont.) Sample IVP

```
%DECW-I-IVP, The IVP will display on NODE33::0.0
%DECW-I-IVP, Running DECW$EXAMPLES:ICO.EXE for up to a minute.
%DECW-I-IVP, Press Ctrl/Y to interrupt test.
%DCL-S-SPAWNED, process DECW$IVP_ICO spawned
%DECW-I-IVP, Running SYS$SYSTEM:DECW$CLOCK for up to a minute.
%DECW-I-IVP, Press Ctrl/Y to interrupt test.
%DCL-S-SPAWNED, process DECW$IVP_CLOCK spawned
%DECW-I-IVP, Invoking the UIL Motif compiler...
%DECW-S-IVP, The UIL Motif compiler test completed successfully.
%DECW-I-IVP, Beginning CONVERT/DOCUMENT IVP...
%DECW-S-IVP, CONVERT/DOCUMENT IVP passed.
%DECW-S-IVP, The IVP has completed.
$
```

4.3 Choosing an Alternative Console

The DECwindows Motif Version 1.2–3 for OpenVMS software allows you to boot all configurations from the main console. You can then toggle between displaying and not displaying the operator window by pressing Ctrl/F2. The main console is always a workstation screen.

For an alternative console, you can use a terminal connected to the workstation by means of a terminal port.

If you boot from the main console, the alternative console is connected when you invoke the DECwindows Motif startup command procedure.

5
Managing DECwindows Motif Software

This chapter contains information about managing the performance of your DECwindows Motif Version 1.2–3 for OpenVMS software. It also describes how to add and remove DECwindows Motif files from your system disk using tailoring utilities. See *Managing DECwindows Motif for OpenVMS Systems* for additional system management information.

The following topics are discussed in this chapter:

- Section 5.1, Customizing the DECwindows X11 Display Server Startup Procedure
- Section 5.2, Using the DECW$MOTIF_TAILOR Utility to Remove Files
- Section 5.3, Adding DECwindows Base-Support Files
- Section 5.4, Determining and Reporting Problems

After you install the DECwindows Motif Version 1.2–3 for OpenVMS product, you can tune your system to enhance performance or to decrease the use of some system resources. For information about tuning your system, see *Managing DECwindows Motif for OpenVMS Systems*.

5.1 Customizing the DECwindows X11 Display Server Startup Procedure

The DECwindows X11 display server manages the graphics devices on your workstation, such as the display, keyboard, and mouse.

Note

Start the DECwindows X11 display server on workstation systems only.

The startup command procedures automatically determine most of the configuration parameters for the DECwindows X11 display server. However, the command procedures cannot determine some items, such as the following:

- Whether you have a 75-dpi or 100-dpi monitor
- Whether you have a North American keyboard layout (such as for an LK201–AA or –LA or an LK401–AA or –LA keyboard)
- Whether the DECwindows X11 display server uses only DECnet for OpenVMS software and local transports
- Whether the DECwindows X11 display server logs both successful and unsuccessful connect and disconnect messages to the DECW$SERVER_*n*_ERROR.LOG file

To ensure that the DECwindows X11 display server is set up correctly, modify the server startup file as follows:

1. Make a copy of the file SYS$MANAGER:DECW$PRIVATE_SERVER_SETUP.TEMPLATE and rename it to SYS$MANAGER:DECW$PRIVATE_SERVER_SETUP.COM. This server startup file shows how to customize individual workstations by adding a section of DCL commands for each workstation.

   You can add setup options in either of two sections in the server startup file. Setup options added to the ''Cluster Common or Standalone Workstation Setup'' section affect all nodes in a cluster. Setup options added to the ''Cluster Member Workstation-Specific Setup'' section affect only individual nodes. If you add a workstation-specific option, you must also update the variable *node_list*.

2. If your screen supports 100 dots-per-inch, add the following line:

   ```
   $ DECW$SERVER_DENSITY == "100"
   ```

Add this line to the section for each workstation that has a 100 dots-per-inch monitor, or add it to the common section for all workstations (if all the workstations have 100-dpi monitors).

3. If you want the server to log successful connect and disconnect messages, add the following line:

```
$ DECW$SERVER_CONNECT_LOG == "TRUE"
```

4. Add the following line to the section for monochrome GPX workstations:

```
$ DECW$COLOR == "FALSE"
```

No modification is necessary for grayscale (intensity) screens.

5. Add the following line to the section for workstations with keyboards that are not North American LK201 models:

```
$ DECW$DEFAULT_KEYMAP == "xxxxx"
```

In the previous line, replace *xxxxx* with the correct DECwindows keymap name. You can determine the correct name from the model number of your LK201 or LK401 keyboard. Turn the keyboard upside down and look for a label that specifies the model number. The model number is in a format similar to LK201–*xx* or LK401–*xx*. The model number may also be listed as LK201 or LK401. In this case, the *xx* that you need is in another part of the label where there is a number that looks similar to the following:

nn-nnnnn-xx

Use the *xx* part of this number to choose a keymap name from Table 5–1. Choose the keymap ending in _DP for data-processing keyboard layout and the keymap ending in _TW for typewriter layout.

Table 5–1 is arranged according to the dialect for which each keyboard is designed.

After you choose a keymap name, modify the DECwindows X11 display server startup file. For example, to change the keyboard layout to a Dutch typewriter layout, add the following line to the DECwindows X11 display server startup file:

```
$ DECW$DEFAULT_KEYBOARD_MAP == "DUTCH_LK201LH_TW"
```

Add a similar line for each workstation that does not have a North American keyboard layout or add the line to the common section for all workstations (if all the workstations use the same keyboard layout).

6. Enter the following command to restart DECwindows Motif on the workstations for which you customized the server startup by using the following command:

```
$ @SYS$MANAGER:DECW$STARTUP RESTART
```

Table 5–1 DECwindows Keymap

Dialect	Model	DECwindows Keymap
Austrian/German	LK201-(AG,LG,BG,MG)	AUSTRIAN_GERMAN_LK201LG_DP
		AUSTRIAN_GERMAN_LK201LG_TW
	LK201-(NG,PG)	AUSTRIAN_GERMAN_LK201NG_DP
		AUSTRIAN_GERMAN_LK201NG_TW
	LK401-(AG)	AUSTRIAN_GERMAN_LK401AG_TW
Belgian/French	LK201-(AP,LP,BP,MP)	BELGIAN_FRENCH_LK201LP_DP
		BELGIAN_FRENCH_LK201LP_TW
Belgian/French	LK401-(AP)	BELGIAN_FRENCH_LK401AP_DP
		BELGIAN_FRENCH_LK401AP_TW
British	LK201-(AE,LE,BE,ME)	BRITISH_LK201LE_DP
		BRITISH_LK201LE_TW
British	LK401-(AA,PA)	BRITISH_LK401AA_DP
		BRITISH_LK401AA_TW
Canadian/French	LK201-(AC,LC,BC,MC)	CANADIAN_FRENCH_LK201LC_DP
		CANADIAN_FRENCH_LK201LC_TW
Canadian/French	LK401-(AC,LC,BC,MC)	CANADIAN_FRENCH_LK401AC_DP
		CANADIAN_FRENCH_LK401AC_TW
Danish	LK201-(AD,LD,BD,MD)	DANISH_LK201LD_DP
		DANISH_LK201LD_TW
	LK201-(ED,RD,FD)	DANISH_LK201RD_DP
		DANISH_LK201RD_TW

(continued on next page)

Table 5–1 (Cont.) DECwindows Keymap

Dialect	Model	DECwindows Keymap
Danish	LK401-(AD,LD,BD,MD)	DANISH_LK401AD_DP
		DANISH_LK401AD_TW
Dutch	LK201-(AH,LH,BH,MH)	DUTCH_LK201LH_DP
		DUTCH_LK201LH_TW
	LK201-(NH,PH)	DUTCH_LK201NH
	LK401-(NH,PH)	DUTCH_LK401AH
Finnish	LK201-(AF,LF,BF,MF)	FINNISH_LK201LF_DP
		FINNISH_LK201LF_TW
	LK201-(NX,PX)	FINNISH_LK201NX_DP
		FINNISH_LK201NX_TW
Finnish	LK401-(AF,LF,BF,MF)	FINNISH_LK401AF_DP
		FINNISH_LK401AF_TW
Flemish	LK201-(AB,LB,BB,MB)	FLEMISH_LK201LB_DP
		FLEMISH_LK201LB_TW
Flemish	LK401-(AB,LB,BB,MB)	FLEMISH_LK401AB_DP
		FLEMISH_LK401AB_TW
Icelandic	LK201-(AU,LU,BU,MU)	ICELANDIC_LK201LU_DP
		ICELANDIC_LK201LU_TW
Italian	LK201-(AI,LI,BI,MI)	ITALIAN_LK201LI_DP
		ITALIAN_LK201LI_TW
Italian	LK401-(AI,LI,BI,MI)	ITALIAN_LK401AI_DP
		ITALIAN_LK401AI_TW
North American	LK201-(AA,LA,BA,MA)	NORTH_AMERICAN_LK201LA
North American	LK401-(AA,LA,BA,MA)	NORTH_AMERICAN_LK401AA
Norwegian	LK201-(AN,LN,BN,MN)	NORWEGIAN_LK201LN_DP
		NORWEGIAN_LK201LN_TW
	LK201-(EN,RN,FN)	NORWEGIAN_LK201RN_DP
		NORWEGIAN_LK201RN_TW
Norwegian	LK401-(AN,LN,BN,MN)	NORWEGIAN_LK401AN_DP

(continued on next page)

Table 5–1 (Cont.) DECwindows Keymap

Dialect	Model	DECwindows Keymap
		NORWEGIAN_LK401AN_TW
Portuguese	LK201-(AV,LV,BV,MV)	PORTUGUESE_LK201LV
Portuguese	LK401-(AV,LV,BV,MV)	PORTUGUESE_LK401AV
Spanish	LK201-(AS,LS,BS,MS)	SPANISH_LK201LS_DP
		SPANISH_LK201LS_TW
Spanish	LK401-(AS,LS,BS,MS)	SPANISH_LK401AS_DP
		SPANISH_LK401AS_TW
Swedish	LK201-(AM,LM,BM,MM)	SWEDISH_LK201LM_DP
		SWEDISH_LK201LM_TW
	LK201-(NM,PM)	SWEDISH_LK201NM_DP
		SWEDISH_LK201NM_TW
Swedish	LK401-(AM,LM,BM,MM)	SWEDISH_LK401AM_DP
		SWEDISH_LK401AM_TW
Swiss/French	LK201-(AK,LK,BK,MK)	SWISS_FRENCH_LK201LK_DP
		SWISS_FRENCH_LK201LK_TW
Swiss/French	LK401-(AK,LK,BK,MK)	SWISS_FRENCH_LK401AK_DP
		SWISS_FRENCH_LK401AK_TW
Swiss/German	LK201-(AL,LL,BL,ML)	SWISS_GERMAN_LK201LL_DP
		SWISS_GERMAN_LK201LL_TW
Swiss/German	LK401-(AL,LL,BL,ML)	SWISS_GERMAN_LK401AL_DP
		SWISS_GERMAN_LK401AL_TW
Combined US/UK	LK201-(EE,RE,PE)	UK_LK201RE
		US_LK201RE
Combined US/UK	LK401-(EE,RE,PE)	UK_LK401AA
		US_LK401AA

5.2 Using the DECW$MOTIF_TAILOR Utility to Remove Files

The DECW$MOTIF_TAILOR utility is used to remove DECwindows Motif files from the system disk (for example, support files for the Toolkit, applications, and programming). If you later decide that you want DECwindows Motif programming

support, add the files to the system disk by reinstalling the system. See Section 5.3 for information about adding files.

The DECW$MOTIF_TAILOR process includes two phases:

- The first phase lists each class of DECwindows Motif files and asks whether you want to delete the class from the system disk.
- The second phase deletes the files you indicated from the system disk.

Table 5–2 lists the classes (or groups) and subclasses of DECwindows Motif files that you can delete using the DECW$MOTIF_TAILOR utility. For a list of DECwindows Motif files and their descriptions and classes, see Appendix C.

Table 5–2 Classes of OpenVMS Files That Can Be Removed with the DECW$MOTIF_TAILOR Utility

Class	Subclass	Description
DECwindows Motif run-time support	No subclasses in this tailor class	DECwindows Motif run-time support.
DECwindows Motif CDA support	No subclasses in this tailor class	DECwindows Motif CDA support.
DECwindows Motif applications files	DECwindows Motif computer-based instruction (CBI)	The DECwindows Motif applications files provide a variety of applications.

(continued on next page)

Table 5–2 (Cont.) Classes of OpenVMS Files That Can Be Removed with the DECW$MOTIF_TAILOR Utility

Class	Subclass	Description
DECwindows Motif C and C++ programming support files	No subclasses in this tailor class	DECwindows Motif C and C++ programming support files are needed only to develop applications and are not required to run DECwindows Motif applications. These files are provided for programming in C and C++ languages using conventions and standards developed at the Massachusetts Institute of Technology (MIT).
Fortran files	No subclasses in this tailor class	Fortran support files are provided for this programming language. The files are needed only to develop applications and are not required to run DECwindows Motif applications.
Pascal files	No subclasses in this tailor class	Pascal support files are provided for this programming language. The files are needed only to develop applications and are not required to run DECwindows Motif applications.
DECwindows Motif example files	No subclasses in this tailor class	DECwindows Motif example files.
Sound files	No subclasses in this tailor class	Sound-editor support files.
Alpha translated-image support files	No subclasses in this tailor class	Translated-image support.

Removing DECwindows Motif Files from the System Disk

To remove DECwindows Motif files from the system disk, do the following:

1. Log in to the SYSTEM account.
2. Enter the following command at the DCL prompt:

   ```
   $ RUN SYS$UPDATE:DECW$MOTIF_TAILOR
   ```

   After a brief overview, the DECW$MOTIF_TAILOR utility lists each group, or class, of files and its size in blocks. Files are grouped according to their function. For example, all the files required for DECwindows for OpenVMS device support are in one class. A file class is made up of many small subclasses. You can eliminate an entire class of files, or you can eliminate one or more of its subclasses. For example:

```
CLASS - VMS DECwindows Motif applications files
          Size of entire class (with subclasses): 16344
          Size of common files required for any subclass: 15323
          Do you wish to select the entire class (default = NO)?
          Do you wish to select any of its subclasses (default = NO)?
    .
    .
    .
```

3. Decide which file classes or subclasses you do not need to support your system. The DECW$MOTIF_TAILOR utility displays step-by-step instructions. Follow these instructions to specify which of the classes or subclasses you want to remove.
4. The DECW$MOTIF_TAILOR utility deletes the files you select and displays the names of those files.

You can ignore ‘‘file not found’’ messages in the log files; tailoring functions are not affected by these messages. The installation procedure deletes files that it does not read. For instance, specific OpenVMS VAX files are deleted when you tailor off files on OpenVMS Alpha systems.

Caution

To cancel DECW$MOTIF_TAILOR during the first phase, press Ctrl/C, Ctrl/Y, or Ctrl/Z. If you cancel DECW$MOTIF_TAILOR during the second phase, a partially tailored disk may result. For a description of both phases, see Section 5.2.

Example 5–1 shows how to use DECW$MOTIF_TAILOR to remove files from a system disk.

Example 5–1 Sample DECW$MOTIF_TAILOR Session

```
$ RUN SYS$UPDATE:DECW$MOTIF_TAILOR
   .
   .
   .

TAILOR-OFF
----------
 You will now be prompted with a list of the classes and subclasses of
 DECwindows files that are optional. The size of each class and subclass is
 included in the list. This will help you decide whether or not you want to
 remove a class or subclass from your system.

 Under some classes there is a set of common files that is required in order
 for any subclasses to work. These files will only be deleted if you remove
 the ENTIRE class. If you choose to keep any subclass, this set of files is
 not deleted.

 NOTE: The files associated with selected classes and subclasses will
       be removed from your system.

Total size of the system disk is 2050860 blocks.
Total space used on the system disk is 684720 blocks.
Total space left on the system disk is 1366140 blocks.

CLASS - VMS DECwindows Runtime Support
          Size of entire class (with subclasses): 44853
          No subclasses in this tailor class.
          Do you wish to select the entire class (default = NO)? Return

CLASS - VMS DECwindows CDA Support
          Size of entire class (with subclasses): 5153
          No subclasses in this tailor class.
          Do you wish to select the entire class (default = NO)? Yes
```

(continued on next page)

Example 5–1 (Cont.) Sample DECW$MOTIF_TAILOR Session

```
CLASS - VMS DECwindows Motif applications files
          Size of entire class (with subclasses): 16344
      Size of common files required for any subclass: 15323
      Do you wish to select the entire class (default = NO)? Return
      Do you wish to select any of its subclasses (default = NO)? Return

CLASS - DECwindows C programming support files
          Size of entire class (with subclasses): 6904
      No subclasses in this tailor class.
          Do you wish to select the entire class (default = NO)? Yes

CLASS - DECwindows Fortran programming support files
          Size of entire class (with subclasses): 2429
      No subclasses in this tailor class.
          Do you wish to select the entire class (default = NO)? Yes

CLASS - DECwindows Pascal programming support files
          Size of entire class (with subclasses): 3010
      No subclasses in this tailor class.
          Do you wish to select the entire class (default = NO)? Return

CLASS - DECwindows Motif example files
          Size of entire class (with subclasses): 13365
      No subclasses in this tailor class.
          Do you wish to select the entire class (default = NO)? Yes

CLASS - Sound editor support files
          Size of entire class (with subclasses): 1837
      Size of common files required for any subclass: 1574
      Do you wish to select the entire class (default = NO)? Yes

CLASS - Alpha translated image support files
          Size of entire class (with subclasses): 32179
      No subclasses in this tailor class.
          Do you wish to select the entire class (default = NO)? Return
```

(continued on next page)

Example 5–1 (Cont.) Sample DECW$MOTIF_TAILOR Session

```
Files have been selected
Do you wish to remove all of the options selected? Return
Do you wish to remove all of the options selected? Yes
Removing files, please wait...
%VMSTLR-I-DELFILE, deleting file: SYS$SYSROOT:[CDA$LIBRARY]DEFSTYLE.DDIF;*
%VMSTLR-I-DELFILE, deleting file: SYS$SYSROOT:[DECW$DEFAULTS.SYSTEM]DDIF$CSW.UID;*
%VMSTLR-I-DELFILE, deleting file: SYS$SYSROOT:[DECW$DEFAULTS.SYSTEM]DDIF$VIEW.UID;*
%VMSTLR-I-DELFILE, deleting file: SYS$SYSROOT:[DECW$DEFAULTS.SYSTEM]DDIF$VIEWWGT.UID;*
%VMSTLR-I-DELFILE, deleting file: SYS$SYSROOT:[DECW$DEFAULTS.SYSTEM]DDIF$VIEWWGT12.UID;*
%VMSTLR-I-DELFILE, deleting file: SYS$SYSROOT:[SYSEXE]CDA$CONVERT.EXE;*
.
.
.
%RMS-E-FNF, file not found
.
.
.
%VMSTLR-I-DELFILE, deleting file: SYS$SYSROOT:[VUE$LIBRARY.SYSTEM]SOUND$PROFILE.VUE$DAT;*
%VMSTLR-I-DELFILE, deleting file: SYS$SYSROOT:[VUE$LIBRARY.SYSTEM]SOUND$VUE_STARTUP.COM;*
%VMSTLR-I-DELFILE, deleting file: SYS$SYSROOT:[SYSLIB]DIVA$LIB_SHR.EXE;*
%VMSTLR-I-DELFILE, deleting file: SYS$SYSROOT:[SYSLIB]DIVA$WGT_SHR.EXE;*
%VMSTLR-I-DELFILE, deleting file: SYS$SYSROOT:[SYSMSG]DIVA$LIB_MSG.EXE;*
_DW002$DKA100:$log
  SYSTEM       logged out at 20-JAN-1995 15:04:44.24
```

5.3 Adding DECwindows Base-Support Files

If you previously chose not to install or if you removed DECwindows software, perform one of the following procedures to add DECwindows base-support files:

- Reinstall the OpenVMS system, specifing that you want only DECwindows Motif support.
- Use the SYS$UPDATE:DECW$TAILOR.EXE procedure to add or remove support files from the system disk.

5.3.1 Reinstalling the OpenVMS Operating System

To reinstall the OpenVMS operating system to add DECwindows Motif support, perform the following steps:

1. Follow the installation procedure as described in Chapter 2 and Chapter 3.
2. When the installation procedure asks whether you want to install the entire kit, type No. The procedure displays optional parts of the kit and asks whether you want to install each part. Type Yes for each part you want to install.
3. All kit sections that you chose are displayed; you are asked to verify that the choices are correct.
4. Once you verifiy the selections, the installation procedure continues.

5.3.2 Using the SYS$UPDATE:DECW$TAILOR.EXE Command

You can use the DECW$TAILOR utility to add or remove some or all DECwindows base-support files from the system disk. DECW$TAILOR is similar to DECW$MOTIF_TAILOR. However, the DECW$TAILOR utility is used to add or remove files that support the DECwindows display server (for example: base-support, workstation, and font files).

DECW$TAILOR includes three phases:

- The first phase asks whether you want to tailor your system by adding files (''tailor on'') or by deleting files (''tailor off'').
- In the second phase, if you choose the tailor-on procedure, DECW$TAILOR lists each class of DECwindows files and asks whether you want to include them on the system disk. If you choose the tailor-off procedure, DECW$TAILOR lists each class of DECwindows files and asks whether you want to delete them from the system disk.
- In the third phase, DECW$TAILOR carries out your instructions.

Note

To cancel DECW$TAILOR during the first and second phases, press Ctrl/C, Ctrl/Y, or Ctrl/Z. If you cancel DECW$TAILOR during the third phase, a partially tailored disk may result.

To tailor the OpenVMS operating system, run SYS$UPDATE:VMSTAILOR.

Table 5–3 lists the classes and subclasses of DECwindows files that you can add or remove from your system using DECW$TAILOR.

Table 5–3 Classes of Files That Can Be Added or Removed with the DECW$TAILOR Utility

Class	Subclass	Description
DECwindows base support files	No subclasses in this tailor class	Files necessary to run the DECwindows Motif client and DECwindows display server.
DECwindows workstation support files	PEX for PHIGS support files	Files necessary to run the DECwindows display server; the PEX subclass includes support files for three-dimensional graphics.
75-dpi video font files	No subclasses in this tailor class	Device support files for 75-dpi monitiors.
100-dpi video font files	No subclasses in this tailor class	Device support files for 100-dpi monitors.

Adding DECwindows Files to the System Disk

To add DECwindows files to the system disk, perform the following steps:

1. Log in to the SYSTEM account.
2. Enter the following command at the DCL prompt to invoke the utility:

```
$ RUN SYS$UPDATE:DECW$TAILOR
```

After a brief overview, the DECW$TAILOR program lists each group, or class, of files and its size in blocks. Files are grouped according to their function. For example, all the files required for DECwindows base support are in one class. A file class is made up of many small subclasses. You can eliminate an entire class of files, or you can eliminate one or more of its subclasses. For example:

```
CLASS - DECwindows workstation support files
          Size of entire class (with subclasses): 12380
          Size of common files required for any subclass: 8919
          Do you wish to select the entire class (default = NO)?
          Do you wish to select any of its subclasses (default = NO)?
   .
   .
   .
```

3. Decide which file classes or subclasses are needed to support your system. DECW$TAILOR displays step-by-step instructions. Follow these instructions to specify which of the classes or subclasses you want to add.
4. DECW$TAILOR creates a temporary command file and asks for the name of the device that contains the distribution media.

Note

The distribution media is the OpenVMS distribution media that contains the DECwindows save sets.

5. DECW$TAILOR adds the files you selected and displays the names of those files.

Caution

To cancel DECW$TAILOR during the first phase, press Ctrl/C, Ctrl/Y, or Ctrl/Z. If you cancel DECW$TAILOR during the second phase, a partially tailored disk may result.

Example 5–2 shows how to use DECW$TAILOR to add files to a system disk.

Example 5–2 Sample DECW$TAILOR Session

```
$ RUN SYS$UPDATE:DECW$TAILOR
   .
   .
   .
 Do you want to tailor files "ON" or "OFF"? ON

TAILOR-ON
---------
 You will now be prompted with a list of the classes and subclasses
 of DECwindows files that are optional. The size of each class and subclass is
 included in the list. This will help you decide whether or not you want to add
 a class or subclass to your system.

 Under some classes, there is a set of common files that is required in order
 for any subclasses to work. These files are added when you ask
 for either the entire class or any of its subclasses.

Total size of the system disk is 1216665 blocks.
Total space used on the system disk is 1121958 blocks.
Total space left on the system disk is 94707 blocks.

CLASS - DECwindows base support files
          Size of entire class (with subclasses): 3110
          No subclasses in this tailor class.
          Do you wish to select the entire class (default = NO)? YES

CLASS - DECwindows workstation support files
          Size of entire class (with subclasses): 12380
          Size of common files required for any subclass: 8919
          Do you wish to select the entire class (default = NO)? Return
          Do you wish to select any of its subclasses (default = NO)? Return

CLASS - 75 dots/inch video font files
          Size of entire class (with subclasses): 4538
          No subclasses in this tailor class.
          Do you wish to select the entire class (default = NO)? Return

CLASS - 100 dots/inch video font files
          Size of entire class (with subclasses): 3693
          No subclasses in this tailor class.
          Do you wish to select the entire class (default = NO)? Return
```

(continued on next page)

Example 5–2 (Cont.) Sample DECW$TAILOR Session

```
Files have been selected
Do you wish to add all of the options selected? YES
Creating temporary command file, please wait...
* Enter device containing DECwindows distribution media:
   .
   .
   .
```

5.4 Determining and Reporting Problems

If you encounter a problem while using DECwindows Motif, review the *Software Product Description* (SPD) and Warranty Addendum for an explanation of the warranty. If you encounter a problem during the warranty period, use the following methods to report the problem or follow alternate instructions provided by Digital for reporting problems:

- Call Digital if your software contract or warranty agreement includes telephone support.
- Submit a Software Performance Report (SPR).
- If you discover a problem with or have comments about the documentation, fill out and submit a Reader's Comments form, located at the back of each DECwindows Motif manual.

A

POLYCENTER Software Installation Utility Sample Installation

Example A–1 in this appendix presents a sample DECwindows Motif installation on an OpenVMS Alpha Version 6.1 operating system using the POLYCENTER Software Installation utility. Refer to Chapter 2 for details about using the POLYCENTER Software Installation utility to install DECwindows Motif Version 1.2–3 for OpenVMS software.

Refer to Section B.1 to see a sample registration of a DECwindows Motif Version 1.2–3 for OpenVMS PAK.

Example A–1 Sample Installation Using the POLYCENTER Software Installation Utility on an OpenVMS Alpha System

```
          Welcome to the OpenVMS Alpha Operating System, Version 6.1

$ @PCSI_INSTALLATION Return

        DECwindows Motif V1.2-3 for OpenVMS installation procedure

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  software and media is authorized only pursuant to a valid written license
  from Digital or an authorized sublicensor.

          **** Supported OpenVMS Version 6.1  DETECTED ****
```

(continued on next page)

Example A–1 (Cont.) Sample Installation Using the POLYCENTER Software Installation Utility on an OpenVMS Alpha System

```
  **** DECwindows Motif application and run-time support files DETECTED ****

          **** DECwindows device support files DETECTED ****


  NOTE: DECwindows Motif will not start if your system parameters are not
        set correctly.

  o If you allow a system shutdown, the installation procedure reboots
    the system at the end of the installation. If your system parameters
    are incorrect, the installation runs AUTOGEN prior to the system reboot.

  o If you do not allow a system shutdown, the installation procedure
    continues; you are informed at the end of the installation whether
    you need to modify your system parameters to start DECwindows Motif.

Will you allow a system reboot after this product is installed?  Yes [Return]

       To answer the following question, enter the directory specification
       of the DECwindows Motif for OpenVMS POLYCENTER Software
       Installation utility kit.

        Answer the following question with the location of the DECwindows
        Motif for OpenVMS PCSI kit.

Where is the PCSI kit located? DAD1:[000000] [Return]

       Caution: POLYCENTER Software installations differ from VMSINSTAL
       installations in one major area: in POLYCENTER Software
       installations, files are deleted from your system disk unless you
       specifically answer "Yes" to the questions that ask if you want to
       install the support. Although the support may exist on your previous
       kit, answer "Yes" to each question. If you answer "No," the
       files are deleted from the your system disk using the POLYCENTER
       Software Installation history file. With VMSINSTAL installations,
       the previous files are not deleted.

       For example, if your previous kit included programming support
       for all languages except Fortran and you want to add Fortran
       support and keep the previous programming support, answer "Yes"
       to the question that asks if you want to install Fortran
       programming support. Also answer "Yes" to the other questions
       that pertain to parts of the kit that want to keep on your system.

The following product has been selected:
DEC AXPVMS DWMOTIF V1.2-3

Do you want to continue? [Yes] [Return]
```

(continued on next page)

Example A–1 (Cont.) Sample Installation Using the POLYCENTER Software Installation Utility on an OpenVMS Alpha System

```
*** DEC AXPVMS DWMOTIF V1.2-3: DECwindows Motif V1.2-3 for OpenVMS AXP

    Copyright Digital Equipment Corporation 1988, 1995. All rights reserved.

    Digital Equipment Corporation

    This product uses the PAK: DW-MOTIF

     Do you want all the default values for this product? [Yes] Return

    DECwindows Motif runtime support files: Yes Return
Programming Support (C Language): Yes Return
Fortran programming support: Yes Return
PASCAL programming support: Yes Return
Programming examples: Yes Return
Translated Image Support (OSF/Motif V1.1.3): Yes Return

     Do you want to view the values? [No] Yes Return

DEC AXPVMS DWMOTIF V1.2-3: DECwindows Motif V1.2-3 for OpenVMS AXP
    DECwindows Motif runtime support files: Yes
    Programming Support (C Language): Yes
    Fortran programming support: Yes
    Pascal programming support: Yes
    Programming examples: Yes
    Translated Image Support (OSF/Motif V1.1.3): Yes
 Are you satisfied with the values? [YES] Yes Return

%PCSIUI-I-DONEASK, execution phase starting
The following product will be installed:
DEC AXPVMS DWMOTIF V1.2-3
%PCSI-I-VOLINFO, estimated space information for volume DISK$AXP_V61
-PCSI-I-VOLSPC, 129661 required; 1567533 available; 1437872 net
Portion Done: 0%
...10%
...20%
...30%
...40%
...50%
...60%
...70%
...80%
...90%
...100%
The following product has been installed:
DEC AXPVMS DWMOTIF V1.2-3
```

(continued on next page)

Example A–1 (Cont.) Sample Installation Using the POLYCENTER Software Installation Utility on an OpenVMS Alpha System

```
  Run the Installation Verification Procedure (IVP) after the installation
  is completed and DECwindows Motif is restarted. The IVP is located
  in the following directory: SYS$TEST:DECW$IVP.COM.

  Checking to see if your system parameters are set correctly....

  The installation procedure has determined that your system parameter
  values are acceptable.  A reboot of the system is not required.

  If your system is already running DECwindows Motif, restart DECwindows
  Motif with the following DCL command:

       $ @SYS$MANAGER:DECW$STARTUP RESTART

  If your system is NOT already running DECwindows Motif, start DECwindows
  Motif with the following DCL command:

       $ @SYS$MANAGER:DECW$STARTUP

                          * * * N O T E * * *

  If you are installing DECwindows Motif from your workstation console, log
  off after you enter the command to start DECwindows Motif.

@SYS$MANAGER:DECW$STARTUP RESTART

Restarting the DECwindows Software stops everything displaying on your
workstation.  Do you really want to restart the DECwindows Software? Yes [Return]

Restarting DECwindows Software, server 0.  Please wait.
%RUN-S-PROC_ID, identification of created process is 00000067
Logout

  SYSTEM       logged out at  19-JAN-1995 18:05:00.7
```

B

VMSINSTAL Sample Installation

This appendix contains a sample Product Authorization Key (PAK) registration and a product installation.

B.1 Sample Product Authorization Key Registration

Example B–1 contains a sample registration of a DECwindows Motif Version 1.2–3 for OpenVMS PAK.

Example B–1 Sample Product Authorization Key Registration

```
$ @SYS$UPDATE:VMSLICENSE.COM

    VMS License Management Utility Options:

        1. REGISTER a Product Authorization Key
        2. AMEND an existing Product Authorization Key
        3. CANCEL an existing Product Authorization Key
        4. LIST the Product Authorization Keys
        5. MODIFY an existing Product Authorization Key
        6. DISABLE an existing Product Authorization Key
        7. DELETE an existing Product Authorization Key
        8. COPY an existing Product Authorization Key
        9. MOVE an existing Product Authorization Key
       10. ENABLE an existing Product Authorization Key
       11. SHOW the licenses loaded on this node
       12. SHOW the unit requirements for this node

       99. EXIT this procedure

    Type '?' at any prompt for a description of the information
    requested.  Press Ctrl/Z at any prompt to exit this procedure.

Enter one of the above choices [1] Return
Do you have your Product Authorization Key? [Yes] Return
```

(continued on next page)

Example B–1 (Cont.) Sample Product Authorization Key Registration

```
   The REGISTER option allows you add a new license to a license
   database.  A Product Authorization Key (PAK) provides the product
   name and information you need to register the license. You must
   enter all the information provided by your PAK exactly as specified.

PAK ID:
                      Issuer [DEC] Return
             Authorization Number [] LAB030419 Return

PRODUCT ID:
                 Product Name [] DW-MOTIF Return

                    Producer [DEC] Return

NUMBER OF UNITS:
             Number of Units [] 400 Return

KEY LEVEL:
                    Version [] Return

PRODUCT RELEASE DATE:       [] Return

KEY TERMINATION DATE:
         Key Termination Date [] Return

RATING:
      Availability Table Code [] H Return
          Activity Table Code [] Return

MISCELLANEOUS:
                  Key Options [] Return
                Product Token [] Return
                  Hardware-Id [] Return
                     Checksum [] 2-fbic-odnh-enwj-lled Return

       License Database File:  SYS$COMMON:[SYSEXE]LMF$LICENSE.LDB
                      Issuer:  DEC
                Authorization: LAB030419
                    Producer: DEC
                Product Name: DW-MOTIF
                       Units: 400
                        Date:
                     Version:
               Termination Date:
                   Availability:  H
                       Activity:
                        Options:
                          Token:
                    Hardware ID:
                       Checksum: 2-FBIC-ODNH-ENWJ-LLED
```

(continued on next page)

Example B–1 (Cont.) Sample Product Authorization Key Registration

```
Is this information correct?  [Yes] Return

Registering DW-MOTIF license in SYS$COMMON:[SYSEXE]LMF$LICENSE.LDB...

Do you want to LOAD this license on this system?  [Yes] Return

%LICENSE-I-LOADED, DEC DW-MOTIF was successfully loaded with 400 units

    VMS License Management Utility Options:

        1. REGISTER a Product Authorization Key
        2. AMEND an existing Product Authorization Key
        3. CANCEL an existing Product Authorization Key
        4. LIST the Product Authorization Keys
        5. MODIFY an existing Product Authorization Key
        6. DISABLE an existing Product Authorization Key
        7. DELETE an existing Product Authorization Key
        8. COPY an existing Product Authorization Key
        9. MOVE an existing Product Authorization Key
       10. ENABLE an existing Product Authorization Key
       11. SHOW the licenses loaded on this node
       12. SHOW the unit requirements for this node

       99. EXIT this procedure

    Type '?' at any prompt for a description of the information
    requested.  Press Ctrl/Z at any prompt to exit this procedure.

Enter one of the above choices [1] 99 Return
$
```

B.2 Sample Installation

Example B–2 contains a sample installation of the DECwindows Motif Version 1.2–3 for OpenVMS software on an OpenVMS VAX Version 6.1 operating system using the VMSINSTAL procedure. The sample installation assumes that no users are logged in to the system and that you specified OPTIONS N to display the release notes.

Example B–2 Sample Installation

(continued on next page)

Example B–2 (Cont.) Sample Installation

```
$ @SYS$UPDATE:VMSINSTAL DWMOTIFVAXU3012

     OpenVMS VAX Software Product Installation Procedure Version 6.1

It is 15-JAN-1995 at 13:42.

Enter a question mark (?) at any time for help.
* Are you satisfied with the backup of your system disk [Yes]? Return

* Where will the distribution volumes be mounted: DAD2:[000000]

Enter the names of the product to be processed from the first distribution
volume set.
* Product: DWMOTIFVAXU3012

* Enter installation options you wish to use (None): Return

The following product will be processed:
       DWMOTIFVAXU3 V1.2

       Beginning installation of DWMOTIFVAXU3 Version 1.2 at 13:44

%VMSINSTAL-I-RESTORE, Restoring product save set A ...
%VMSINSTAL-I-RELMOVED, Product's release notes have been moved to SYS$HELP.

        *** Installing DECwindows Motif for OpenVMS VAX software ***

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  This software is proprietary to and embodies the confidential technology
  of Digital Equipment Corporation. Possession, use, or copying of this
  software and media is authorized only pursuant to a valid written license
  from Digital or an authorized sublicensor.


  You can install the DECwindows Motif kit completely or in selected
  portions.  A complete installation requires as many as 68,400 blocks.
  If you choose to perform a partial installation, you can select
  (tailor) the programming support files that support your DECwindows
  Motif application development.  Whether you perform a complete or partial
  installation, this kit provides support for running DECwindows Motif
  applications on OpenVMS compute servers.

* Do you want to install the entire kit [Yes]? Return

  You have selected the following portions of the kit:

       o  DECwindows Motif Applications and Run-time Libraries
```

(continued on next page)

Example B–2 (Cont.) Sample Installation

```
        o  DECwindows Motif programming examples

        o  DECwindows Motif programming support

               Fortran, Pascal
               MIT C language programming conventions

* Are these selections correct [Yes]? Return

  A registered and loaded product authorization key for DW-MOTIF is
  required to run any DECwindows Motif for OpenVMS application. If you
  answer No to the next question, the installation of DECwindows Motif for
  OpenVMS will be terminated.

  Product:      DW-MOTIF
  Producer:     DEC
  Version:
  Release Date:

* Does this product have an authorization key registered and loaded? Yes Return

  DECwindows Motif will not start if your system parameters are not
  correct.

  o If you allow a system shutdown, the installation procedure will
    reboot the system at the end of the installation.  If your system
    parameters are incorrect, the installation will run AUTOGEN prior
    to the system reboot.

  o If you do not allow a system shutdown, the installation procedure
    will continue, and you will be informed at the end of the
    installation whether you need to modify your system parameters in
    order to start DECwindows Motif.

    To complete the installation of this product, you should reboot
    the system.  If it is not convenient to reboot at this time, then
    enter No to the following question.

    If you enter No, the installation procedure will continue.

* Will you allow a system shutdown after this product is installed
  [Yes]? No Return

  No further questions will be asked.
```

(continued on next page)

Example B–2 (Cont.) Sample Installation

```
%VMSINSTAL-I-RESTORE, Restoring product save set B ...
%VMSINSTAL-I-RESTORE, Restoring product save set C ...
%VMSINSTAL-I-RESTORE, Restoring product save set D ...
%VMSINSTAL-I-RESTORE, Restoring product save set E ...
%VMSINSTAL-I-RESTORE, Restoring product save set F ...
%VMSINSTAL-I-RESTORE, Restoring product save set G ...
%VMSINSTAL-I-RESTORE, Restoring product save set H ...
%VMSINSTAL-I-RESTORE, Restoring product save set I ...
%VMSINSTAL-I-RESTORE, Restoring product save set J ...
%VMSINSTAL-I-MOVEFILES, Files will now be moved to their target directories...

  You can safely ignore the following NCP error message(s):

  %NCP-I-SUCCESS,  Success
  Object = X$X0
  %NML-I-RECDELET, Database entry deleted

  The Installation Verification Procedure (IVP) should be run after the
  installation has been completed and DECwindows Motif has been restarted.
  The IVP can be found in SYS$TEST:DECW$IVP.COM.

  The installation procedure has determined that your system parameters are
  set correctly and that it will not be necessary to run AUTOGEN or reboot
  the system.

  If your system is already running DECwindows Motif, restart DECwindows
  Motif with the following DCL command:

       $ @SYS$MANAGER:DECW$STARTUP RESTART

  If your system is NOT already running DECwindows Motif, start DECwindows
  Motif with the following DCL command:

       $ @SYS$MANAGER:DECW$STARTUP
                            * * * NOTE * * *

  If you are installing DECwindows Motif from your workstation console, log
  off after you enter the command to start DECwindows Motif.

 Installation of DWMOTIFVAXU3 V1.2 completed at 14:11

  Enter the products to be processed from the next distribution volume set.
  * Products: Return
      VMSINSTAL procedure done at 15:19
```

C
Software Components

This appendix provides a table of software components that are available on DECwindows Motif Version 1.2–3 for OpenVMS. Table C–1 lists component classes. Table C–2 provides the directory, file name, description, and class of each component.

Table C–1 DECwindows Motif Component Classes

Class	Description
APPS	Application file
APPS–CB	Computer-based instruction (CBI) file
CDA	CDA support file
DVMS	Files also supplied by OpenVMS
INST	Installation and startup files
PGFO	Fortran programming support file
PGPA	Pascal programming support file
PRGM	C programming support file
RTL	Run-time support file
SND	Sound-editor support file
SND–DI	Device independent voice API file
TIS	Alpha translated-image support file
XMPL	DECwindows Motif example file

Table C–2 DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
CDA$LIBRARY			
	CL_DAY.DOC_STYLE	Calendar day style	APPS
	DEFSTYLE.DDIF	DDIF document style guide	CDA
DECW$BOOK			
	BOOKREADER.DECW$BOOK	User's guide for Bookreader	APPS
	LIBRARY.DECW$BOOKSHELF	Bookreader bookshelf	APPS
DECW$CBI_SUPPORT			
	DECW00010.CBI	CBI support	APPS-CB
	DECW00020.CBI	CBI support	APPS-CB
	DECW00030.CBI	CBI support	APPS-CB
	DECW00040.CBI	CBI support	APPS-CB
	DECW00040.DAT	CBI support	APPS-CB
	DECW00050.CBI	CBI support	APPS-CB
	DECW00050.DAT	CBI support	APPS-CB
	DECW00060.CBI	CBI support	APPS-CB
	DECW00060.DAT	CBI support	APPS-CB
	DECW00070.CBI	CBI support	APPS-CB
	DECW00070.DAT	CBI support	APPS-CB

(continued on next page)

Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DECW00080.DAT	CBI support	APPS-CB
	DECW00090.DAT	CBI support	APPS-CB
	DECW00100.CBI	CBI support	APPS-CB
	DECW00100.DAT	CBI support	APPS-CB
	DECW00110.DAT	CBI support	APPS-CB
	DECW00120.DAT	CBI support	APPS-CB
	DECW00130.DAT	CBI support	APPS-CB
	DECW00140.DAT	CBI support	APPS-CB
	DECW00150.DAT	CBI support	APPS-CB
	DECW00160.DAT	CBI support	APPS-CB
	DECW00170.DAT	CBI support	APPS-CB
	DECW00180.DAT	CBI support	APPS-CB
	DECW00190.DAT	CBI support	APPS-CB
	DECW00230.CBI	CBI support	APPS-CB
	DECW00240.CBI	CBI support	APPS-CB
	DECW01010.CBI	CBI support	APPS-CB
	DECW01020.CBI	CBI support	APPS-CB

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DECW01030.CBI	CBI support	APPS-CB
	DECW01040.CBI	CBI support	APPS-CB
	DECW02010.CBI	CBI support	APPS-CB
	DECW05010.CBI	CBI support	APPS-CB
	DECW06010.CBI	CBI support	APPS-CB
	DECW09010.CBI	CBI support	APPS-CB
	DECW09020.CBI	CBI support	APPS-CB
	DECW10010.CBI	CBI support	APPS-CB
	DECW10020.CBI	CBI support	APPS-CB
	DECW10030.CBI	CBI support	APPS-CB
	DECW12010.CBI	CBI support	APPS-CB
	DECW13010.CBI	CBI support	APPS-CB
	DECW13020.CBI	CBI support	APPS-CB
	DECWCBI.DATA	CBI support	APPS-CB
DECW$EXAMPLES			
	7X14RK.BDF	Programming example (Alpha font)	XMPL
	7X14RK.DECW$BDF	Programming example (VAX font)	XMPL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	ACCESSX.EXE	Programming example	XMPL
	ACCESSX.UID	Programming example	XMPL
	ALLOBJS.H	Programming example	XMPL
	APP.C	Programming example	XMPL
	APP.H	Programming example	XMPL
	AUTO-SQUEAL.AUD	Sound editor example	SND
	BARK.BM	Programming example	XMPL
	BASIC.H	Programming example	XMPL
	BELLS.AUD	Sound editor example	SND
	BIKE-HORN.AUD	Sound editor example	SND
	BIKE-HORN.AU	Sound editor example	SND
	BUILD_CUSTOMIZER.COM	Programming example	XMPL
	CHALLENGER.GIF	Programming example	XMPL
	CLIENT.UID	Programming example	XMPL
	CLIENT.UIL	Programming example	XMPL
	CLIENT_CB.C	Programming example	XMPL
	CLIENT_CB.H	Programming example	XMPL
	CLOCK.DDIF	DDIF example	APPS
	COWS.AUD	Sound editor example	SND
	CUSTOM.C	Programming example	XMPL
	CUSTOM.DAT	Programming example	XMPL
	CUSTOM.HLB	Programming example	XMPL
	CUSTOM.HLP	Programming example	XMPL
	CUSTOM.TXT	Programming example	XMPL
	CUSTOM.UIL	Programming example	XMPL
	CUSTOMIMAGE.DAT	Programming example	XMPL
	CUTPASTE.C	Programming example	XMPL
	CUTPASTE.EXE	Programming example	XMPL
	CUTPASTE.UID	Programming example	XMPL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	CUTPASTE.UIL	Programming example	XMPL
	CUTPASTE_LOCAL.UIL	Programming example	XMPL
	DECBURGER.COM	UIL DRM demo	XMPL
	DECBURGER.C	UIL demo source	XMPL
	DECBURGER.EXE	UIL DRM programming example image	XMPL
	DECBURGER.HLB	UIL DRM demo	XMPL
	DECBURGER.HLP	UIL DRM demo source	XMPL
	DECBURGER.UID	UIL DRM demo	XMPL
	DECBURGER.UIL	UIL DRM demo	XMPL
	DECBURGER_HELP. DECW$BOOKSHELF	UIL DRM demo	XMPL
	DECBURGER_HELP. DECW$BOOK	UIL DRM demo	XMPL
	DECW$CDPLAYER.C	Programming example	XMPL
	DECW$CDPLAYER.DAT	Demo resource file	XMPL
	DECW$CDPLAYER.EXE	Programming example image	XMPL
	DECW$CDPLAYER.H	Programming example	XMPL
	DECW$CDPLAYER.UID	Programming example	XMPL
	DECW$CDPLAYER.UIL	Programming example	XMPL
	DECW$DXM_PORT.COM	Programming example	XMPL
	DECW$DXM_PORT_CALL.EXE	Programming example image	XMPL
	DECW$DXM_PORT_CLASS.EXE	Programming example image	XMPL
	DECW$DXM_PORT_DATA.EXE	Programming example image	XMPL
	DECW$DXM_PORT_DRM.EXE	Programming example image	XMPL
	DECW$DXM_PORT_HILEVELS .EXE	Programming example image	XMPL
	DECW$DXM_PORT_INCLUDES .EXE	Programming example image	XMPL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DECW$DXM_PORT_LOLEVELS .EXE	Programming example image	XMPL
	DECW$DXM_PORT_RESOURCES .EXE	Programming example image	XMPL
	DECW$DXM_PORT_UIL.EXE	Programming example image	XMPL
	DECW$FONT_ALIAS_ CHARTER.DAT	Font alias file	DVMS
	DECW$FONT_ALIAS_ CHARTER_100DPI.DAT	Font alias file	DVMS
	DECW$FONT_ALIAS_ FILENAMES.DAT	Font alias file	DVMS
	DECW$FONT_ALIAS_ KANJI.DAT	Font alias file	DVMS
	DECW$FONT_ALIAS_ LUCIDA.DAT	Font alias file	DVMS
	DECW$FONT_ALIAS_LUCIDA_ 100DPI.DAT	Font alias file	DVMS
	DEMO_BUILD.COM	Programming example	XMPL
	DIALOG.H	Programming example	XMPL
	DIALOGS.C	Programming example	XMPL
	DLG.C	Programming example	XMPL
	DLG.H	Programming example	XMPL
	DNDDEMO.C	Programming example	XMPL
	DNDDEMO.EXE	Programming example	XMPL
	DNDDEMO.H	Programming example	XMPL
	DNDDRAW.C	Programming example	XMPL
	DOG-HOWL.AUD	Sound editor example	SND
	DOG.C	Programming example	XMPL
	DOG.H	Programming example	XMPL
	DOG.UID	Programming example	XMPL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DOG.UIL	Programming example	XMPL
	DOGP.H	Programming example	XMPL
	DOGS.C	Programming example	XMPL
	DOGS.EXE	Programming example image	XMPL
	DOGS.UID	Programming example	XMPL
	DOGS.UIL	Programming example	XMPL
	DOG_ANIM.UIL	Programming example	XMPL
	DOWN.BM	Programming example	XMPL
	DXMDEFAULTS.DAT	Programming example	XMPL
	ENCODEFONT.PS	Coding example PostScript	XMPL
	FACTORY-WHISTLE.AUD	Sound editor example	SND
	FILEE.H	Programming example	XMPL
	FILEVIEW.COM	Programming example	XMPL
	FILEVIEW.C	Programming example	XMPL
	FILEVIEW.DAT	Programming example	XMPL
	FILEVIEW.EXE	Programming example	XMPL
	FILEVIEW.H	Programming example	XMPL
	FILEVIEW.UID	Programming example	XMPL
	FILEVIEW_ENGLISH.DAT	Programming example	XMPL
	FILEVIEW_ENGLISH.UID	Programming example	XMPL
	FILEVIEW_ENGLISH.UIL	Programming example	XMPL
	FILEVIEW_FRENCH.DAT	Programming example	XMPL
	FILEVIEW_FRENCH.UID	Programming example	XMPL
	FILEVIEW_FRENCH.UIL	Programming example	XMPL
	FILEVIEW_GERMAN.DAT	Programming example	XMPL
	FILEVIEW_GERMAN.UID	Programming example	XMPL
	FILEVIEW_GERMAN.UIL	Programming example	XMPL
	FONTS.ALIAS	Font alias file	DVMS
	FROG.AUD	Sound editor example	SND

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	HEB8X13.BDF	Programming example (Alpha font)	XMPL
	HEB8X13.DECW$BDF	Programming example (VAX font)	XMPL
	HELLOINT.C	Programming example	XMPL
	HELLOINT.EXE	Programming example	XMPL
	HELLOINT.UID	Programming example	XMPL
	HELLOINT.UIL	Programming example	XMPL
	HELLOMOTIF.C	Programming example	XMPL
	HELLOMOTIF.EXE	Programming example	XMPL
	HELLOMOTIF.FOR	XUI Toolkit demo source	XMPL
	HELLOMOTIF.PAS	XUI Toolkit demo source	XMPL
	HELLOMOTIF.UID	Programming example	XMPL
	HELLOMOTIF.UIL	XUI Toolkit demo source	XMPL
	HELP.TXT	Programming example	XMPL
	ICO.C	Programming example	XMPL
	ICO.EXE	Programming example image	XMPL
	ICON.XBM	Demo image	XMPL
	IMAGE.C	Programming example	XMPL
	JET-FLYBY.AUD	Sound editor example	SND
	K14-1.BDF	Programming example (Alpha font)	XMPL
	K14-1.DECW$BDF	Programming example (VAX font)	XMPL
	LASER.AUD	Sound editor example	SND
	LOCALSTRINGS.UID	Programming example	XMPL
	LOCALSTRINGS_ENGLISH.UID	Programming example	XMPL
	LOCALSTRINGS_ENGLISH.UIL	Programming example	XMPL
	LOCALSTRINGS_FRENCH.UID	Programming example	XMPL
	LOCALSTRINGS_FRENCH.UIL	Programming example	XMPL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	LOCALSTRINGS_HEBREW.UID	Programming example	XMPL
	LOCALSTRINGS_HEBREW.UIL	Programming example	XMPL
	LOCALSTRINGS_JAPAN.UID	Programming example	XMPL
	LOCALSTRINGS_JAPAN.UIL	Programming example	XMPL
	MAIN.H	Programming example	XMPL
	MAINE.H	Programming example	XMPL
	MEMBERSHIP.TXT	Programming example	XMPL
	MENU.UID	Programming example	XMPL
	MENU.UIL	Programming example	XMPL
	MENU_CB.C	Programming example	XMPL
	MENU_CB.H	Programming example	XMPL
	MOTIF.TXT	Programming example	XMPL
	MOTIFANIM.C	Programming example	XMPL
	MOTIFANIM.EXE	Programming example image	XMPL
	MOTIFANIM.UID	Programming example	XMPL
	MOTIFANIM.UIL	Programming example	XMPL
	MOTIFBUR.C	Programming example	XMPL
	MOTIFBUR.EXE	Programming example	XMPL
	MOTIFBUR.UID	Programming example	XMPL
	MOTIFBUR.UIL	Programming example	XMPL
	MOTIFBURGER.FOR	Programming example	XMPL
	MOTIFBURGER.UIL	Programming example	XMPL
	MOTIFBURGER_DEFS.FOR	Programming example	XMPL
	MOTIFGIF.C	Programming example	XMPL
	MOTIFGIF.EXE	Programming example image	XMPL
	MOTIFGIF.H	Programming example	XMPL
	MOTIFLOGO.UIL	Programming example	XMPL
	MOTIFSHELL.C	Programming example	XMPL
	MOTIFSHELL.EXE	Programming example	XMPL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	MOTIFSHELL.H	Programming example	XMPL
	OBJCUBE.H	Programming example	XMPL
	OBJICO.H	Programming example	XMPL
	OBJOCTA.H	Programming example	XMPL
	OBJPLANE.H	Programming example	XMPL
	OBJPYR.H	Programming example	XMPL
	PERIODIC.C	Programming example	XMPL
	PERIODIC.DAT	Programming example	XMPL
	PERIODIC.EXE	Programming example image	XMPL
	PERIODIC.UID	Programming example	XMPL
	PERIODIC.UIL	Programming example	XMPL
	PERIODIC_LOCAL.UIL	Programming example	XMPL
	PICT.COM	Programming example	XMPL
	PICT.C	Programming example	XMPL
	PICT.EXE	Programming example image	XMPL
	PICT.H	Programming example	XMPL
	PICTGLOB.H	Programming example	XMPL
	PLANE.UID	Programming example	XMPL
	PLANE.UIL	Programming example	XMPL
	POLICE-WHISTLE.AUD	Sound editor example	SND
	POLYINFO.H	Programming example	XMPL
	PRINCIPLES.TXT	Programming example	XMPL
	RESEARCH.TXT	Programming example	XMPL
	SQUARE.C	Programming example	XMPL
	SQUARE.H	Programming example	XMPL
	SQUARE.UIL	Programming example	XMPL
	SQUAREP.H	Programming example	XMPL
	STREAM.FDL	Programming example	XMPL
	STRINGS.UIL	Programming example	XMPL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	SUPERMAN.UID	Programming example	XMPL
	SUPERMAN.UIL	Programming example	XMPL
	SUPERMAN1.XBM	Programming example	XMPL
	SUPERMAN2.XBM	Programming example	XMPL
	SUPERMAN3.XBM	Programming example	XMPL
	SUPERMAN4.XBM	Programming example	XMPL
	SUPERMAN5.XBM	Programming example	XMPL
	SUPERMAN6.XBM	Programming example	XMPL
	SVNMSAMPLE.C	Programming example	XMPL
	SVNMSAMPLE.EXE	Programming example image	XMPL
	SVNMSAMPLESOURCE.C	Programming example	XMPL
	TERRE.XBM	Programming example	XMPL
	TEXT.C	Programming example	XMPL
	TEXTE.H	Programming example	XMPL
	TEXTEDIT.C	Programming example	XMPL
	TEXTEDIT.EXE	Programming example	XMPL
	TEXTEDIT.UID	Programming example	XMPL
	TEXTEDIT.UIL	Programming example	XMPL
	TFILE.C	Programming example	XMPL
	TFILE.H	Programming example	XMPL
	TK.C	Programming example	XMPL
	TK.H	Programming example	XMPL
	TKDEF.H	Programming example	XMPL
	TOUCAN.GIF	Programming example	XMPL
	TRIP.UID	Programming example	XMPL
	TRIP.UIL	Programming example	XMPL
	TRIP_CB.C	Programming example	XMPL
	TRIP_CB.H	Programming example	XMPL
	UILWMDCREATE.COM	Programming example	XMPL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	UILWMDCREATE.C	Programming example	XMPL
	UP.BM	Programming example	XMPL
	VFILE.C	Programming example	XMPL
	VFILE.H	Programming example	XMPL
	VTEXT.H	Programming example	XMPL
	WELCOME.TXT	Programming example	XMPL
	WHISTLE-DOWN.AUD	Sound editor example	SND
	WHISTLE-UP.AUD	Sound editor example	SND
	XGIF.H	Programming example	XMPL
	XGIFLOAD.C	Programming example	XMPL
	XLIBINTRO.C	Programming example	XMPL
	XLIBINTRO.EXE	Programming example	XMPL
	XLIBINTRO.FOR	Programming example	XMPL
	XMAPDEF.C	Programming example	XMPL
	XMAPDEF.EXE	Programming example	XMPL
	XMDEMOS.DAT	Programming example	XMPL
	XMDIALOGS.C	Programming example	XMPL
	XMDIALOGS.EXE	Programming example	XMPL
	XMEDITOR.C	Programming example	XMPL
	XMEDITOR.EXE	Programming example	XMPL
	XMFONTS.C	Programming example	XMPL
	XMFONTS.EXE	Programming example	XMPL
	XMFORC.C	Programming example	XMPL
	XMFORC.EXE	Programming example	XMPL
	XMFORM.C	Programming example	XMPL
	XMFORM.EXE	Programming example	XMPL
	XMGETRES.C	Programming example	XMPL
	XMGETRES.EXE	Programming example	XMPL
	XMLIST.C	Programming example	XMPL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	XMLIST.EXE	Programming example	XMPL
	XMMAP.C	Programming example	XMPL
	XMMAP.EXE	Programming example	XMPL
	XMPIANO.C	Programming example	XMPL
	XMPIANO.EXE	Programming example	XMPL
	XMPIANO.XBM	Programming example	XMPL
	XMPROTOCOL.C	Programming example	XMPL
	XMPROTOCOL.EXE	Programming example	XMPL
	XMTER.C	Programming example	XMPL
	XMTER.EXE	Programming example	XMPL
	XMTRAVEL.C	Programming example	XMPL
	XMTRAVEL.DAT	Programming example	XMPL
	XMTRAVEL.EXE	Programming example	XMPL
	XMTRAVEL.H	Programming example	XMPL
	XSETROOT_CUST.C	Programming example	XMPL
DECW$INCLUDE.BITMAPS			
	1X1.XBM	Programming example	XMPL
	2X2.XBM	Programming example	XMPL
	BLACK.XBM	Programming example	XMPL
	BOXES.XBM	Programming example	XMPL
	CALCULATOR.XBM	Programming example	XMPL
	CNTR_PTR.XBM	Programming example	XMPL
	CNTR_PTRMSK.XBM	Programming example	XMPL
	CROSS_WEAVE.XBM	Programming example	XMPL
	DIMPLE1.XBM	Programming example	XMPL
	DIMPLE3.XBM	Programming example	XMPL
	DOT.XBM	Programming example	XMPL
	DROPBAR7.XBM	Programming example	XMPL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DROPBAR8.XBM	Programming example	XMPL
	EDIT.XBM	Programming example	XMPL
	ESCHERKNOT.XBM	Programming example	XMPL
	FLAGDOWN.XBM	Programming example	XMPL
	FLAGUP.XBM	Programming example	XMPL
	FLIPPED_GRAY.XBM	Programming example	XMPL
	GRAY.XBM	Programming example	XMPL
	GRAY1.XBM	Programming example	XMPL
	GRAY3.XBM	Programming example	XMPL
	HLINES2.XBM	Programming example	XMPL
	KEYBOARD16.XBM	Programming example	XMPL
	LEFT_PTR.XBM	Programming example	XMPL
	LEFT_PTRMSK.XBM	Programming example	XMPL
	LETTERS.XBM	Programming example	XMPL
	LIGHT_GRAY.XBM	Programming example	XMPL
	MAILEMPTY.XBM	Programming example	XMPL
	MAILEMPTYMSK.XBM	Programming example	XMPL
	MAILFULL.XBM	Programming example	XMPL
	MAILFULLMSK.XBM	Programming example	XMPL
	MENSETMANUS.XBM	Programming example	XMPL
	MENU10.XBM	Programming example	XMPL
	MENU12.XBM	Programming example	XMPL
	MENU16.XBM	Programming example	XMPL
	MENU8.XBM	Programming example	XMPL
	NOLETTERS.XBM	Programming example	XMPL
	OPENDOT.XBM	Programming example	XMPL
	OPENDOTMASK.XBM	Programming example	XMPL
	PLAID.XBM	Programming example	XMPL
	RIGHT_PTR.XBM	Programming example	XMPL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	RIGHT_PTRMSK.XBM	Programming example	XMPL
	ROOT_WEAVE.XBM	Programming example	XMPL
	SCALES.XBM	Programming example	XMPL
	SIPB.XBM	Programming example	XMPL
	STAR.XBM	Programming example	XMPL
	STARMASK.XBM	Programming example	XMPL
	STIPPLE.XBM	Programming example	XMPL
	TARGET.XBM	Programming example	XMPL
	TERMINAL.XBM	Programming example	XMPL
	TIE_FIGHTER.XBM	Programming example	XMPL
	VLINES2.XBM	Programming example	XMPL
	VLINES3.XBM	Programming example	XMPL
	WEIRD_SIZE.XBM	Programming example	XMPL
	WIDE_WEAVE.XBM	Programming example	XMPL
	WINGDOGS.XBM	Programming example	XMPL
	WOMAN.XBM	Programming example	XMPL
	XFD_ICON.XBM	Programming example	XMPL
	XLOGO11.XBM	Programming example	XMPL
	XLOGO16.XBM	Programming example	XMPL
	XLOGO32.XBM	Programming example	XMPL
	XLOGO64.XBM	Programming example	XMPL
DECW$INCLUDE.EXTENSIONS			
	EXTUTIL.H	Programming support	PRGM
	IPC.H	Programming support	PRGM
	MITMISC.H	Programming support	PRGM
	MITMISCSTR.H	Programming support	PRGM
	MULTIBUF.H	Programming support	PRGM
	MULTIBUFST.H	Programming support	PRGM

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	SHAPE.H	Programming support	PRGM
	SHAPESTR.H	Programming support	PRGM
	SHM.H	Programming support	PRGM
	SHMSTR.H	Programming support	PRGM
	XEXT.H	Programming support	PRGM
	XI.H	Programming support	PRGM
	XINPUT.H	Programming support	PRGM
	XIPROTO.H	Programming support	PRGM
	XSHM.H	Programming support	PRGM
	XTEST.H	Programming support	PRGM
	XTESTEXT1.H	Programming support	PRGM
	XTESTSTR.H	Programming support	PRGM
DECW$INCLUDE.XMU			
	ATOMS.H	C language include file	XMPL
	CHARSET.H	C language include file	XMPL
	CLOSEHOOK.H	C language include file	XMPL
	CONVERTERS.H	C language include file	XMPL
	CURUTIL.H	C language include file	XMPL
	CVTCACHE.H	C language include file	XMPL
	DISPLAYQUE.H	C language include file	XMPL
	DRAWING.H	C language include file	XMPL
	ERROR.H	C language include file	XMPL
	INITER.H	C language include file	XMPL
	MISC.H	C language include file	XMPL
	STDCMAP.H	C language include file	XMPL
	STDSEL.H	C language include file	XMPL
	SYSUTIL.H	C language include file	XMPL
	WINUTIL.H	C language include file	XMPL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	XCT.H	C language include file	XMPL
	XMU.H	C language include file	XMPL
DECW$INCLUDE			
	APIENVRST.H	C language include file	PRGM
	APIENVSET.H	C language include file	PRGM
	ARROWB.H	C language include file	PRGM
	ARROWBG.H	C language include file	PRGM
	ARROWBGP.H	C language include file	PRGM
	ARROWBP.H	C language include file	PRGM
	ATOMMGR.H	C language include file	PRGM
	ATOMMGRI.H	C language include file	PRGM
	BASECLASSI.H	C language include file	PRGM
	BASECLASSP.H	C language include file	PRGM
	BITMAPS.H	C language include file	PRGM
	BITMAPSI.H	C language include file	PRGM
	BULLETINB.H	C language include file	PRGM
	BULLETINBP.H	C language include file	PRGM
	CACHEP.H	C language include file	PRGM
	CALLBACKI.H	C language include file	PRGM
	CASCADEB.H	C language include file	PRGM
	CASCADEBG.H	C language include file	PRGM
	CASCADEBGP.H	C language include file	PRGM
	CASCADEBP.H	C language include file	PRGM
	COLOROBJ.H	C language include file	PRGM
	COLOROBJP.H	C language include file	PRGM
	COMMAND.H	C language include file	PRGM
	COMMANDP.H	C language include file	PRGM
	COMPOBJ.H	C language include file	PRGM

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	COMPOBJP.H	C language include file	PRGM
	COMPOSITE.H	C language include file	PRGM
	COMPOSITEP.H	C language include file	PRGM
	CONSTRAINP.H	C language include file	PRGM
	CONSTRAINT.H	C language include file	PRGM
	CONVERT.H	C language include file	PRGM
	CORE.H	C language include file	PRGM
	COREP.H	C language include file	PRGM
	CURSORFONT.H	C language include file	PRGM
	CUTPASTE.H	C language include file	PRGM
	CUTPASTEP.H	C language include file	PRGM
	D2DX.H	C language include file	PRGM
	D2DXSTR.H	C language include file	PRGM
	DECSPECIFIC.H	C language include file	PRGM
	DECW$GBLSTRINGS.H	C language include file	PRGM
	DECWI18N.H	C language include file	PRGM
	DECWMHINTS.H	C language include file	PRGM
	DESKTOPP.H	C language include file	PRGM
	DIALOGS.H	C language include file	PRGM
	DIALOGSEP.H	C language include file	PRGM
	DIALOGSP.H	C language include file	PRGM
	DISPLAY.H	C language include file	PRGM
	DISPLAYI.H	C language include file	PRGM
	DISPLAYP.H	C language include file	PRGM
	DRAGBSI.H	C language include file	PRGM
	DRAGC.H	C language include file	PRGM
	DRAGCI.H	C language include file	PRGM
	DRAGCP.H	C language include file	PRGM
	DRAGDROP.H	C language include file	PRGM

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DRAGICCI.H	C language include file	PRGM
	DRAGICON.H	C language include file	PRGM
	DRAGICONP.H	C language include file	PRGM
	DRAGOVERS.H	C language include file	PRGM
	DRAGOVERSP.H	C language include file	PRGM
	DRAGUNDERI.H	C language include file	PRGM
	DRAWINGA.H	C language include file	PRGM
	DRAWINGAP.H	C language include file	PRGM
	DRAWNB.H	C language include file	PRGM
	DRAWNBP.H	C language include file	PRGM
	DRAWP.H	C language include file	PRGM
	DROPSMGR.H	C language include file	PRGM
	DROPSMGRI.H	C language include file	PRGM
	DROPSMGRP.H	C language include file	PRGM
	DROPTRANS.H	C language include file	PRGM
	DROPTRANSP.H	C language include file	PRGM
	DXMCOLOR.H	C language include file	PRGM
	DXMCOLORP.H	C language include file	PRGM
	DXMCSTEXT.H	C language include file	PRGM
	DXMCSTEXTP.H	C language include file	PRGM
	DXMHELPB.H	C language include file	PRGM
	DXMHELPBP.H	C language include file	PRGM
	DXMHELPSP.H	C language include file	PRGM
	DXMPRINT.H	C language include file	PRGM
	DXMPRINTP.H	C language include file	PRGM
	DXMSVN.H	C language include file	PRGM
	DXMSVNP.H	C language include file	PRGM
	DXMXLATARG.UIL	UIL language include file	PRGM
	DXMXLATTEXT.UIL	UIL language include file	PRGM

(continued on next page)

Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	EVENT.H	C language include file	PRGM
	EXTOBJECT.H	C language include file	PRGM
	EXTOBJECTP.H	C language include file	PRGM
	FILENVRST.H	C language include file	PRGM
	FILENVSET.H	C language include file	PRGM
	FILESB.H	C language include file	PRGM
	FILESBP.H	C language include file	PRGM
	FORM.H	C language include file	PRGM
	FORMP.H	C language include file	PRGM
	FRAME.H	C language include file	PRGM
	FRAMEP.H	C language include file	PRGM
	GADGETP.H	C language include file	PRGM
	GETSECRES.H	C language include file	PRGM
	GMUTILSI.H	C language include file	PRGM
	ICONFILE.H	C language include file	PRGM
	ICONFILEP.H	C language include file	PRGM
	IDB.H	C language include file	PRGM
	INTRINSIC.H	C language include file	PRGM
	INTRINSICP.H	C language include file	PRGM
	KEYSYM.H	C language include file	PRGM
	KEYSYMDEF.H	C language include file	PRGM
	LABEL.H	C language include file	PRGM
	LABELDICOI.H	C language include file	PRGM
	LABELG.H	C language include file	PRGM
	LABELGP.H	C language include file	PRGM
	LABELP.H	C language include file	PRGM
	LIST.H	C language include file	PRGM
	LISTDICONI.H	C language include file	PRGM
	LISTP.H	C language include file	PRGM

(continued on next page)

Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	MAINW.H	C language include file	PRGM
	MAINWP.H	C language include file	PRGM
	MANAGERP.H	C language include file	PRGM
	MENUSHELL.H	C language include file	PRGM
	MENUSHELLP.H	C language include file	PRGM
	MENUUTILP.H	C language include file	PRGM
	MESSAGEB.H	C language include file	PRGM
	MESSAGEBP.H	C language include file	PRGM
	MESSAGESI.H	C language include file	PRGM
	MRM.H	C language include file	PRGM
	MRMAPPL.H	C language include file	PRGM
	MRMDECLS.H	C language include file	PRGM
	MRMPUBLIC.H	C language include file	PRGM
	MRMWIDGET.H	C language include file	PRGM
	MWMUTIL.H	C language include file	PRGM
	OBJECT.H	C language include file	PRGM
	OBJECTP.H	C language include file	PRGM
	PANEDW.H	C language include file	PRGM
	PANEDWP.H	C language include file	PRGM
	PRIMITIVEP.H	C language include file	PRGM
	PROTOCOLS.H	C language include file	PRGM
	PROTOCOLSP.H	C language include file	PRGM
	PUSHB.H	C language include file	PRGM
	PUSHBG.H	C language include file	PRGM
	PUSHBGP.H	C language include file	PRGM
	PUSHBP.H	C language include file	PRGM
	QUARKS.H	C language include file	PRGM
	RCUTILSP.H	C language include file	PRGM
	RECTOBJ.H	C language include file	PRGM

(continued on next page)

Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	RECTOBJP.H	C language include file	PRGM
	REGIONI.H	C language include file	PRGM
	REPTYPE.H	C language include file	PRGM
	REPTYPEI.H	C language include file	PRGM
	ROWCOLUMN.H	C language include file	PRGM
	ROWCOLUMNP.H	C language include file	PRGM
	SASHP.H	C language include file	PRGM
	SCALE.H	C language include file	PRGM
	SCALEP.H	C language include file	PRGM
	SCREEN.H	C language include file	PRGM
	SCREENP.H	C language include file	PRGM
	SCROLLBAR.H	C language include file	PRGM
	SCROLLBARP.H	C language include file	PRGM
	SCROLLEDW.H	C language include file	PRGM
	SCROLLEDWP.H	C language include file	PRGM
	SELECTIOB.H	C language include file	PRGM
	SELECTIOBP.H	C language include file	PRGM
	SELECTION.H	C language include file	PRGM
	SEPARATOG.H	C language include file	PRGM
	SEPARATOGP.H	C language include file	PRGM
	SEPARATOR.H	C language include file	PRGM
	SEPARATORP.H	C language include file	PRGM
	SHELL.H	C language include file	PRGM
	SHELLEP.H	C language include file	PRGM
	SHELLP.H	C language include file	PRGM
	STRINGDEFS.H	C language include file	PRGM
	STRINGSRCP.H	C language include file	PRGM
	TEAROFFBP.H	C language include file	PRGM
	TEAROFFP.H	C language include file	PRGM

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	TEXT.H	C language include file	PRGM
	TEXTDICONI.H	C language include file	PRGM
	TEXTF.H	C language include file	PRGM
	TEXTFP.H	C language include file	PRGM
	TEXTFSELP.H	C language include file	PRGM
	TEXTINP.H	C language include file	PRGM
	TEXTOUTP.H	C language include file	PRGM
	TEXTP.H	C language include file	PRGM
	TEXTSELP.H	C language include file	PRGM
	TEXTSRCP.H	C language include file	PRGM
	TEXTSTRSOP.H	C language include file	PRGM
	TOGGLEB.H	C language include file	PRGM
	TOGGLEBG.H	C language include file	PRGM
	TOGGLEBGP.H	C language include file	PRGM
	TOGGLEBP.H	C language include file	PRGM
	TRANSLATE.H	C language include file	PRGM
	TRANSLTNSP.H	C language include file	PRGM
	TRAVACTI.H	C language include file	PRGM
	TRAVERSAL.H	C language include file	PRGM
	TRAVERSALI.H	C language include file	PRGM
	UILDBDEF.H	C language include file	PRGM
	UILLEXPARS.H	C language include file	PRGM
	VASIMPLE.H	C language include file	PRGM
	VASIMPLEP.H	C language include file	PRGM
	VENDOR.H	C language include file	PRGM
	VENDORE.H	C language include file	PRGM
	VENDOREP.H	C language include file	PRGM
	VENDORP.H	C language include file	PRGM
	VENDORS.H	C language include file	PRGM

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	VENDORSEP.H	C language include file	PRGM
	VENDORSP.H	C language include file	PRGM
	VIRTKEYS.H	C language include file	PRGM
	VIRTKEYSP.H	C language include file	PRGM
	WINDOWOBJ.H	C language include file	PRGM
	WINDOWOBJP.H	C language include file	PRGM
	WORLDP.H	C language include file	PRGM
	X.H	C language include file	PRGM
	XATOM.H	C language include file	PRGM
	XCMS.H	C language include file	PRGM
	XFUNCPROTO.H	C language include file	PRGM
	XFUNCS.H	C language include file	PRGM
	XLIB.H	C language include file	PRGM
	XLIB_XPG4_FUNCS.H	C language include file	PRGM
	XLOCALE.H	C language include file	PRGM
	XM.H	C language include file	PRGM
	XMALL.H	C language include file	PRGM
	XMAPPL.UIL	C language include file	PRGM
	XMD.H	C language include file	PRGM
	XMI.H	C language include file	PRGM
	XMOSP.H	C language include file	PRGM
	XMP.H	C language include file	PRGM
	XMSTRDEFS.H	C language include file	PRGM
	XOS.H	C language include file	PRGM
	XOSDEFS.H	C language include file	PRGM
	XPROTO.H	C language include file	PRGM
	XPROTOSTR.H	C language include file	PRGM
	XRESOURCE.H	C language include file	PRGM
	XTOS.H	C language include file	PRGM

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	XUTIL.H	C language include file	PRGM
DECW$SYSTEM_DEFAULTS			
	DDIF$CSW.UID	DDIF UI data file	CDA
	DDIF$VIEW.UID	CDA Viewer UI data file	CDA
	DDIF$VIEWWGT.UID	CDA Viewer UI data file	CDA
	DDIF$VIEWWGT12.UID	CDA Viewer UI data file	CDA
	DECW$BOOKREADER.DAT	Bookreader resource file	RTL
	DECW$BOOKREADER.UID	Bookreader UI data file	RTL
	DECW$CALC.DAT	Calculator resource file	APPS
	DECW$CALC.UID	Calculator UI data file	APPS
	DECW$CALENDAR.DAT	Calendar resource file	APPS
	DECW$CALENDAR.UID	Calendar UI data file	APPS
	DECW$CARDFILER.DAT	Cardfiler resource file	APPS
	DECW$CARDFILER.UID	Cardfiler UI data file	APPS
	DECW$CBI.UID	CBI UI data file	APPS
	DECW$CLOCK.DAT	Clock resource file	APPS
	DECW$CLOCK.UID	Clock UI data file	APPS
	DECW$CONSOLE.DAT	Console Window resource file	APPS
	DECW$DXMPRINTWGT_ UI.UID	Print Widget UI data file	RTL
	DECW$DXMPRINTWGT_ UI12.UID	Print Widget UI data file	RTL
	DECW$ENDSESSION.DAT	Session Manager resource file	APPS
	DECW$ENDSESSION.UID	Session Manager UI data file	APPS
	DECW$LOGIN.DAT	Login resource file	APPS
	DECW$LOGIN.UID	Login UI data file	APPS
	DECW$MAIL.DAT	DECwindows Mail resource file	RTL
	DECW$MAIL_MAIN.UID	DECwindows Mail UI data file	RTL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DECW$MAIL_MAIN12.UID	DECwindows Mail UI data file 123	RTL
	DECW$MAIL_MISC.UID	DECwindows Mail UI data file 113	RTL
	DECW$MAIL_MISC12.UID	DECwindows Mail UI data file 123	RTL
	DECW$MAIL_READ.UID	DECwindows Mail UI data file 113	RTL
	DECW$MAIL_READ12.UID	DECwindows Mail UI data file 123	RTL
	DECW$MAIL_SEND.UID	DECwindows Mail UI data file 113	RTL
	DECW$MAIL_SEND12.UID	DECwindows Mail UI data file 123	RTL
	DECW$MESSAGEPANEL.DAT	Message Panel resource file	APPS
	DECW$MESSAGEPANEL.UID	Message Panel UI data file	APPS
	DECW$MWM.DAT	Motif Window Manager resource file	APPS
	DECW$MWM.UID	Motif Window Manager UI data file	APPS
	DECW$MWM_BW.DAT	Motif Window Manager resource file	APPS
	DECW$MWM_GRAY.DAT	Motif Window Manager resource file	APPS
	DECW$MWM_RC.DAT	Motif Window Manager resource file	APPS
	DECW$NOTEPAD.DAT	Notepad resource file	APPS
	DECW$NOTEPAD.UID	Notepad UI data file	APPS
	DECW$PAINT.DAT	Paint resource file	APPS
	DECW$PAINT.UID	Paint UI data file	APPS
	DECW$PAUSESESSION.DAT	Session Manager resource file	APPS
	DECW$PAUSESESSION.UID	Session Manager UI data file	APPS
	DECW$PRINTSCREEN.UID	Print Screen UI data file	APPS

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DECW$PRINTWGT_UI.UID	Print Widget UI data file	RTL
	DECW$PUZZLE.DAT	Puzzle resource file	APPS
	DECW$PUZZLE.UID	Puzzle UI data file	APPS
	DECW$SMB_BACKGROUND.DAT	Session Manager resource file	APPS
	DECW$SMB_BACKGROUND_BW.DAT	Session Manager resource file	APPS
	DECW$SMB_BACKGROUND_COLOR.DAT	Session Manager resource file	APPS
	DECW$SMB_BACKGROUND_GRAY.DAT	Session Manager resource file	APPS
	DECW$SMB_KEYBOARD.DAT	Session Manager resource file	APPS
	DECW$SMB_LANGUAGE.DAT	Session Manager resource file	APPS
	DECW$SMB_POINTER.DAT	Session Manager resource file	APPS
	DECW$SMB_POINTER_BW.DAT	Session Manager resource file	APPS
	DECW$SMB_POINTER_COLOR.DAT	Session Manager resource file	APPS
	DECW$SMB_POINTER_GRAY.DAT	Session Manager resource file	APPS
	DECW$SMB_SECURITY.DAT	Session Manager resource file	APPS
	DECW$SMB_WINDOW.DAT	Session Manager resource file	APPS
	DECW$SMB_WINDOW_BW.DAT	Session Manager resource file	APPS
	DECW$SMB_WINDOW_COLOR.DAT	Session Manager resource file	APPS
	DECW$SMB_WINDOW_GRAY.DAT	Session Manager resource file	APPS
	DECW$TERMINAL.DAT	DECterm resource file	RTL
	DECW$TERMINAL.UID	DECterm user interface	RTL
	DECW$UIL_DXM_MOTIF.WMD	UIL support	PRGM
	DECW$UIL_DXM_MOTIF.WML	UIL support	PRGM

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DECW$UIL_OSF_MOTIF_1_1.WMD	UIL support	PRGM
	DECW$UIL_OSF_MOTIF_1_1.WML	UIL support	PRGM
	DECW$WINMGR.DAT	XUI Window Manager resource file	APPS
	DECW$WINMGR.UID	XUI Window Manager UI data file	APPS
	DECW$WSCUST.DAT	Workstation customization resource file	APPS
	DECW$WSCUST.UID	Workstation customization UI data file	APPS
	DECW$WSINIT.UID	Workstation initialization UI data file	APPS
	DIVA$WGT_UI.UID	Sound editor UI data file	SND-DI
	LWK$DXMUI.UID	LinkWorks UI data file	RTL
	LWK$DXMUI12.UID	LinkWorks UI data file	RTL
	MOSAIC.DAT	MOSAIC resource file	XMPL
	MOSAIC.DAT_COLOR	MOSAIC resource file	XMPL
	MOSAIC.DAT_MONO	MOSAIC resource file	XMPL
	SOUND$EDITOR_UI.UID	Sound editor UI data file	SND
	VUE$MASTER.DAT	FileView UI data file	APPS
	VUE$MASTER.UID	FileView UI data file	APPS
	VUE$SYSTEM_PROFILE.VUE$DAT	FileView profile file	APPS
	XNL_CS_CZ.UID	Language switching UI data file	RTL
	XNL_DA_DK.UID	Language switching UI data file	RTL
	XNL_DE_AT.UID	Language switching UI data file	RTL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	XNL_DE_CH.UID	Language switching UI data file	RTL
	XNL_DE_DE.UID	Language switching UI data file	RTL
	XNL_EN_AU.UID	Language switching UI data file	RTL
	XNL_EN_GB.UID	Language switching UI data file	RTL
	XNL_EN_NZ.UID	Language switching UI data file	RTL
	XNL_EN_PG.UID	Language switching UI data file	RTL
	XNL_EN_US.UID	Language switching UI data file	RTL
	XNL_ES_ES.UID	Language switching UI data file	RTL
	XNL_FI_FI.UID	Language switching UI data file	RTL
	XNL_FJ_FJ.UID	Language switching UI data file	RTL
	XNL_FR_BE.UID	Language switching UI data file	RTL
	XNL_FR_CA.UID	Language switching UI data file	RTL
	XNL_FR_CH.UID	Language switching UI data file	RTL
	XNL_FR_FR.UID	Language switching UI data file	RTL
	XNL_HU_HU.UID	Language switching UI data file	RTL
	XNL_ISO8859-1.UID	Language switching UI data file	RTL
	XNL_ISO8859-2.UID	Language switching UI data file	RTL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	XNL_ISO8859-5.UID	Language switching UI data file	RTL
	XNL_ISO8859-8.UID	Language switching UI data file	RTL
	XNL_IT_CH.UID	Language switching UI data file	RTL
	XNL_IT_IT.UID	Language switching UI data file	RTL
	XNL_IW_IL.UID	Language switching UI data file	RTL
	XNL_NL_BE.UID	Language switching UI data file	RTL
	XNL_NL_NL.UID	Language switching UI data file	RTL
	XNL_NO_NO.UID	Language switching UI data file	RTL
	XNL_PL_PL.UID	Language switching UI data file	RTL
	XNL_PT_PT.UID	Language switching UI data file	RTL
	XNL_RU_RU.UID	Language switching UI data file	RTL
	XNL_SK_SK.UID	Language switching UI data file	RTL
	XNL_SV_SE.UID	Language switching UI data file	RTL
DECW$UTILS			
	ATOBM.C	MIT utility source	XMPL
	ATOBM.EXE	MIT utility image	XMPL
	BITMAP.C	MIT utility source	XMPL
	BITMAP.EXE	MIT utility image	XMPL
	BMTOA.C	MIT utility source	XMPL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	BMTOA.EXE	MIT utility image	XMPL
	COPYRIGHT.H	MIT utility source	XMPL
	DECW$DEFINE_UTILS.COM	MIT utility source	XMPL
	DECWINDOWS.GIF	MOSAIC Home Page example file	XMPL
	DIALOG.C	MIT utility source	XMPL
	DIGITAL_LOGO.GIF	MOSAIC Home Page example file	XMPL
	DSIMPLE.C	MIT utility source	XMPL
	DSIMPLE.H	MIT utility source	XMPL
	EXEC.C	MIT utility source	XMPL
	HANDLE.C	MIT utility source	XMPL
	HOME.HTML	MOSAIC Home Page example file	XMPL
	HOTSPOT.HTML	MOSAIC Home Page example file	XMPL
	LNCMD.H	MIT utility source	XMPL
	MOSAIC.EXE	MOSAIC image file	XMPL
	PF.C	MIT utility source	XMPL
	PMP.H	MIT utility source	XMPL
	STRIPNAME.C	MIT utility source	XMPL
	UNLINK.C	MIT utility source	XMPL
	WQ.H	MIT utility source	XMPL
	X2JET.C	MIT utility source	XMPL
	X2PMP.C	MIT utility source	XMPL
	XDPYINFO.C	MIT utility source	XMPL
	XDPYINFO.EXE	MIT utility image	XMPL
	XEV.C	MIT utility source	XMPL
	XEV.EXE	MIT utility image	XMPL
	XLSATOMS.C	MIT utility source	XMPL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	XLSATOMS.EXE	MIT utility image	XMPL
	XLSFONTS.C	MIT utility source	XMPL
	XLSFONTS.EXE	MIT utility image	XMPL
	XLSWINS.C	MIT utility source	XMPL
	XLSWINS.EXE	MIT utility image	XMPL
	XMAG.C	MIT utility source	XMPL
	XMAG.EXE	MIT utility image	XMPL
	XMBIND.EXE	MIT utility image	XMPL
	XMODMAP.C	MIT utility source	XMPL
	XMODMAP.EXE	MIT utility image	XMPL
	XMODMAP.H	MIT utility source	XMPL
	XMOSAIC-SETUP.COM	MOSAIC utility file	XMPL
	XPR.C	MIT utility source	XMPL
	XPR.EXE	MIT utility image	XMPL
	XPR.H	MIT utility source	XMPL
	XPROP.C	MIT utility source	XMPL
	XPROP.EXE	MIT utility image	XMPL
	XRDB.C	MIT utility source	XMPL
	XRDB.EXE	MIT utility image	XMPL
	XREFRESH.C	MIT utility source	XMPL
	XREFRESH.EXE	MIT utility image	XMPL
	XSET.C	MIT utility source	XMPL
	XSET.EXE	MIT utility image	XMPL
	XSETROOT.C	MIT utility source	XMPL
	XSETROOT.EXE	MIT utility image	XMPL
	XWD.C	MIT utility source	XMPL
	XWD.EXE	MIT utility image	XMPL
	XWDFILE.H	MIT utility source	XMPL
	XWININFO.C	MIT utility source	XMPL

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	XWININFO.EXE	MIT utility image	XMPL
	XWUD.C	MIT utility source	XMPL
	XWUD.EXE	MIT utility image	XMPL
SYS$HELP			
	DDIF$VIEW.DECW$BOOK	CDA Viewer help	CDA
	DECW$BOOKREADER. DECW$BOOK	Bookreader help	RTL
	DECW$CALC.DECW$BOOK	Calculator help	APPS
	DECW$CALENDAR. DECW$BOOK	Calendar help	APPS
	DECW$CARDFILER. DECW$BOOK	Cardfiler help	APPS
	DECW$CLOCK.DECW$BOOK	Clock help	APPS
	DECW$DECSOUND. DECW$BOOK	Sound editor help	SND
	DECW$DXMCOLOR_HELP. DECW$BOOK	Color mixer help	RTL
	DECW$DXMHELP_HELP.HLB	HELP help	RTL
	DECW$DXMPRINTWGT_ HELP.DECW$BOOK	Print Widget help	RTL
	DECW$HELPHELP.HLB	HELP help	RTL
	DECW$MAIL.DECW$BOOK	DECwindows Mail help	RTL
	DECW$MESSAGEPANEL. DECW$BOOK	Message Panel help	APPS
	DECW$MOTIFU3012.RELEASE_ NOTES	Release Notes V1.2-3	INST
	DECW$MOTIF_OSF_BUG_ LIST_V12.TXT	Help text	INST
	DECW$MULTIBUFFER.TXT	Help text	INST
	DECW$MWM.DECW$BOOK	Motif Window Manager help	APPS
	DECW$NOTEPAD.DECW$BOOK	Notepad help	APPS

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DECW$PAINT.DECW$BOOK	Paint help	APPS
	DECW$PRINTSCREEN. DECW$BOOK	Print Screen help	APPS
	DECW$PRINTWGT.HLB	Print Widget help	RTL
	DECW$PUZZLE.DECW$BOOK	Puzzle help	APPS
	DECW$SHAPE.TXT	Help text	INST
	DECW$TERMINAL. DECW$BOOK	DECterm help	RTL
	DECW$VUE.DECW$BOOK	FileView help	APPS
	DECW$XINPUT.TXT	Help text	INST
SYS$LIBRARY			
	CDA$ACCESS.EXE	CDA Toolkit and CDA Converter Toolkit run-time library shareable image	CDA
	CDA$ACCESS.IIF‡	Translated-image support	TIS
	CDA$ACCESS_TV_SUPPORT .EXE‡	Translated-image support	TIS
	CDA$DTIF_TO_DDIF.EXE	CDA DTIF-to-DDIF converter image	CDA
	CDA$WRITE_ANALYSIS.EXE	CDA image	CDA
	CDADEF.FOR	Fortran programming support	PGFO
	CDADEF.H	CDA language bindings	PRGM
	CDADEF.PAS	Pascal programming support	PGPA
	CDAMSG.FOR	Fortran programming support	PGFO
	CDAMSG.H	CDA message symbols	PRGM
	CDAMSG.PAS	Pascal programming support	PGPA
	CDAPTP.H	CDA C language include file	PRGM
	CDATRANS.H	CDA C language include file	PRGM
	CDATYP.H	CDA C language include file	PRGM

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DDIF$CC_VIEWSHR.EXE	DDIF Viewer shareable image	CDA
	DDIF$DECW_VIEWSHR12.EXE	DDIF Viewer shareable image	CDA
	DDIF$READ_TEXT.EXE	Text frontend shareable image	CDA
	DDIF$VIEWSHR.EXE	DDIF Viewer shareable image	CDA
	DDIF$VIEWSHR.IIF‡	Translated-image support	TIS
	DDIF$VIEWSHR12.EXE	DDIF Viewer shareable image	CDA
	DDIF$VIEWSHR_TV_ SUPPORT.EXE‡	Translated-image support	TIS
	DDIF$WRITE_PS.EXE	CDA text image	CDA
	DDIF$WRITE_TEXT.EXE	CDA text backend shareable image	CDA
	DDIFDEF.FOR	Fortran programming support	PGFO
	DDIFDEF.H	DDIF language bindings	PRGM
	DDIFDEF.PAS	Pascal programming support	PGPA
	DECW$AILSHR.EXE	Shareable image	RTL
	DECW$AILSHR.IIF‡	Translated-image support	TIS
	DECW$AILSHRR5.EXE	Shareable image	RTL
	DECW$AILSHR_TV_SUPPORT. EXE‡	Translated-image support	TIS
	DECW$BKRSHR.EXE	Shareable image	RTL
	DECW$BKRSHR.IIF‡	Translated-image support	TIS
	DECW$BKRSHR12.EXE	Shareable image	RTL
	DECW$BKRSHR_TV_ SUPPORT.EXE‡	Translated-image support	TIS
	DECW$BOOKREADER_ PROLOG.PS	PostScript initialization	APPS
	DECW$CALENDAR_PROLOG.PS	PostScript initialization	APPS
	DECW$CURSOR.H	Cursor include file	PRGM
	DECW$D2DXLIBSHR.EXE	Shareable image	RTL
	DECW$D2DXLIBSHR.IIF‡	Translated-image support	TIS

‡Alpha specific

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DECW$D2DXLIBSHR_TV_ SUPPORT .EXE‡	Translated-image support	TIS
	DECW$DWTLIBSHR.EXE	XUI Toolkit thin-layer shareable image	RTL
	DECW$DWTLIBSHR.IIF‡	Translated-image support	TIS
	DECW$DWTLIBSHR_TV_ SUPPORT.EXE‡	Translated-image support	TIS
	DECW$DWTMSG.FOR	Fortran programming support	PGFO
	DECW$DWTMSG.PAS	Pascal programming support	PGPA
	DECW$DWTSHR.EXE	XUI Toolkit shareable image	RTL
	DECW$DWTSHR_TV_ SUPPORT.EXE‡	Translated-image support	TIS
	DECW$DXMLIBSHR.EXE	Digital Extended Motif Toolkit shareable image	RTL
	DECW$DXMLIBSHR.IIF‡	Translated-image support	TIS
	DECW$DXMLIBSHR12.EXE	Digital Extended Motif Toolkit shareable image	RTL
	DECW$DXMLIBSHR_TV_ SUPPORT.EXE‡	Translated-image support	TIS
	DECW$LOGINOUT.EXE	DECwindows extension to VMS LOGINOUT image	APPS
	DECW$MAILSHR.EXE	DECwindows Mail shareable image for V1.1.3	RTL
	DECW$MAILSHR.IIF‡	Translated-image support	TIS
	DECW$MAILSHR12.EXE	DECwindows Mail shareable image for V1.2.3	RTL
	DECW$MAILSHR12.IIF‡	Translated-image support	TIS
	DECW$MAILSHR_TV_ SUPPORT.EXE‡	Translated-image support	TIS
	DECW$MOTIF.FOR	Fortran programming support	PGFO
	DECW$MOTIF.PAS	Pascal programming support	PGPA

‡Alpha specific

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DECW$MRMLIBSHR12.EXE	Digital Extended Motif Toolkit shareable image	RTL
	DECW$PEN_BUILD.COM	Pascal programming support	PGPA
	DECW$PRINTWGTSHR.EXE	Print Widget shareable image	RTL
	DECW$PRINTWGTSHR.IIF‡	Translated-image support	TIS
	DECW$PRINTWGTSHR_TV_ SUPPORT.EXE‡	Translated-image support	TIS
	DECW$SESSIONSHRP.EXE	Privileged session support image	DVMS
	DECW$TERMINALSHR.EXE	DECterm shareable image	RTL
	DECW$TERMINALSHR.IIF‡	Translated-image support	TIS
	DECW$TERMINALSHR12.EXE	DECterm shareable image	RTL
	DECW$TERMINALSHR_TV_ SUPPORT.EXE‡	Translated-image support	TIS
	DECW$WML_TOKENS.DAT	Widget metalanguage tokens data	PRGM
	DECW$XEXTLIBSHR.EXE	Xlib shareable image	RTL
	DECW$XEXTLIBSHR.IIF‡	Translated-image support	TIS
	DECW$XEXTLIBSHR_TV_ SUPPORT.EXE‡	Translated-image support	TIS
	DECW$XKEYSYMDB.DAT	Key symbols data	RTL
	DECW$XLIBDEF.FOR	Fortran programming support	PGFO
	DECW$XLIBDEF.PAS	Pascal programming support	PGPA
	DECW$XLIBMSG.FOR	Fortran programming support	PGFO
	DECW$XLIBMSG.H	XLib message symbols	PRGM
	DECW$XLIBMSG.PAS	Pascal programming support	PGPA
	DECW$XLIBSHR.EXE	Xlib shareable image	RTL
	DECW$XLIBSHR.IIF‡	Translated-image support	TIS
	DECW$XLIBSHR_TV_ SUPPORT.EXE‡	Translated-image support	TIS
	DECW$XMLIBSHR.EXE	Motif Toolkit shareable image	RTL

‡Alpha specific

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DECW$XMLIBSHR.IIF‡	Translated-image support	TIS
	DECW$XMLIBSHR12.EXE	Motif Toolkit shareable image	RTL
	DECW$XMLIBSHR_TV_ SUPPORT.EXE‡	Translated-image support	TIS
	DECW$XMULIBSHR.EXE	MIT miscellaneous utilities library	RTL
	DECW$XMULIBSHR.IIF‡	Translated-image support	TIS
	DECW$XMULIBSHRR5.EXE	MIT miscellaneous utilities library	RTL
	DECW$XMULIBSHR_TV_ SUPPORT.EXE‡	Translated-image support	TIS
	DECW$XTLIBSHRR5.EXE	Xtoolkit (intrinsics) shareable image	RTL
	DECW$XTRAPLIBSHR.EXE	Xtrap extension shareable image	RTL
	DECW$XTRAPLIBSHR.IIF‡	Translated-image support	TIS
	DECW$XTRAPLIBSHRR5.EXE	Xtrap extension shareable image	RTL
	DECW$XTRAPLIBSHR_TV_ SUPPORT.EXE‡	Translated-image support	TIS
	DECW$XTSHR.EXE	Xtoolkit (intrinsics) shareable image	RTL
	DECW$XTSHR_TV_SUPPORT. EXE‡	Translated-image support	TIS
	DECWINDOWS.OLB	DECwindows Object Library	DVMS
	DGIT$LIBSHR.EXE	Digital Extended Toolkit shareable image	RTL
	DGIT$LIBSHR.IIF‡	Translated-image support	TIS
	DGIT$LIBSHR12.EXE	Digital Extended Toolkit shareable image	RTL
	DGIT$LIBSHR_TV_SUPPORT. EXE‡	Translated-image support	TIS

‡Alpha specific

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DIVA$LIB_SHR.EXE	Sound-editor shareable image	SND-DI
	DIVA$WGT_SHR.EXE	Sound-editor shareable image	SND-DI
	DTIFDEF.FOR	Fortran programming support	PGFO
	DTIFDEF.H	DTIF programmer files	PRGM
	DTIFDEF.PAS	Pascal programming support	PGPA
	DVR$DECW_DEF.H	CDA Viewer C language support	PRGM
	DVR$DECW_PTP.H	CDA Viewer C language support	PRGM
	DVR$MSG.H	CDA Viewer C language support	PRGM
	DVRCDEF.H	CDA Viewer C language support	PRGM
	DVRCINT.H	CDA Viewer C language support	PRGM
	DVRCPTP.H	CDA Viewer C language support	PRGM
	DVRMSG.H	CDA Viewer C language support	PRGM
	DVRWDEF.H	CDA Viewer C language support	PRGM
	IMG$SHRLIB.EXE	DECimage Application Services (DAS) shareable image	RTL
	IMG$SHRLIB.IIF‡	Translated-image support	TIS
	IMG$SHRLIB12.EXE	DECimage Application Services (DAS) shareable image	RTL
	IMG$SHRLIB_NOX.EXE	DECimage Application Services (DAS) shareable image	RTL
	IMG$SHRLIB_TV_SUPPORT.EXE‡	Translated-image support	TIS
	LWK$DXMSHR.EXE	LinkWorks shareable image	RTL
	LWK$DXMSHR.IIF‡	Translated-image support	TIS

‡Alpha specific

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	LWK$DXMSHR12.EXE	LinkWorks shareable image	RTL
	LWK$DXMSHR_TV_SUPPORT.EXE‡	Translated-image support	TIS
	VUE$MASTERSHR.EXE	FileView shareable image	APPS
	XDPS$DPSBINDINGSSHR.EXE	Display PostScript Client Library VAX binding shareable image	RTL
	XDPS$DPSBINDINGSSHR.IIF‡	Translated-image support	TIS
	XDPS$DPSBINDINGSSHR_TV_SUPPORT.EXE‡	Translated-image support	TIS
	XDPS$DPSCLIENTSHR.EXE	Display PostScript Client Library C binding shareable image	RTL
	XDPS$DPSCLIENTSHR.IIF‡	Translated-image support	TIS
	XDPS$DPSCLIENTSHR_TV_SUPPORT.EXE‡	Translated-image support	TIS
	XDPS$DPSLIBSHR.EXE	Display PostScript Xlib extension shareable image	RTL
	XDPS$DPSLIBSHR.IIF‡	Translated-image support	TIS
	XDPS$DPSLIBSHR_TV_SUPPORT.EXE‡	Translated-image support	TIS
	XDPS$DPSOPS.FOR	Fortran programming support	PGFO
	XDPS$DPSXCLIENT.FOR	Fortran programming support	PGFO
	XDPS$PSOPS.FOR	Fortran programming support	PGFO
	XDPS$XDPS.FOR	Fortran programming support	PGFO
	XDPS$XDPSLIB.FOR	Fortran programming support	PGFO
	XIE$SHRLIB.EXE	X Imaging Extension library shareable image	RTL
	XIE$SHRLIB.IIF‡	Translated-image support	TIS
	XIE$SHRLIB_TV_SUPPORT.EXE‡	Translated-image support	TIS
	XNL$DEF.FOR	Fortran programming support	PGFO
	XNL$DEF.PAS	Pascal programming support	PGPA

‡Alpha specific

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	XNL$MSG.FOR	Fortran programming support	PGFO
	XNL$MSG.PAS	Pascal programming support	PGPA
	XNL$SHR.EXE	Language-switching shareable image	RTL
	XNL$SHR.IIF‡	Translated-image support	TIS
	XNL$SHR12.EXE	Language-switching shareable image	RTL
	XNL$SHR_TV_SUPPORT.EXE‡	Translated-image support	TIS
SYS$MANAGER			
	DECW$CHECK_PARAMS.COM	AUTOGEN parameter checklist	INST
	DECW$CONSOLE.COM	Console Window startup	APPS
	DECW$LOGICALS.COM	Logical name table initialization	INST
	DECW$MWM.COM	Motif Window Manager startup	APPS
	DECW$PRIVATE_APPS_SETUP.TEMPLATE	Application customization template	APPS
	DECW$STARTAPPS.COM	Application and user environment startup	APPS
	DECW$STARTI18N.COM	DECwindows layered product support	INST
	DECW$STARTLIBS.COM	Programming environment support	INST
	DECW$STARTSM.COM	Session Manager startup	APPS
	DECW$STARTUP.COM	DECwindows environment startup	INST
	DECW$SYLOGIN.TEMPLATE	System login file template	APPS
SYS$MESSAGE			
	CDA$ACCESSMSG.EXE	CDA message image	CDA

‡Alpha specific

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DDIF$VIEWMSG.EXE	CDA message image	CDA
	DECW$DWTMSG.EXE	XUI and Motif Toolkit message image	RTL
	DECW$LOGINMSG.EXE	DECwindows login message image	RTL
	DECW$TERMINALMSG.EXE	DECterm message image	RTL
	DECW$TRANSPORTMSG.EXE	Transport message file	DVMS
	DECW$XERRORDB.DAT	Xlib message data	RTL
	DECW$XLIBMSG.EXE	Xlib message image	RTL
	DIVA$LIB_MSG.EXE	Sound-editor message image	SND-DI
SYS$SYSTEM			
	CDA$CONVERT.EXE	DDIF converter image	CDA
	CDA$PACK.EXE	CDA image	CDA
	CDA$UNPACK.EXE	CDA image	CDA
	DDIF$VIEW.EXE	DDIF Viewer image	CDA
	DECSOUND.EXE	Sound editor image	SND
	DECW$BOOKREADER.EXE	Bookreader image	RTL
	DECW$CALC.EXE	Calculator image	APPS
	DECW$CALENDAR.EXE	Calendar image	APPS
	DECW$CARDFILER.EXE	Cardfiler image	APPS
	DECW$CBI.EXE	CBI image	APPS
	DECW$CLOCK.EXE	Clock image	APPS
	DECW$ENDSESSION.EXE	Session Manager image	APPS
	DECW$MAIL.EXE	DECwindows Mail image	APPS
	DECW$MESSAGEPANEL.EXE	Message Panel image	APPS
	DECW$MWM.EXE	Motif Window Manager image	APPS
	DECW$NOTEPAD.EXE	Notepad image	APPS
	DECW$PAINT.EXE	Paint image	APPS

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DECW$PAUSESESSION.EXE	Session Manager image	APPS
	DECW$PRINTSCREEN.EXE	Print Screen image	APPS
	DECW$PUZZLE.EXE	Puzzle image	APPS
	DECW$SESSION.EXE	Session Manager image	APPS
	DECW$STARTLOGIN.EXE	Image to start DECwindows Start Login box	APPS
	DECW$TERMINAL.EXE	DECterm terminal emulator controller image	APPS
	DECW$TERMINAL_CREATE.EXE	DECterm terminal emulator creation image	APPS
	DECW$UILMOTIF.EXE	Motif UIL compiler image	PRGM
	DECW$WAITFORSM.EXE	Session Manager support image	APPS
	DECW$WINMGR.EXE	XUI Window Manager image	APPS
	DECW$WML.EXE	Widget metalanguage image	PRGM
	DECW$WSCUST.EXE	Session Manager customization image	APPS
	DECW$WSINIT.EXE	Session Manager initialization image	APPS
	NEWPARAMS.DAT	AUTOGEN support	INST
	VUE$MASTER.EXE	FileView image	APPS
	XDPS$PSWRAP.EXE	pswrap utility image	PRGM
SYS$TEST			
	DECW$IVP.COM	Installation Verification Procedure	INST
SYS$UPDATE			
	DECW$COMPARE_VERSIONS.COM	DECwindows layered product support	INST
	DECW$GET_IMAGE_VERSION.COM	DECwindows layered product support	INST

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DECW$MOTIF_KITBLD.DAT	Required installation file	INST
	DECW$MOTIF_KITBLD.IDX	Required installation file	INST
	DECW$MOTIF_TAILOR.EXE	Required installation file	INST
	DECW$MOTIF_TAILOR_ CLEANUP.COM	Required installation file	INST
	DECW$VERSIONS.COM	DECwindows layered product support	INST
VUE$LIBRARY			
	MOSAIC$VUE.COM	FileView verb command file	XMPL
	SOUND$PROFILE.VUE$DAT	Sound editor	SND
	SOUND$VUE_STARTUP.COM	Sound editor	SND
	VUE$BOOKREADER.COM	FileView verb command file	APPS
	VUE$CALCULATOR.COM	FileView verb command file	APPS
	VUE$CALENDAR.COM	FileView verb command file	APPS
	VUE$CARDFILER.COM	FileView verb command file	APPS
	VUE$CBI.COM	FileView verb command file	APPS
	VUE$CLOCK.COM	FileView verb command file	APPS
	VUE$COMPARE.COM	FileView verb command file	APPS
	VUE$COMPILE.COM	FileView verb command file	APPS
	VUE$COPY.COM	FileView verb command file	APPS
	VUE$CREATE_DIRECTORY.COM	FileView verb command file	APPS
	VUE$CREATE_PUBLIC_ PROFILE.COM	FileView verb command file	APPS
	VUE$DCL_COMMAND.COM	FileView verb command file	APPS
	VUE$DDIF_VIEWER.COM	FileView verb command file	APPS
	VUE$DECTERM.COM	FileView verb command file	APPS
	VUE$DELETE.COM	FileView verb command file	APPS
	VUE$EDIT.COM	FileView verb command file	APPS
	VUE$HELP.COM	FileView verb command file	APPS

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	VUE$ITERATE.COM	FileView verb command file	APPS
	VUE$LINK.COM	FileView verb command file	APPS
	VUE$LINKWORKSMANAGER.COM	FileView verb command file	APPS
	VUE$LINKWORKSSETUP.COM	FileView verb command file	APPS
	VUE$MAIL.COM	FileView verb command file	APPS
	VUE$MWM.COM	FileView verb command file	APPS
	VUE$NOTEPAD.COM	FileView verb command file	APPS
	VUE$PAINT.COM	FileView verb command file	APPS
	VUE$PRINT.COM	FileView verb command file	APPS
	VUE$PRINTSCREEN.COM	FileView verb command file	APPS
	VUE$PURGE.COM	FileView verb command file	APPS
	VUE$PUZZLE.COM	FileView verb command file	APPS
	VUE$RENAME.COM	FileView verb command file	APPS
	VUE$RUN.COM	FileView verb command file	APPS
	VUE$SEARCH.COM	FileView verb command file	APPS
	VUE$SET_PROTECTION.COM	FileView verb command file	APPS
	VUE$SUBPROCESS_INIT.COM	FileView verb command file	APPS
	VUE$UTILS.COM	FileView verb command file	APPS
	VUE$XUI_WM.COM	FileView verb command file	APPS
XDPS$INCLUDE			
	DPSCLIENT.H	Display PostScript C language include file	PRGM
	DPSCUSTOMOPS.H	Display PostScript C language include file	PRGM
	DPSEXCEPT.H	Display PostScript C language include file	PRGM
	DPSFRIENDS.H	Display PostScript C language include file	PRGM

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Table C–2 (Cont.) DECwindows Motif Version 1.2–3 for OpenVMS Software Components

Directory	File Name	Description	Class
	DPSOPS.H	Display PostScript C language include file	PRGM
	DPSXCLIENT.H	Display PostScript C language include file	PRGM
	PSCUSTOMOPS.H	Display PostScript C language include file	PRGM
	PSOPS.H	Display PostScript C language include file	PRGM
	XDPS.H	Display PostScript C language include file	PRGM
	XDPSLIB.H	Display PostScript C language include file	PRGM

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